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ABSTRACT

A project was conducted to develop two criterion-referenced, multiple-choice tests and a performance test for the dental assistant occupational area. Procedures were recommended for administration of the tests and field test and for revision of the tests. Evaluation experts analyzed the performance standards being tested, drafted test items, reviewed the items, conducted field tests, revised the tests, and finalized the tests and procedures for administering them. (This document contains a report on the drafting of the tests and the following appendixes, which make up the bulk of the document: list of participants, occupational proficiency performance standards, list of competencies, task analysis, item matrices, written tests, and a performance test administration manual.) (KC)



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FINAL REPORT

for

Dental Assistant Test Development Project

Project # 7-2103-03
FSU

Prepared by:

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The Center for Instructional Development and Services
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August, 1986

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INTRODUCTION

The Division of Vocational, Adult, and Community Education (DVACE) of the Florida Department of Education (DOE) has been contributing to and supporting the implementation of individualized competency-based vocational education (CBVE). Many vocational educators think individualized CBVE to be better than traditional, nonindividualized, lock-step vocational education in terms of improving student confidence and success, and meeting employers' expectations of hiring qualified graduates. Qualified graduates are vocational program completers who possess the required skills, knowledge, and attitudes (SKA's) to perform successfully in entry-level occupational positions. And when vocational program completers are qualified, vocational instructors and administrators have performed their proper roles.

In vocational schools or centers where CBVE has been partially or fully implemented, the conditions are appropriate for the use of written and performance competency tests. These tests can be developed and used to determine the degree to which vocational program completers have mastered the program requirements. If the program requirements include the required entry-level SKA's for the corresponding occupations, then two things are possible: (1) vocational programs can provide qualified individuals to employers, and (2) competency tests can be developed in order to verify that program completers are qualified. The 1984 Florida Legislature has mandated that such tests be developed.

Florida is at the forefront of the movement from traditional teaching and testing to criterion-referenced or competency-based teaching and testing. The DVACE (1983) sponsored and published a position paper for Florida entitled "Individualized Competency-Based Vocational Education." This position paper describes the principles and procedures of individualized CBVE and stated the DVACE's endorsement of them.

Popham (1978) discussed the movement in terms of its origins and future. He credited Glaser (1963) as one of the first to make the distinction between norm-referenced and criterion-referenced measurement strategies. Popham (1978), looking toward the future said "... we are at the threshold of a new orientation in educational measurement. We can characterize this new period of educational assessment as the criterion-referenced era."

The role of written and performance competency tests in CBVE is to provide educators with two kinds of information: (1) the level of proficiency of program completers in the occupational area, and (2) the adequacy of the instruction in which the completers had participated. The latter can serve as the basis for planning future instruction.

It is important to note that these two kinds of information are possible only if the tests are developed using procedures which assure that the correct entry-level occupational competencies are identified.

Popham (1981) states "A criterion-referenced test is used to ascertain an individual's status with respect to a defined behavioral domain." In order to develop criterion-referenced tests for vocational programs, it is necessary to define the behavioral domain of each program in terms of the occupation's entry-level competencies. Once these competencies have been correctly identified, test development procedures can begin. The present project utilized Occupational Proficiency Performance Standards (O.P.P.S.'s), developed by the DVACE, as the correct entry-level competencies. O.P.P.S.'s were established for: (1) educational accountability, and (2) the identification of those minimal competencies students must acquire in order to perform effectively in the student's chosen occupational area.

The test development project reported herein is in the occupational area of Dental Assistant. See Appendix A for the list of project participants, including business representatives, instructors, instructional designers, and test developers.

OBJECTIVES

1. Develop two alternative-form, criterion-referenced multiple choice tests for the Dental Assistant occupational area.
2. Develop a criterion-referenced performance test for the Dental Assistant occupational area.
3. Develop recommended procedures for administration of both the written and performance tests.
4. Field test and revise the tests.

METHODS

The Center for Instructional Development and Services (CIDS) of the Florida State University was contracted by the Florida Department of Education, Division of Vocational, Adult, and Community Education (DVACE) to develop the written and performance tests for the Dental Assistant occupational program. Items were written and reviewed. Field testing and final revision of the tests were conducted.

The test development project was managed by a knowledgeable evaluation specialist called upon the additional expertise of the Center's professional staff. Experienced Florida professionals--both educators and practitioners--were contracted to conduct analyses of the performance standards being tested, to draft test items, both written and performance, to review test items, and to conduct field tests of the items with program completers.

The products of the project are one performance test and two alternate form written tests. Great care was taken to relate each of the items to those performance standards judged necessary for students to enter the occupation, perform in a satisfactory manner, and keep a job. The resulting tests should be useful, valid tools for assessing student competencies and for improving the programs at the institutions that choose to use them.

Procedures for Developing Performance Standards

As required by Florida Statutes, DVACE developed Occupational Proficiency Performance Standards (O.P.P.S.) for many vocational education occupations. These standards are "developed on the basis of entry level skills needed by vocational program completers to obtain and keep a job" (O.P.P.S.--Dental Assistant, Appendix B).

Identification and verification of the performance standards for a given program include the following nine steps:

1. Acquire task data from workers in the occupation for two years or less.
2. Use task data to determine tasks and duties normally performed by recent employees.
3. Obtain catalogs of performance objectives related to occupation, such as V-TECS.

4. Review catalogs to determine minimum or entry-level tasks and prepare lists for statewide verification.
5. Identify ten representative high school, vocational center, and community college programs for use in verification, using the following criteria:
 - a. follow-up data indicate placement success
 - b. program has active advisory committee
6. Conduct verification of tasks at representative sites to include instructors, former students working in the occupation, and employees/supervisors.
7. Analyze verification forms; tasks must reach 80% approval to be retained; write in tasks included if identified by at least 5%.
8. Submit recommended tasks to DVACE for approval.
9. Distribute approved tasks ("standards") statewide.

The standards produced by this process have been used by a number of contractors for development of the various Florida Vocational Achievement Tests in separate efforts.

CIDS Test Development Model

The test development model used at CIDS follows the guidelines provided by the DVACE. At the request of DVACE, the CIDS project manager was asked, in addition, to organize and conduct an extensive task analysis of each performance standard to serve as the basis for the written and performance test items. As the figure below shows, there are four basic steps in the model.

1.
Conduct Task
Analysis

2.
Develop Test
Items

3.
Evaluate
Tests

4.
Prepare Final
Instruments and
Procedures

Each of the four steps and their procedures will be discussed.

1. Conduct Task Analysis: A thorough task analysis was conducted in order to confirm and/or identify all relevant entry and enabling knowledge and skills, and thereby to provide a foundation for all written and performance items. All test items must be directly relatable to identified standards or enablers. Major steps in the task analysis follow.

1.1 Establish task analysis and item writing committee of contracted professionals --both instructors and practitioners.

1.2 Analyze each Occupational Proficiency Performance Standard. Based on committee member recommendations, standards were added, deleted, and revised (Appendix C--List of Competencies). The analyses identified both knowledge and skill enablers showing relationships among them in a "flow chart" format.

1.3 Review task analyses; revise as necessary.

1.4 Produce task analyses using CIDS word processing (Appendix D--Task Analysis).

2. Develop Test Items: Test items were developed by the same persons who did the task analyses. They used various published texts and tests as references but in general devised their own items.

- 2.1 Conduct search/acquisition for existing test materials. The Florida Education Information Service found and acquired numerous examples of test materials for use as references and resources for ideas.
- 2.2 Prioritize standards by frequency and importance. In the case of Dental Assistant, such prioritizing aided in choosing those standards to be tested by performance.
- 2.3 Identify enablers for which test items, both multiple choice and performance, could be written. Committee members then brain-stormed ideas for items. Data from 2.2 was used.
- 2.4 Write first draft items to cover enablers identified in 2.3. Test writers began work at a group training session, then continued at home. During the training session, items written were reviewed by the project manager, and revised. Parallel multiple choice items were developed concurrently.
- 2.5 Revise first draft items. The project manager and the committee members revised the items each member produced.
- 2.6 Review second draft items and revise again. The committee members reviewed all the items; the project manager revised again based on their suggestions.
- 2.7 Conduct statewide review using sample of instructors, employers, and recent completers to establish face validity; revise as required.

- 2.8 Prepare draft tests and related materials (e.g., forms, scripts, etc.).
- 2.9 Prepare draft test administration materials—project manager and committee members.
3. Evaluate Tests: The evaluation of the tests was done in two stages—pilot testing and final field testing.
 - 3.1 Conduct pilot test of written and performance tests. Pilot tests were done with 12-15 program near-completers.
 - 3.2 Revise as required. Test items, materials, and procedures were revised based on analysis of pilot test data.
 - 3.3 Conduct field test of written and performance tests. A field test of the written test was conducted with 94 completers or near-completers; the performance test with 20 completers or near-completers.
 - 3.4 Analyze field test data.
4. Prepare Final Test Instruments and Procedures:
 - 4.1 Revise as required. Based on the analyses of the field test data, the two parallel written tests (see Appendix F) and the performance test (see Appendix G), all test materials and procedures were revised as required.

4.2 Final version of all materials were produced by CIDS, using the formats of the National Occupational Testing Institute (NOCTI).

Steps 2.7 through 4.3 are broken down as follows:

2.7 Conduct statewide review of written and performance tests

2.7.1 Identify potential reviewers

2.7.2 Select reviewers and get their agreement to participate

2.7.3 Reproduce materials for review

2.7.4 Send materials for review

2.7.5 Arrange production; start editorial review

2.8 Prepare draft tests and all related materials

2.8.1 Organize reviewer data

2.8.2 Revise edited draft as required

2.8.3 Arrange for editorial review of changes

2.8.4 Reproduce materials for pilot testing

2.9 Prepare draft test administration materials

2.9.1 Identify administration information needed

2.9.2 Prepare outline of administration information

2.9.3 Send outline of information to committee member to write

2.9.4 Review and revise draft information using other members

2.9.5 Reproduce draft administration materials for pilot test

3.1 Conduct pilot tests

- 3.1.1 Identify a program with 12-15 program near-completers
- 3.1.2 Arrange for administering both tests
- 3.1.3 Administer both tests; collect observational data
- 3.1.4 Score the tests

3.2 Revise the tests and procedures

- 3.2.1 Interpret the test results and observational data
- 3.2.2 Revise the tests and administration procedures as required
- 3.2.3 Obtain committee review as required
- 3.2.4 Obtain editorial review as required
- 3.2.5 Reproduce materials for field testing

3.3 Conduct field tests

- 3.3.1 Identify programs and instructors willing to participate:
 - 94 completers were available for written test
 - 20 completers were available for performance test
- 3.3.2 Arrange for administering tests
- 3.3.3 Administer both tests; collect observational data
- 3.3.4 Score both tests

4.1 Revise tests and procedures

4.2 Obtain final editorial review

4.3 Produce final revisions

RESULTS

Performance Test

The Performance Test consists of six tasks in which the examinee participates. An audio tape is associated with Task 1. Scoring is recorded on the Performance Evaluation Guidesheets. The guidesheets provide the process steps and product criteria on which scoring is based.

The Performance Test Administration Manual contains the directions and test, including the directions for the test administrator, evaluator and examinee, and the list of required materials. Appendix G is the Performance Test Administration Manual.

Written Test

Forms A and B of the written test contain 153 parallel items. 51 examinees participated in the field trial for Form A and 43 examinees participated in the field trial for Form B. Table I shows the results of the field trial.

Table I

Means, standard deviation, mean difficulty indices, and alphas (KR20) for Forms A and B of the Dental Assistant Written Test

	<u>Form A</u>	<u>Form B</u>
Mean	98.00	99.00
Standard Deviation	23.20	21.00
Mean Difficulty Index	.63	.64
alpha (KR20)	.95	.94

Ten items had difficulty indices less than .30. These were selected for discussion and possible revision by the evaluation specialist and a content expert. Minimal revisions were made. It was agreed that those items not revised which had a difficulty index less than .30 are good items, and their low difficulty indices were due to the lack of adequate instruction for the examinees.

RECOMMENDATIONS

The Dental Assistant Performance and Written Tests can be used by Dental Assistant instructors to evaluate their students and their programs. However, before doing so, it is recommended that a comparison be made between the List of Competencies (Appendix C) and the current Performance Standards. Current Performance Standards are grouped into clusters called Intended Outcomes, and there should be a very close correspondence between the List of Competencies and the current Intended Outcomes in order for these tests to be able to serve as valid and useful student and program evaluation instruments.

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APPENDICES

List of Participants

Dental Assistant Test Development Project

Task Analysis

Sue Suggs, Dental Assisting Instructor, Gulf Coast Community College
Lori Ann Varn, CDA, Tallahassee
Joan Ziel, Dental Assistant Instructor, Pensacola Junior College

Item Writing/Review and/or Field Testing

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APPENDIX B
Occupational Proficiency Performance Standards
Dental Assistant

12-15-07

OCCUPATIONAL PROFICIENCY PERFORMANCE STANDARDS
USED FOR THE
DENTAL ASSISTANT ACHIEVEMENT TEST
TASK ANALYSIS

DENTAL ASSISTANT

ENTRY LEVEL SKILLS -- The student will:

- A. THE STUDENT WILL PERFORM GENERAL OFFICE PROCEDURES
 1. Maintain office environment.
 2. Receive and dismiss patients and visitors.
 3. Take and record patient's medical and dental history.
 4. Receive and place telephone calls.
 5. Assemble patient records for treatment.
 6. Maintain accurate patient dental records.
 7. File business and patient records.
 8. Maintain and replenish inventory.
 9. Call to confirm patient's appointments.
- B. THE STUDENT WILL PERFORM ACCOUNTING AND FINANCIAL PROCEDURES
 10. Collect fees for dental services.
 11. Maintain daily log system of ledger entries.
 12. Prepare statements.
 13. Issue receipt.
 14. Verify invoices.
 15. Maintain pegboard system of ledger entries.
- C. THE STUDENT WILL PERFORM X-RAY PROCEDURES
 16. Develop and fix exposed radiographic film.
 17. File dental radiographs.
 18. Practice patient and operator safety measures for x-radiation.
 19. Label dental radiographs.
 20. Clean x-ray processing equipment.

D. THE STUDENT WILL PERFORM
GENERAL CHAIRSIDE
PROCEDURES

21. Mix solutions for developing and fixing radiographic film.
22. Maintain unexposed radiographic film storage.
23. Mount dental radiographs.
24. Position patient for radiographic examination.
25. Select film size appropriate for patient's mouth and indicated technique.
26. Adjust voltage, amperage, and time of x-ray machine.
27. Select accessories for radiographic (x-ray) technique.
28. Seat and prepare patient for procedure.
29. Follow approved hand washing procedures.
30. Prepare (alginate) impression materials.
31. Assist with amalgam restoration.
32. Prepare for amalgam restoration (done with 44).
33. Prepare for composite resotration (done with 44).
34. Apply saliva ejector.
35. Assist with composite resin restoration.
36. Assist with oral surgery procedure (gingivectomy).
37. Assist with periodontal treatment (scaling and curettage).
38. Prepare (rubber base) impression materials.
- 39a. Assist with taking alginate impressions.
- 39b. Assist with taking rubber-base impressions.
40. Prepare for administration of local anesthetic injection.
41. Assist with acrylic restoration. (Omitted)
42. Chart oral conditions on clinical record as dictated by dentist.
43. Assist with administration of local anesthetic.
44. Prepare for cavity restoration (includes 32 and 33)

- 45b. Dismiss patient from chair.
46. Assist with cavity preparation.
47. Prepare setup for prophylaxis.
48. Prepare setup for endodontic treatment.
- 48a. Assist in root canal therapy.
49. Evacuate the oral cavity during dental procedures.
- 49a. Evacuate during surgical procedures.
- 49b. Rinse the oral cavity.
- 49c. Dry the work area.
50. Assist with oral surgery procedures.
- 50a. Deliver and receive instruments for extraction procedure.
51. Maintain asepsis while handling sterile items.
52. Prepare for oral surgery procedures.
53. Prepare cement for cementation of gold; and
54. Prepare cement for protective base.
- 53a. Mix zinc phosphate cement.
- 54a. Mix zinc oxide eugenol (ZOE) base.
55. Stabilize impressions in mouth.
- 56a. Assist with rubber dam application.
- 56b. Assist with the removal of the rubber dam (when treatment procedure is completed).
57. Remove (alginate) impression(s) from patient's mouth.
58. Prepare silicates for restoration. (Omitted)
59. Prepare set-up for periodontal treatments.
60. Assist in administering first aid.
61. Dispense medications as ordered by the dentist. (Illegal)

E. THE STUDENT WILL CARE FOR AND OPERATE DENTAL INSTRUMENTS AND EQUIPMENT

62. Explain post-operative instructions to the patient. (Also Standard 45a.)
63. Prepare setup for anticariogenic treatment.
64. Prepare (operatory) instruments for sterilization.
65. Disinfect (laboratory) instruments using chemical disinfectant solutions
66. Clean dental laboratory instruments.
67. Clean dental operatory equipment.
68. Identify various types of dental instruments.
- 69a. Operate water (moist) autoclave.
- 69b. Operate dry heat sterilizer.
- 69c. Operate chemical sterilizer.
70. Maintain dental operatory equipment.
71. Clean model trimmer.
72. Maintain dental laboratory instruments.
73. Clean dental lathe.
74. Operate (endodontic) bead sterilizer.
- 75a. Clean dental instruments (operatory).
- 75b. Maintain dental instruments (operatory).
76. Care for preliminary or final impressions.
77. Fabricate custom trays for impressions.
78. Fabricate custom trays for edentulous casts.
79. Give instructions in oral hygiene. (Omitted)
80. Take impression for study models.
81. Expose intraoral radiographs using parallel (long cone) technique.
82. Expose intraoral radiographs using short cone (bisecting) technique.
83. Apply topical anesthetic. (Omitted)

F. THE STUDENT WILL PERFORM DENTAL LABORATORY ACTIVITIES

G. THE STUDENT WILL PERFORM EXPANDED FUNCTIONS

84. Apply and remove rubber dam. (Omitted)
85. Give new denture instructions. (Omitted)
86. Apply anti-cariogenic agents topically.
87. Remove periodontal surgical packs.
88. Polish an amalgam restoration.
89. Place matrices and wedging.
90. Polish coronal surfaces of teeth. (Omitted)
91. Teach patients preventive care. (Omitted)
92. Place periodontal dressing (gingivectomy).
93. Remove sutures.
- 94a. Place temporary restorations.
- 94b. Remove temporary restoration.
95. Apply cavity liners (varnishes), bases.
96. Polish clinical crowns.
97. Obtain bacteriological cytological specimens. (Omitted)
98. Remove excess cement from dental restorations and appliances.
99. Cement temporary crown and bridges with temporary cement.
100. Apply unfilled (pit and fissure) sealant.
101. Monitor nitrous oxide.
102. Apply cardiopulmonary resuscitation.

APPENDIX C
List of Competencies
Dental Assistant

**ASSISTANT-DENTAL
COMPETENCY LIST**

<u>Comp. No.</u>	<u>Related OPPS No.</u>	
A00		Perform general office procedures
A01	(1)	Maintain office environment
A02	(2)	Receive and dismiss patients and visitors
A03	(3)	Take and record patient's medical and dental history
A04	(4)	Receive and place telephone calls
A05	(5)	Assemble patient records for treatment
A06	(9)	Call to confirm patient's appointments
A07	(6)	Maintain accurate patient dental records
A08	(7)	File business and patient records
A09	(8)	Maintain and replenish inventory
B00		Perform accounting and financial procedures
B01	(11)	Maintain daily log system of ledger entries
B02	(15)	Maintain pegboard system of ledger entries
B03	(10)	Collect fees for dental services
B04	(13)	Issue receipt
B05	(12)	Prepare statement
B06	(14)	Verify invoices

<u>Comp. No.</u>	<u>Related OPPS No.</u>	
C00		Perform X-ray procedures
C01	(18)	Practice patient and operatory safety measures for X-radiation
C02	(24)	Position patient for radiographic examination
C03	(26)	Adjust voltage, amerage, and time of X-ray machine
C04	(27)	Select accessories for radiographic (X-ray) technique
C05	(25)	Select film size appropriate for patient's mouth and indicate technique
C06	(16)	Develop and fix exposed radiographic film
C07	(23)	Mount dental radiographs
C08	(19)	Label dental radiographs
C09	(17)	File dental radiographs
C10	(20)	Clean X-ray processing equipment
C11	(21)	Mix solutions for developing and fixing radiographic film
C12	(22)	Maintain unexposed radiographic film storage
D00		Perform chairside procedures
D01	(28)	Seat and prepare patient for procedure
D02	(29)	Follow approved hand washing procedures
D03	(40)	Prepare for administration of local anesthetic injection
D04	(43)	Assist with administration of local anesthetic
D05	(56)	Assist with rubber dam application
D06	(32, 33, 34)	Prepare for cavity restoration
D07	(46)	Assist with cavity preparation

<u>Comp. No.</u>	<u>Related OPPS No.</u>	
D08	(31)	Assist with amalgam restoration
D09	(35)	Assist with composite resin (self-curing) restoration
D10	(47)	Prepare setup for oral prophylaxis
D11	(63)	Prepare setup for anticariogenic treatment
D12	(52)	Prepare for oral surgery procedures
D13	(50)	Assist with oral surgery procedures
D14	(-)	Deliver and receive instruments for extraction procedures
D15	(49)	Evacuate during surgical procedures
D16	(48)	Prepare setup for endodontic treatment
D17	(-)	Assist with endodontic therapy
D18	(59)	Prepare setup for periodontal treatments
D19	(36)	Assist with periodontal surgery procedure (gingivectomy)
D20	(37)	Assist with periodontal treatment (scaling and curettage)
D21	(30)	Prepare alginate impression materials
D22	(39)	Assist with taking alginate impressions
D23	(55)	Stabilize impressions in mouth
D24	(57)	Remove alginate impression(s) from patient's mouth
D25	(38)	Prepare rubber base impression materials
D26	(39)	Assist with taking rubber-base impressions
D27	(53, 54)	Prepare cement for cementation of gold; prepare cement for protective base
D28	(-)	Mix zinc phosphate cement
D29	(-)	Mix zinc oxide-eugenol (ZOE) base

<u>Comp. No.</u>	<u>Related OPPS No.</u>	
D30	(34)	Apply saliva ejector
D31	(49)	Evacuate the oral cavity during dental procedures
D32	(-)	Rinse the oral cavity
D33	(-)	Dry the work area
D34	(51)	Maintain asepsis while handling sterile items
D35	(56)	Assist with the removal of the rubber dam (when treatment procedure is completed)
D36	(45, 62)	Explain post-operative instructions to the patient
D37	(45)	Dismiss patient from chair
D38	(42)	Chart oral conditions on clinical record as dictated by dentist
D39	(60)	Assist in administering first aid
E00		Care for and operate dental instruments and equipment
E01	(66)	Clean dental laboratory instruments
E02	(65)	Disinfect laboratory instruments using chemical disinfectant solutions
E03	(72)	Maintain dental laboratory instruments
E04	(73)	Clean dental lathe
E05	(71)	Clean model trimmer
E06	(68)	Identify various types of dental instruments
E07	(75)	Clean dental instruments (operatory)
E08	(64)	Prepare operatory instruments for sterilization
E09	(69)	Operate water (moist) autoclave
E10	(69)	Operate dry heat sterilizer
E11	(69)	Operate chemical sterilizer
E12	(74)	Operate (endodontic) bead sterilizer
E13	(67)	Clean dental operatory equipment
E14	(70)	Maintain dental operatory equipment
E15	(75)	Maintain dental instruments (operatory)

<u>Comp. No.</u>	<u>Related OPPS No.</u>	
F00		Perform dental laboratory activities
F01	(76)	Care for preliminary or final impressions
F02	(77)	Fabricate custom trays for impressions
F03	(78)	Fabricate custom trays for edentulous casts
F04	(-)	Pour up impressions; trim and polish study model
G00		Perform expanded functions
G01	(80)	Take impressions for study models
G02	(81)	Expose intraoral radiographs using paralleling (long cone) technique
G03	(82)	Expose intraoral radiographs using bisecting (short cone) technique
G04	(84)	Place and remove rubber dam
G05	(89)	Place matrices and wedging
G06	(-)	Apply cavity lines (varnishes), bases
G07	(86)	Apply anticariogenic agents topically
G08	(-)	Polish clinical crowns
G09	(-)	Apply unfilled (pit or fissure) sealant
G10	(-)	Remove sutures
G11	(-)	Place periodontal dressing (gingivectomy)
G12	(87)	Remove periodontal surgical packs
G13	(88)	Polish an amalgam restoration
G14	(-)	Place temporary restoration

<u>Comp. No.</u>	<u>Related OPPS No.</u>	
G15	(-)	Remove temporary restorations
G16	(-)	Cement temporary crown and bridges with temporary cement
G17	(-)	Remove excess cement from dental restoration and appliances
G18	(-)	Monitor nitrous oxide
G19	(-)	Apply cardiopulmonary resuscitation

APPENDIX D
Task Analysis
Dental Assistant

Dental Assistant Task Analysis

Competency A01: Maintain office environment.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|------|---|
| 1. | Adjust lights as needed. |
| 2. | Check thermostat for proper temperature. |
| 3. | Keep the office neat and clean. |
| 3.A. | Sweep uncarpeted areas at end of day, as required. |
| 3.B. | Vacuum carpeted areas at end of day, as required. |
| 3.C. | Dispose of refuse in appropriate manner. |
| 3.D. | Arrange waiting room furniture. |
| 3.E. | Straighten magazines in waiting room. |
| 3.F. | Dust waiting room. |
| 4. | Check office for safety hazards. |
| 4.A. | Check electric cords, outlets, and equipment. Remove defective items. |
| 4.B. | Wipe up spills and wet spots immediately. |
| 4.C. | Remove obstacles. |

Dental Assistant Task Analysis

Competency A02: Receive and dismiss patients and visitors.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Organize the office appointment book.
	1.A.	Mark off days when the office is closed.
	1.B.	Write in meetings and other activities the dentist participates in on the proper day and time.
	1.C.	Mark off buffer time (lunch, emergencies, etc.)
	2.	Greet cordially all persons who enter the office; ask name and purpose of visit.
	3.	Perform according to purpose of visit.
	3.A.	If unscheduled patient, ask if having pain.
	3.A.1.	- If yes, tell patient you will work him/her into the schedule.
	3.A.2.	- If no, set up appointment.
	3.A.2.a.	- Explain appointment schedule.
	3.A.2.b.	- Ask patient best dates and times for appointment.
	3.A.2.c.	- Find open times in appointment book.
	3.A.2.c.1.	- Vary the types of treatments for each day.
	3.A.2.c.2.	- Schedule children according to age and physical maturity.

Dental Assistant Task Analysis

Competency A02: Receive and dismiss patients and visitors.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	3.A.2.d.	- Offer open times to patient for his/her choice.
	3.A.2.e.	- Write in appointment book: <ol style="list-style-type: none">1. name of patient2. work to be done3. length of appointment.
	3.A.2.f.	- Write appointment card for patient stating date and time.
	3.A.2.g.	- Cordially dismiss patient.
	3.B.	If scheduled patient, inform of any delay and approximate time s(he) will be seen.
	3.C.	If professional colleague, notify dentist of professional colleague's presence and follow dentist's directions about where to seat colleague. <ul style="list-style-type: none">- If professional colleague, invite to be seated in visiting room.
	3.C.1.	If salesperson, ask dentist if s(he) wishes to see. <ul style="list-style-type: none">- If yes, ask dentist when s(he) wishes to see salesperson.<ul style="list-style-type: none">- Show salesperson into dentist's private office if dentist wishes to see him/her immediately.
	3.D.	
	3.D.1.	
	3.D.1.a.	
	3.D.1.b.	
	3.D.1.c.	

Dental Assistant Task Analysis

Competency A02: Receive and dismiss patients and visitors.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

3.D.2.

- If no, dismiss the salesperson cordially.

4.

When dentist is ready, seat scheduled or unscheduled patient in operatory and prepare for dentist (see D01).

5.

Dentist sees patient (see relevant standards).

6.

Record treatment information on clinical record (see A07).

7.

Escort patient (bringing patient's folder) into waiting room.

8.

Refer to dentist's note on patient's clinical record for work to be done at next visit.

9.

Receive payment from patient (see B01-B05 as necessary).

10.

Set up appointment (follow 3.A.2.).

Dental Assistant Task Analysis

Competency A03: Take and record patient's medical and dental history.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
-------------------------------	--------------------	-----------------------

NOTE: Assume that "patient" refers to patient or guardian.

- | | | |
|--|---------------|---|
| | 1. | Tell patient why history is important. |
| | 1.A. | Identify purposes for obtaining a record of the patient's medical and dental history (i.e., to inform dentist about patients with systemic diseases, allergies, bleeding, rheumatic heart disease, asthma, hepatitis, diabetes, heart disease, high blood pressure, Barlow's syndrome, glomular nephritis; also any medication being taken; also the legal aspects of keeping accurate and complete records (i.e., if heart patient's record was not complete and wrong medication was used by dentist, a lawsuit might ensue). |
| | 2. | Obtain medical and dental history. |
| | 2.A. | Give blank medical and dental history forms to patient to complete (or assist patient in completing forms, if necessary). |
| | 2.A.1. | - Recognize correct medical and dental history forms. |
| | 2.B. | Review completed form and ask patient for any missing information. |
| | 2.B.1. | - Read and interpret medical and dental history forms used in the dentist's office. |
| | 2.C. | Accurately enter missing information. |

Dental Assistant Task Analysis

Competency A03: Take and record patient's medical and dental history.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|------|--|
| 2.D. | Code patients' medical history forms with notations about allergies, bleeding, rheumatic heart disease, high blood pressure, Barlow's syndrome, glomular netphiritis, diabetes, heart patients, patients who have a history of hepatitis, and some others. |
| 3. | Place completed forms in patient's folder for clinical exam. |
| 4. | Escort patient (bringing patient's folder) into operatory. |
| 5. | Take X-ray. (To Group C.) |
| 6. | Place X-rays on view box. |
| 7. | To D38: Chart oral conditions as dictated by dentist. |

Dental Assistant Task Analysis

Competency A04: Receive and place telephone calls.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Place telephone calls.
	1.A.	Locate phone number.
	1.A.1.	- Look up surnames in alphabetical order.
	1.B.	Position mouthpiece properly.
	1.C.	Dial (or push) correct numbers.
	1.D.	When party answers, introduce yourself and identify office.
	1.E.	If calling to ask questions, be prepared to take notes.
	1.F.	If calling to give information, give the message briefly.
	1.G.	Cordially end conversation.
	1.H.	Replace receiver gently.
	2.	Receive telephone calls.
	2.A.	Identify dentist's office and yourself.
	2.A.1.	- Use good telephone manners: <ul style="list-style-type: none">- answer promptly- speak distinctly and directly into the mouthpiece- use good speech habits.
	2.A.2.	- When answering the telephone, project voice with a smile.

Dental Assistant Task Analysis

Competency A04: Receive and place telephone calls.

**ENTRY
COMPETENCIES** **STEP NUMBER**

STEP STATEMENT

2.B.

Provide the caller the necessary assistance except for confidential information.

2.C.

If necessary, refer caller to dentist or take caller's telephone number and assure him/her that the dentist will return the call.

2.D.

Write messages for office personnel.

2.E.

Cordially end conversation, letting the caller hang up first.

Dental Assistant Task Analysis

**ENTRY
COMPETENCIES STEP NUMBER**

Competency A05: Assemble patient records for treatment.

STEP STATEMENT

1.
Identify the patients scheduled for next work day.
- 1.A.
Interpret types of information required in the appointment book.
2.
Pull records and prepare forms, as necessary.
 - 2.A.
Pull records for scheduled returning patients in sequence that patients are scheduled in appointment book (for next work day).
 - Demonstrate cross-referencing of numerical files with alphabetical file.
 - Set up patient folders in alphabetical order.
 - 2.B.
Prepare folders for new patients in sequential order according to appointment book. (Put patient's name on folder.)
 - 2.C.
Assemble forms for new patients scheduled for next work day.
 - 2.D.
Place forms in new patients' folders for next work day.
3.
Integrate folders of returning and new patients in sequential order according to appointment book.
4.
Go to 06: Call to confirm patients' appointments.

Dental Assistant Task Analysis

Competency A06: Call to confirm patients' appointments.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.
 - 1.A. Locate patient's phone number in his/her record.
 - 1.B. Position telephone mouthpiece properly.
 - 1.C. Dial (or push) correct numbers.
 - 1.D. When party answers, introduce yourself and give name of dentist.
 - 1.E. Ask to speak to patient.
2.
 - 2.A. **Talk with patient.**
 - 2.A.1. If patient is reached and cancels appointment, note in appointment book and enter in clinical record.
 - Reschedule appointment (in A02).
 - 2.A.2.
 - Replace patient's folder in the file.
 - 2.A.2.a.
 - File alphabetically by surname and cross-file by number.
 - 2.B. If patient is reached, confirm date and time of next day's appointment.
 - 2.C. If patient is out, leave a message of your call.
 - 2.D. Call again the same day.
 - 2.E. If patient is in, confirm date and time of next day's appointment.
 - 2.F. Leave scheduled appointment if unable to reach patient.
3. **If confirmed, note in appointment book with an "x" or other mark.**

Dental Assistant Task Analysis

Competency A06: Call to confirm patients' appointments.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	4.	Repeat Steps 1.-3. for all other patients.
	5.	Complete daily work schedule.
	5.A.	Select daily work schedule form.
	5.B.	For each patient, enter name, service, time of appointment. (Information is from ap- pointment book.)
	6.	Duplicate copy of work schedule for each operatory.
	7.	Place a copy of daily work schedule in each operatory.

Dental Assistant Task Analysis

**ENTRY
COMPETENCIES STEP NUMBER**

Competency A07: Maintain accurate patient dental records.

STEP STATEMENT

1. Identify the purpose of maintaining patient records (to update records and have complete records for legal protection in the event of a lawsuit).
2. Update history and personal information.
 - 2.A. Ask patient if there have been any changes in personal information and in medical history.
 - 2.B. Identify errors in patient's personal information and in medical histories.
 - 2.C. Update patient's personal information on appropriate form.
 - 2.D. Update medical histories on appropriate forms.
3. Chart new oral conditions on the clinical record as dictated by dentist: from 38.
 - 3.A. Record date.
 - 3.B. Record tooth number.
 - 3.C. Record dental services in order performed.
4. Record new dental services.
 - 4.A. Identify abbreviations used to record dental services (e.g., MOD, ba, va, aml, POI, BW, pro, ex, etc.).
5. Place letters, diagnostic reports from other dentists and specialists, and new radiographs in patient's folder.

Dental Assistant Task Analysis

Competency A08: File business and patient records.

**ENTRY
COMPETENCIES** **STEP NUMBER**

STEP STATEMENT

1.

If alphabetical filing system is used in office, file documents alphabetically by surname in appropriate section(s) of files.

2.

If cross-indexed alphanumeric filing system is used in office, file documents numerically with cross-reference to alphabetical listing in appropriate section(s) of files.

Dental Assistant Task Analysis

Competency A09: Maintain and replenish inventory.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

Identify amount of materials/supplies needed (from inventory form).

1.A.

Identify purpose of maintaining inventory control and replenishing supplies and materials.

1.B.

Identify a method of keeping records of supply companies (materials, names, cost and date supplies were ordered).

1.C.

Determine quantity of supply(ies) needed (by subtracting present amount on hand from the maximum amount needed).

1.C.1.

- Identify methods of maintaining inventory control in a dental office

1. Maximum/minimum system

2. Running inventory system.

1.D.

Compare present amount of supply(ies) on hand with minimum amount listed (tells when to order).

1.D.1.

- Identify rule about minimum supplies needed (keep on hand the minimum amount of any product to last until replacement arrives).

1.E.

Make appropriate notation on inventory form when item is removed from supplies (running inventory form).

1.E.1.

- Identify information required on inventory forms (quantity of each item, names of products, description of each type of produce; e.g., sizes, colors, volume, etc.).

Dental Assistant Task Analysis

Competency A09: Maintain and replenish inventory.

ENTRY
COMPETENCIES **STEP NUMBER**

STEP STATEMENT

- | | |
|------|---|
| 2. | Look up needed supplies in catalog. |
| 3. | Compare costs and decide on best source for purchase (cost, shipping weights and costs, time, type of product). |
| 3.A. | Identify materials to be ordered locally due to weight/size (stone, gypsum products). |
| 3.B. | Calculate unit costs. |
| 3.C. | Identify products which might be damaged by cold (anesthetic solution; liquids which might freeze and expand). |
| 4. | Note what has been ordered on inventory sheet and/or in card file. |
| 5. | Fill out order blank for materials or deliver order orally to salesman. |
| 6. | Go to B06: Verify invoices. |

Dental Assistant Task Analysis

Competency B01: Maintain daily log system of ledger entries.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. Enter patient's financial transaction into system.
 - 1.A. Prepare journal page.
 - 1.A.1. - Obtain journal page at start of day; write date at top.
 - 1.A.2. - For each patient, enter visit on daily journal page, showing name, service, and fee in appropriate columns.
 - 1.B. Make entry on ledger card and/or journal page.
 - 1.B.1. - If patient pays amount owed, enter amount of payment on daily journal page in appropriate column.
 - 1.B.2. - If patient has active charge account, pull ledger and enter date, service, fee, any payment made, and the new balance.
 - 1.B.3. - If patient has inactive charge account, pull old ledger, enter date, service, fee, any payment, and new balance.
 - 1.B.4. - For new charging patient, prepare ledger card by typing in name and address; then enter date, services, fee, any payment, and new balance.
 - 1.B.5. - If patient charges, enter any payment on the daily journal page in the appropriate column, and if possible check off that the ledger entry was made.
 - 1.C. Issue receipt for any payment received (B04).
 - 1.D. File ledger card as necessary.

Dental Assistant Task Analysis

Competency B01: Maintain daily log system of ledger entries.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

- | | |
|------|--|
| 2. | Enter payments received by mail into system. |
| 2.A. | Enter on daily journal page the date, patient's name, amount received on account. |
| 2.B. | Pull ledger for patient sending check; enter date, amount received on account, and new balance. |
| 2.C. | File the ledger card. |
| 3. | Complete daily journal page at end of day. |
| 3.A. | Compare entries in the appointment book to see that all patient visits or payments have been listed on the daily journal page. |
| 3.B. | Total the charge and paid columns. |
| 3.C. | Total all receipts for the day. |
| 3.D. | Compare receipts for the day with paid column total; reconcile any differences. |
| 3.E. | Place completed daily journal page in binder. |
| 3.F. | Transfer totals from charge and paid columns to the monthly summary sheet for that date. |

Dental Assistant Task Analysis

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SS Page 1

**ENTRY
COMPETENCIES**

STEP NUMBER

Competency B02: Maintain pegboard system of ledger entries.

STEP STATEMENT

1.
 - 1.A. Place daily journal page on pegboard. Record date, page number, and pertinent totals brought forward from previous day's page.
 - 1.B. Place (peg) a series of receipt-charge slips over daily journal page and align with the first blank line of the daily journal.
 - 1.C. When patient arrives, complete charge slip, showing name and any previous balance.
 - 1.C.1. - Determine the previous balance of each returning patient from patients' ledgers.
 - 1.D. Tear off charge-slip portion along perforation and attach to the patient's chart with paper clip.
2. Enter patient financial transactions into system.
 - 2.A. If patient pays for service, complete receipt slip (which also enters into daily journal).
 - 2.B. If patient has a balance, or wishes to charge any amount, pull ledger card and place under receipt slip in proper alignment with pegboard; complete receipt slip.
 - 2.B.1. - For new charging patient, prepare ledger card by typing in name and address.
 - 2.B.2. - For returning patient, locate ledger card in file.
 - 2.C. Tear off and give receipt portion to patient (B04).
 - 2.D. File the ledger card.
3. Enter payments received by mail into system.



Dental Assistant Task Analysis

Competency B02: Maintain pegboard system of ledger entries.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 3.A. Pull ledger for patient sending check, place under receipt slip in proper alignment with pegboard.
- 3.B. Enter date, received on account, payment and balance on receipt-slip.
- 3.C. File the ledger card.
4. **Complete daily journal page.**
- 4.A. Total all columns and record in the appropriate box on journal page.
- 4.B. Complete the proof of posting and accounts receivable control on the daily journal page.
- 4.B.1. - For proof of posting, add previous balances to day's fees charged out; deduct payments and adjustments; should equal current balance column.
- 4.B.2. - To verify accounts receivable control, add previous page total accounts receivable to today's fees charged out; deduct payments and adjustments; should equal present accounts receivable balance.
- 4.C. Total all receipts for the day.
- 4.D. Compare receipts for the day to paid column total; reconcile any differences.
- 4.E. Place completed daily journal page in binder.

Dental Assistant Task Analysis

Competency B03: Collect fees for dental services.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

1.
 - 1.A. If patient treated, determine fee charged for day's services from charge slip or record.
 - 1.B. Add fees charged for day's services to any balance patient may have.
 - 1.C. Tell patient total amount owed.
 - 1.D. If patient walks in, greet cordially and ask reason for visit. If patient wants to pay bill, identify amount owed and tell patient.
2. **Ask patient how payment to be made or if to be charged.**
 - 2.A. If cash, accept and place cash in money drawer; make necessary change.
 - 2.B. If check, process check payment.
 - 2.B.1. - Make sure:
 - proper date
 - written and numerical amounts are correct
 - check signed
 - 2.B.2. - Stamp check with dentist's name (if needed) on front; stamp restrictive endorsement on back.
 - 2.B.3. - Place check in money drawer.
 - 2.C. If credit card, process credit card payment.

Dental Assistant Task Analysis

Competency B03: Collect fees for dental services.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 2.C.1. - If credit card, identify type and select appropriate form.
- 2.C.1.a - Identify different credit cards and forms.
- 2.C.2. - Make sure card is valid. Then place card in imprinter, inserting form properly; make card imprint.
- 2.C.3. - Remove form; enter
 - date
 - service
 - amount charged on form.
- 2.C.4. - Ask patient to sign form.
- 2.C.5. - Remove customer copy and give to patient, together with credit card.
- 2.C.6. - Place remainder of form in money drawer.
- 2.D. If to be charged, arrange payment plan acceptable to patient, and within office policy and enter charge into bookkeeping system (B01 or B02).
- 2.D.1 - Identify office policies regarding collection of fees, credit, and limits on charges.
- 3. Enter payment into bookkeeping system (B01 or B02).
- 4. Issue receipt to patient (B04).
- 5. Thank and dismiss patient courteously.

Dental Assistant Task Analysis

Competency B04: Issue receipt.

**ENTRY
COMPETENCIES** **STEP NUMBER**

STEP STATEMENT

1.

Enter in ink in the receipt book or on pegboard receipt slip:

- account-holder's name
- amount of payment
- balance remaining
- services performed (if required)

2.

If receipt book used, sign or initial the receipt.

3.

Give the original copy to the patient and retain carbon for office records.

**ENTRY
COMPETENCIES** **STEP NUMBER**

Competency B05: Prepare statements.

STEP STATEMENT

- | | |
|--------|--|
| 1. | Remove ledgers from the accounts receivable file on the closing date. |
| 1.A. | Identify closing date(s) for sending statements. |
| 2.A. | Photocopy ledger card. |
| 2.A.1. | - Use photocopy machine. |
| 2.B. | Complete a statement form by typing name, address, and balance. |
| 2.B.1. | - Identify statement form. |
| 3. | If necessary, place reminder of overdue account on photocopy or statement form. |
| 4. | Return ledgers to accounts receivable file. |
| 5. | Insert photocopy or statement in window envelope so patient's name and address shows; seal, stamp, and mail. |

Dental Assistant Task Analysis

Competency B06: Verify invoices.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|--------|--|
| 1. | Receive and order materials and supplies. |
| 2. | Compare shipment with original order to be sure that all products are there. |
| 2.A. | Return unordered materials to company. |
| 2.A.1. | - Identify procedure for returning damaged or unordered materials to company. |
| 2.B. | Make note about back-ordered items on invoice. |
| 3. | Check items for damage. |
| 3.A. | If OK, date and store items in appropriate area(s), bringing old items to front. |
| 3.B. | If damaged, return items for credit. |
| 4. | Add new items to inventory. |
| 5. | File invoice in current or outstanding invoice file. |

Competency C01: Practice patient and operator safety measures for X-radiation.

ENTRY
COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 1.
 - 1.A.
 - 1.A.1.
 - Identify why no through traffic should be allowed.
 - 1.B.
 - 1.B.1.
 - Identify why walls must be lead-lined.
 - 1.C.
 - 1.C.1.
 - Identify why control box should be at least 6 feet away or behind lead-lined partition.
 - 1.D.
 - 1.D.1.
 - Identify agency to check x-ray machines.
 - 1.E.
 - 1.E.1.
 - Identify why open-end cone should be used.
 - 1.F.
 - 1.F.1.
 - Identify why fast-speed film should be used.
 - 2.
 - 2.A.
 - Identify why fast-speed film should be used.
- Maintain patient safety.**
- Review patient's clinical record for history of radiation exposure; if recently x-rayed consult with dentist before x-raying patient.

Dental Assistant Task Analysis

Competency C01: Practice patient and operator safety measures for X-radiation.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 2.A.1. - Identify why it is important to know patient's x-ray history.
- 2.A.2. - Identify symptoms and complications of over-exposure to radiation.
- 2.B. Record the number of exposures and Roentgens of dosage in the patient's record.
- 2.B.1. - Calculate Roentgens of radiation exposure.
- 2.C. Use lead apron and collar on all patients (C02).
- 2.C.1. - Identify why lead apron and collar are used on patient.
- 2.D. Ask patient to close eyes during exposure of X-ray film.
- 2.D.1. - Identify X-ray hazards to eyes.
- 2.E. Properly position film and use correct exposure technique (G02 and G03).
- 3. **Maintain operator safety.**
- 3.A. Wear monitoring device when taking X-rays.
- 3.A.1. - Identify why monitoring device is worn.
- 3.B. Have monitoring device read monthly.
- 3.B.1. - Identify how often monitoring device should be read.
- 3.C. Have patient (or parent, if patient is young child) hold X-ray film.

Dental Assistant Task Analysis

Competency C02: Position patient for radiographic examination.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. Seat patient in a lowered, upright dental chair.
2. Remove eyeglasses and/or any removable dental appliances.
3. Place lead apron on patient by draping over shoulders and covering lap, shiny side up.
4. If necessary, explain the purpose of the lead apron to the patient.
5. If necessary, explain the X-ray procedure to the patient.
 - 5.A. Identify steps in X-ray procedure.
6. Determine the radiographic technique to be used (see G02 and G03).
 - 6.A. If using the bisecting (short cone) technique, place patient in upright position; place head with sagittal plane perpendicular to floor, occlusal plane parallel to floor.
 - 6.A.1. - Identify sagittal and occlusal planes; supine position.
 - 6.B. If using the paralleling (long cone) technique, position patient as for the bisecting technique or recline patient in a supine position and have patient turn head to accommodate each exposure.
 - 6.B.1. - Identify parallel, perpendicular.
7. Go to C03: Adjust machine.

Dental Assistant Task Analysis

Competency C03: Adjust voltage, amperage, and time of X-ray machine.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

Turn on switch of dental X-ray unit at control box.

2.

Adjust settings.

2.A.

Set milliamperage according to film manufacturer's specifications.

2.A.1.

- Identify amperage and voltage controls; timer.

2.A.2.

- Read film manufacturer's instructions; identify proper settings for patient.

2.B.

Set kilovoltage according to film manufacturer's specifications.

2.C.

Set timer for correct time according to film manufacturer's specifications.

3.

Go to C04: Select accessories.

Dental Assistant Task Analysis

Competency C04: Select accessories for radiographic (X-ray) technique.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. Determine radiographic technique to be used (see G02 and G03).
2. If paralleling (long-cone) technique, select and assemble the paralleling bars and rings.
 - 2.A. Identify paralleling bars and rings.
 - 2.B. If needed, select cotton rolls (see G02).
3. If bisecting (short cone) technique, and if taking bitewing films, select correct size tab for film to be used (see C05).
 - 3.A. Match sizes of tabs and films.
 - 3.B. If needed, select and use bite block or film holder (see G03).
4. Go to D02: Wash hands.

Dental Assistant Task Analysis

Competency C05: Select film size appropriate for patient's mouth and indicated technique.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|--------|---|
| 1. | Identify type of film required by dentist. |
| 1.A. | From D02: Wash hands. |
| 2. | Select film size appropriate to size of patient's mouth. |
| 2.A. | Look at patient's mouth. |
| 2.B. | Apply rules to select film size of child's and adult's mouth. |
| 2.B.1. | - Select size 0 film for the child patient for periapical and interproximal films. |
| 2.B.2. | - Select size 1 film for the adult patient with a narrow anterior region. |
| 2.B.3. | - Select size 2 film for the adult patient for periapical and interproximal films and for the small child patient for an occlusal view. |
| 2.B.4. | - Select size 3 bitewing tabbed film for the adult with a long arch (interproximal films). |
| 2.B.5. | - Select occlusal films for children unable to tolerate periapical films or for occlusal views of cysts, impacted teeth. |
| 2.C. | Identify periapical, interproximal, bitewing |
| 3. | Go to G02 or G03. |

Dental Assistant Task Analysis

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ENTRY

COMPETENCIES

STEP NUMBER

Competency C06: Develop and fix exposed radiographic film.

STEP STATEMENT

- | | |
|--------|--|
| 2. | Develop film(s). |
| 2.A. | Separate film(s) one at a time from wrapping(s), discard wrappings, keep lead foil. |
| 2.A.1. | - Handle film correctly. |
| 2.B. | Clip each film securely onto film rack. |
| 2.C. | Place loaded film rack in developer and agitate rack to remove any air trapped on film. |
| 2.D. | Start timer. |
| 2.E. | When timer goes off, remove film rack from developer. |
| 2.F. | Dip film rack several times in master bath to rinse off developer. |
| 3. | Fix film(s). |
| 3.A. | Place film rack in fixer, replace tank cover; note time. |
| 3.B. | If necessary, wet read films; if OK, return films to fixer; if error in film, retake (G02 or G03). |
| 3.B.1. | - Identify errors in films (exposure or processing). |
| 3.B.2. | - Identify if wet reading necessary. |
| 3.C. | After 10 minutes, remove film rack. |
| 4. | Wash, dry, and duplicate film(s). |
| 4.A. | Place film rack in water bath. |

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

4.B.

4.C.

4.D.

4.D.1.

4.D.2.

5.

6.

7.

Competency C06: Develop and fix exposed radiographic film.

STEP STATEMENT

After 20 minutes, remove film rack; replace tank cover.

Hang film rack to dry or place in dryer and turn on.

When dry, duplicate.

- Identify when film is dry.

- Duplicate using hand method or commercial machine following manufacturer's directions.

Wipe counter surfaces dry and turn off safe light.

Go to C07: Mount dental radiographs.

Turn off water to master tank at end of day.

Dental Assistant Task Analysis

**ENTRY
COMPETENCIES**

STEP NUMBER

Competency C07: Mount dental radiographs.

STEP STATEMENT

1.
 - 1.A. Remove dry films from film rack and view each film on the viewbox.
From Competency C06: Develop and fix radiographic film.
2. Locate landmarks on each film.
 - 2.A. Identify anatomical landmarks used to determine what film you are mounting.
 - Identify: molars, premolars, cuspids, laterals, centrals.
 - Identify bony structures of mandibular and maxillary arches.
 - Identify maxillary sinuses, mandibular nerve canal, nasal floor.
 - Identify curve of Spee.
3. Place each film in the appropriate slot in the film mount.
 - 3.A. Identify interproximal (bitewing) films and periapical films.
 - 3.B. Identify the facial or lingual side of the film according to the dimple (dot) orientation.
4. When all films are mounted, review for correct mounting, and processing and exposure errors.
 - 4.A. Identify the purpose of mounting finished x-rays.
5. If OK, go to C08: Label radiographs.
6. If not OK, remount or retake X-ray, as necessary (G02 or G03).

Dental Assistant Task Analysis

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SS Page 1

**ENTRY
COMPETENCIES**

STEP NUMBER

Competency C08: Label dental radiographs.

STEP STATEMENT

1.

Write patient's name and date on top of mount. Write dentist's name on mount if required.

1.A.

From C07: Mount dental radiographs.

2.

Go to C09: File radiographs.

Dental Assistant Task Analysis

Competency C09: File dental radiographs.

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ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

File in patient's record.

1.A.

From C08: Label dental radiographs.

1.B.

Locate patient's record in file.

1.C.

Place radiographs in patient's record.

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Dental Assistant Task Analysis

Competency C10: Clean X-ray processing equipment.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Drain the water from master tank by removing plug.
	2.	Empty solutions from developer and fixer tanks.
	3.	Rinse master tank.
	4.	Wipe and rinse developer and fixer tanks, being sure not to interchange tanks.
	5.	Reposition developer and fixer tanks in proper place.
	6.	Replace plug and start filling the master tank with fresh water.
	6.A.	Identify reasons for cleaning x-ray processing equipment, and when needed.
	7.	While master tank is filling, to to C11: Mix solutions.

NOTE:

Clean automatic processor according to manufacturer's instructions.

Dental Assistant Task Analysis

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SS Page 1

**ENTRY
COMPETENCIES**

STEP NUMBER

**Competency C11: Mix solutions for developing and
fixing radiographic film.**

STEP STATEMENT

- | | |
|------|--|
| 1. | Obtain new developer and fixer (powders or solutions) from storage area. |
| 1.A. | From C10: Clean X-ray processing equipment. |
| 1.B. | Identify fixer and developer. |
| 2. | Place measured amount of developer and fixer in appropriate tanks and fill with water to appropriate levels. |
| 2.A. | Identify amount of developer or fixer needed by reading manufacturer's instructions. |
| 3. | Adjust water flow in master tank to appropriate rate. |
| 3.A. | Identify appropriate water flow rate for master tank. |
| 4. | Stir developer and fixer solutions with different stir rods. |
| 5. | Wipe counter surfaces dry and replace tank cover. |
| 6. | Record the date when solutions were changed, as appropriate. |

Dental Assistant Task Analysis

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SS Page 1

**ENTRY
COMPETENCIES**

STEP NUMBER

- 1.
- 1.A.
- 2.
- 3.
- 4.

Competency C12: Maintain unexposed radiographic film storage.

STEP STATEMENT

As received, place new supply of film packages in lead-lined container or cool storage area.

Identify purpose of storing X-ray film in lead-lined container or cool storage area.

Periodically check expiration date on each film package

Return expired film package(s) to manufacturer.

As needed, place unexpired film package in lead-lined film dispenser.

Dental Assistant Task Analysis

Competency D01: Seat and prepare patient for procedure.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

Greet patient by name; escort patient to operatory, bringing records.

2.

Have patient sit in lowered dental chair; provide assistance where needed (elderly, children, handicapped).

3.

Prepare patient for dentist.

3.A.

If necessary, hand tissue to female patients to remove lipstick.

3.B.

Place patient napkin properly on patient, using neck chain.

3.C.

Ask patient to remove dental appliances and eye glasses, as necessary.

4.

Adjust patient position.

4.A.

If necessary, explain chair movements to patient.

4.B.

Operate dental chair.

4.C.

If treating upper arch, place patient in supine position with dental chair reclined. If treating lower arch, place chair back at a 25 to 35-degree angle to floor.

4.C.1.

- Read patient's chart to determine treatment area.

4.D.

Place patient with head at upper end of dental chair and close to dentist's side of chair.

Dental Assistant Task Analysis

Competency D01: Seat and prepare patient for procedure.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	4.E.	Elevate chair to proper height for dentist.
	4.F.	Ask patient if he/she is comfortable and make any necessary adjustments.
	5.	Position operating light so that it will not be in patient's face or eyes when turned on.
	6.	For new patient, introduce dentist.
	7.	Go to D02: Wash hands.

Dental Assistant Task Analysis

Competency D02: Follow approved hand washing procedures.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

Perform between-patient handwashing (2-minute handwash).

1.A.

Prepare to wash hands.

1.A.1.

- If necessary, remove rings and watch; roll up sleeves.

1.A.2.

- Turn on water; using germicidal soap, wet and lather hands.

1.A.2.a.

- Identify germicidal soap.

1.A.2.b.

- Identify when and why hands should be washed (before and after each patient).

1.A.3.

- Rinse hands and reapply soap.

1.B.

Wash hands thoroughly for 2 minutes.

1.B.1.

- Using a friction motion, wash palms.

1.B.2.

- Wash back of hands using friction motion.

1.B.3.

- Wash thumbs by rubbing against forefinger or agitate by using thumb and forefinger of opposite hand.

1.B.4.

- Wash in between fingers.

1.B.5.

- Lock fingers together, cup hands together, and create a suction motion several times.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D02: Follow approved hand washing procedures.

STEP STATEMENT

1.C.

Rinse and dry hands.

1.C.1.

- Rinse hands, holding fingers down so that water will run off fingertips.

1.C.2.

- Dry hands thoroughly with paper towels.

1.C.3.

- Use paper towel to turn off faucet.

1.C.4.

- Discard paper towels in waste receptacle.

2.

Perform initial hand washing (scrub).

2.A.

Prepare to wash hands (see 1.A.).

2.B.

Scrub hands thoroughly for 3 minutes.

2.B.1.

- Use surgical scrub brush to scrub palms, back of hands, fingers, thumbs, wrists, and forearms.

2.B.2.

- Clean under fingernails using orange stick.

2.B.3.

- Identify surgical scrub brush and orange stick.

2.B.4.

- Rinse hands and reapply germicidal soap.

2.C.

Wash hands thoroughly for 2 minutes; repeat (see 1.B.).

2.D.

Rinse and dry hands (see 1.C.).

Dental Assistant Task Analysis

Competency D03: Prepare for administration of
local anesthetic injection.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Assemble needed equipment and materials for procedure.
	1.A.	Identify anesthetic to be used based on patient's history or upon direct instruction from dentist.
	1.A.1.	- Define vasoconstrictor and explain use in dentistry.
	1.A.2.	- Identify types of anesthetic solution.
	1.A.3.	- Identify ratio of vasoconstrictor to anesthetic.
	1.A.4.	- Match patient health condition with appropriate amount of vasoconstrictor in anesthetic.
	1.A.5.	- Match dental procedure with appropriate amount of vasoconstrictor in anesthetic.
	1.B.	Obtain sterile syringe, needle, cotton swab, topical anesthetic, carpule, and gauze square.
	1.B.1	- Identify aspirating syringe, appropriate needle, topical anesthetic, local anesthetics.
	1.B.1.a	- Match needle length to type of injection and area to be given.
	2.	Inspect syringe and needle.
	2.A.	Check that the harpoon is straight, sharp, free from wax and debris.
	2.B.	Check that thumb ring is securely screwed into plunger.

Dental Assistant Task Analysis

**Competency D03: Prepare for administration of
local anesthetic injection.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	2.C.	Check that plunger moves freely and smoothly.
	2.D.	Check that threads of adapter are not worn.
	2.F.	Check that center hole of adapter is unobstructed.
	2.G.	Check to make sure seal of disposable needle is unbroken.
	3.	Mount needle on syringe properly.
	3.A.	Break seal off syringe end of needle, then insert into the adapter of the syringe.
	3.B.	Screw the needle down snugly onto the adapter.
	3.C.	Check to be sure needle is securely mounted but not over-tightened.
	3.D.	Check to be sure exposed syringe end of needle is parallel with syringe.
	4.	Inspect carpule.
	4.A.	Check to be sure anesthetic solution is clear, colorless, and without foreign objects.
	4.B.	Check to be sure there are no bubbles larger than 2 mm.
	4.C.	Check to be sure there are no small chips or hairline cracks in carpule.
	4.D.	Check to be sure the rubber stopper is flush with the edge of carpule.
	4.E.	Check to be sure metal cap shows no evidence of contamination.
	4.F.	Check that rubber diaphragm has not been penetrated or contaminated.
	4.G.	Discard carpule if it fails inspection.

Competency D03: Prepare for administration of
local anesthetic injection.

ENTRY
COMPETENCIES

STEP NUMBER	STEP STATEMENT
5.	Insert carpule into syringe.
5.A.	Pull plunger back and hold it; drop carpule into the barrel of the syringe.
5.B.	Check to be sure the exposed end of the needle has not touched the metal cap of carpule as you inserted.
5.C.	Release pressure on plunger to slide the carpule onto the needle.
5.D.	Check to be sure syringe end of needle has entered the rubber diaphragm of carpule.
5.E.	Check to be sure needle is centered in adapter to avoid leakage.
6.	Engage harpoon.
6.A.	Hold syringe with needle pointing down; rap the plunger sharply to engage the harpoon into the rubber stopper.
6.B.	Pull back on thumb ring; check to be sure the harpoon pulls the rubber stopper back.
7.	Test syringe for operability.
7.A.	Remove protective shield from needle.
7.B.	Hold syringe with needle up and push on plunger to expel several drops of anesthetic solution.
7.C.	To maintain asepsis, do not touch anything with needle.
7.C.1.	- Identify importance of maintaining asepsis.

Dental Assistant Task Analysis

**Competency D03: Prepare for administration of
local anesthetic injection.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	8.	Check level and carpule orientation.
	8.A.	Check to be sure carpule will be visible to dentist when syringe is handed to dentist.
	8.B.	Check that bevel of needle will be to the bone.
	8.C.	Adjust as necessary by turning needle or barrel of syringe.
	8.C.1.	- Read chart to identify where injection will be made and which hand dentist will use.
	9.	Replace protective shield.
	10.	Place needed materials on sterile tray.
	10.A.	Place prepared syringe on sterile tray and cover with napkin or sterile cloth.
	10.B.	Insert cotton swab into topical anesthetic; place swab and gauze on tray.
	11.	Go to D04: Assist with administration of local anesthetic.

Dental Assistant Task Analysis

**Competency D04: Assist with administration
of local anesthetic.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Assist dentist with applying topical anesthetic.
	1.A.	Hand dentist a gauze sponge for drying the area to be injected.
	1.B.	Receive the gauze sponge and hand the swab with the topical anesthetic.
	1.C.	Receive the swab.
	2.	Deliver the aspirating syringe to the dentist, out of the patient's view.
	2.A.	Pick up syringe; secure the thumb ring over dentist's thumb and position barrel of syringe between dentist's fingers.
	2.B.	Grasp barrel of syringe with one hand and remove needle shield with the other hand.
	2.C.	Check to be sure bevel is toward bone and the window of syringe is visible to dentist.
	3.	Assist dentist during injection.
	3.A.	Extend arm across patient to guard against any sudden movement.
	3.B.	Observe patient during injection for any adverse reaction: color change, excessive perspiration, change in breathing rate, unusual body movements; report to dentist. Go to D39: Administer first aid, as necessary.
	3.B.1.	- Identify normal and abnormal vital signs (see D39).

Dental Assistant Task Analysis

**Competency D04: Assist with administration
of local anesthetic.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	4.	Complete the procedure.
	4.A.	Receive syringe after dentist completes injection and replace protective shield.
	4.B.	Place syringe back on tray
	4.C.	Obtain air and water syringe and suction if necessary.
	4.D.	Rinse patient's mouth and evacuate or allow patient to expectorate.
	4.E.	Remain with patient after administration of local anesthetic.
	5.	Continue with other procedures, as necessary.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D05: Assist with rubber dam application.

STEP STATEMENT

- | | |
|--------|---|
| 1. | Prepare basic setup. |
| 1.A. | From D04: Assist with administration of local anesthetic. |
| 1.B. | Obtain sterile mirror, explorer, and cotton forceps. |
| 1.C. | Place on tray. |
| 2. | Prepare rubber dam equipment and materials. |
| 2.A. | Identify need for rubber dam by type of procedure being done, patient tolerance, and office practice. |
| 2.A.1. | - Explain purpose and application of rubber dam to patient. |
| 2.B. | Select frame, forceps, and punch, crown and bridge scissors, inversion instrument, template or stamp (if needed). |
| 2.C. | Select rubber dam square (thin, medium, or heavy). |
| 2.D. | Obtain dental floss, napkin, (if used, lubricant). |
| 2.E. | Look in patient's mouth to determine operation field to be isolated; select anchor tooth and determine teeth to be punched out. |
| 2.E.1. | - Read patient's chart to identify tooth being worked on. |
| 2.F. | Select clamp(s) for anchor tooth or teeth. |

Dental Assistant Task Analysis

Competency D05: Assist with rubber dam application.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	2.F.1.	- Apply rule to clamp at least one tooth distal, if possible, to tooth being worked on.
	2.F.2.	- Identify clamps for molars, premolars, and anteriors.
	3.	Punch rubber dam square for application.
	3.A.	Prepare rubber dam square for punching as necessary.
	3.A.1.	- Identify if rubber dam preparation is needed.
	3.A.2.	- If necessary, use rubber dam template to mark the holes for the teeth to be isolated.
	3.A.3.	- If necessary, stamp the rubber dam square.
	4.	Prepare for application of rubber dam.
	4.A.	Floss patient's teeth to be isolated.
	4.B.	Lubricate patient's lips and the tissue side of rubber dam.
	5.	Assist dentist in applying rubber dam.
	5.A.	Assist with winged clamp procedure.
	5.A.1.	- If using a winged clamp, place clamp in anchor hole in rubber dam square.
	5.A.2.	- Center rubber dam square and attach to frame if necessary or requested.
	5.A.3.	- Engage the clamp forceps in the clamp, and bend forceps with engaged clamp, frame, and square to dentist.

Dental Assistant Task Analysis

Competency D05: Assist with rubber dam application.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	5.A.4.	- If asked, place rubber dam napkin over patient's mouth.
	5.A.5.	- Receive clamp forceps after dentist applies clamp and rubber dam materials/frame.
	5.A.6.	- Pass floss through contact points as dentist stretches rubber dam over teeth.
	5.B.	Assist with wingless clamp procedure.
	5.B.1.	- If using a wingless clamp, engage the clamp forceps in clamp and hand to dentist.
	5.B.2.	- Receive clamp forceps after dentist applies clamp.
	5.B.3.	- If used, place rubber dam napkin over patient's mouth.
	5.B.4.	- Pass rubber dam to dentist.
	5.B.5.	- Pass frame to dentist with attachment.
	5.B.6.	- Pass floss through contact points as dentist stretches rubber dam over teeth.
	5.C.	If requested, pass floss to ligate anterior isolated tooth; cut off excess or wind around frame.
	5.D.	Pass inversion instrument to dentist to invert the dam around teeth. Apply air to isolated teeth as needed.
	5.E.	If requested, lubricate any isolated silicate restorations.

Dental Assistant Task Analysis

Competency D05: Assist with rubber dam application.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	5.F.	If necessary, snip a hole in rubber dam square and place a saliva ejector (see D30).
	5.F.1.	- Identify if saliva ejector is needed by patient.
	5.G.	Receive inversion instrument back and replace on tray.

Dental Assistant Task Analysis

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**ENTRY
COMPETENCIES**

STEP NUMBER

Competency D06: Prepare for cavity restoration.

STEP STATEMENT

1.

Read patient's treatment plan in clinical record to determine type of cavity preparation and area to be treated.

1.A.

Identify classification of cavities (from D38).

2.

Select preassembled tray of instruments and check for completeness; or select the necessary instruments and place on tray.

2.A.

Assemble instrument trays, amalgam or composite as needed (from E9, E10, E11: Sterilize instruments).

2.A.1.

- Select sterile instruments necessary to prepare tray, maintaining aseptic techniques (see D34).

2.A.1.a.

- Identify instruments used in basic cavity preparation setup: basic setup (mirror, explore, cotton forceps); spoon excavator; small hatchet; large hatchet; curved chisel; monangle chisel; bi-angle hoe; triple angle hoe; mesial margin trimmer; distal margin trimmer; bur block set with burs.

2.A.1.b.

- Identify instruments used in amalgam restoration: placing and carving instruments; amalgam carrier; small and medium condensers; carvers; interproximal scaler (carver); burnisher; matrix retainer and assorted bands.

Dental Assistant Task Analysis

Competency D06: Prepare for cavity restoration.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

2.A.1.c.

- Identify instruments used in composite restoration: nylon or teflon placing instrument; or composite syringe if used; trimming instrument, e.g., Bard Parker.

2.A.1.d.

- Identify purpose of each instrument used in procedure.

2.A.1.e.

- Identify steps in restoration procedure.

2.A.2.

- Place hand instruments on the left side of tray from the bottom to top (or left to right) according to their sequence of use.

2.A.3.

- Place pen grasp instruments with their working end to be used first toward the right side (or top) of tray.

2.A.3.a.

- Identify instrument grasps.

2.A.4.

- Place cotton pliers or any other instruments manipulated by the auxiliary with the left hand with their working end to the right (or top) of the tray.

2.A.5.

- Place palm grasp instruments with the working end toward the left side (or bottom) of the tray.

2.A.6.

- Place the mirror or any other instruments to be transferred to the dentist's left hand with their working end to the left (or bottom) of the tray.

Dental Assistant Task Analysis

Competency D06: Prepare for cavity restoration.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|---|---|
| <p>3.</p> <p>3.A.</p> <p>3.B.</p> <p>3.C.</p> <p>3.D.</p> <p>3.E.</p> <p>4.</p> <p>4.A.</p> <p>4.A.1.</p> <p>4.B.</p> <p>4.B.1.</p> <p>5.</p> <p>6.</p> | <p>Select proper bur for preparation; insert and tighten handpiece using chucking tool (bur changer).</p> <p>Identify the shank on burs and match the correct handpiece.</p> <p>Identify types of handpieces and their uses.</p> <p>Match bur shape with cutting action.</p> <p>Identify burs and preparations they are used with.</p> <p>Select the chucking tool (bur changer) for appropriate handpiece.</p> <p>Prepare evacuation equipment.</p> <p>If needed, select and place saliva ejector tip in adapter on saliva ejector hose.</p> <p>- Identify saliva ejector hose.</p> <p>Select and place oral evacuator tip in adapter on oral evacuator hose.</p> <p>- Identify oral evacuator hose.</p> <p>Prepare for topical and local anesthesia, if necessary (see D03).</p> <p>Prepare rubber dam set-up if necessary (see D05).</p> |
|---|---|

Dental Assistant Task Analysis

Competency D06: Prepare for cavity restoration.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

7.

Check to be sure restorative materials and supplies are in cart or on counter; if not, obtain from storage.

7.A.

Identify materials and supplies for amalgam restoration: cavity base and cavity varnish if needed; spatula applicator, mixing pad, assorted wooden wedges if doing a Class II procedure; amalgam well or squeeze cloth; articulating paper in holder; alloy and mercury; amalgamator; clean capsule and pestle.

7.A.1.

- Identify the purposes of a varnish and a base.

7.B.

Identify materials and supplies for composite restoration: cavity base mixing pad and spatula; matrix strip (matrix clamp—optional) (wooden wedges—optional); finishing strips and discs; lubricant; articulating paper in holder; mandrel; material used.

7.B.1.

- Identify mandrel for the appropriate handpiece.

8.

Go to D07: Assist with cavity preparation.

Dental Assistant Task Analysis

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ENTRY

COMPETENCIES

STEP NUMBER

Competency D07: Assist with cavity preparation.

STEP STATEMENT

1. Prepare for procedure (D06).
2. Seat and prepare patient (D01).
3. Wash hands (D02).
4. Deliver and receive mirror and explorer for preliminary examination if necessary.
 - 4.A. Pass and receive explorer properly.
 - 4.B. Pass and receive mirror properly.
5. Assist with administration of anesthesia (D04).
6. Assist with placement of or place rubber dam if necessary (D05 or G19).
7. Evacuate and rinse as the dentist prepares the tooth/teeth (D31).
8. When cavity is prepared, ask the dentist if a base is needed.
 - 8.A. If needed, mix base.
 - 8.A.1. - Select base and catalyst as required by dentist.
 - 8.A.1.a. - Identify bases and catalysts by brand name.
 - 8.A.2. - Dispense equal amounts of base and catalyst on proper pad.
 - 8.A.3. - Mix quickly with applicator or small spatula until uniform; then move mixture near edge of pad.
9. Assist with placement of base (or G06: Apply base).
 - 9.A. Hold pad near patient's chin and give dentist clean applicator.

Dental Assistant Task Analysis

Competency D07: Assist with cavity preparation.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

- 9.A.1. - Pass and receive applicator properly.
- 9.B. Simultaneously, hold a gauze sponge in the other hand close to patient's mouth to wipe applicator as dentist applies base.
- 9.C. When completed, receive applicator and replace on tray with pad.
- 9.D. If necessary, pass explorer to remove excess base; receive explorer and replace on tray.
- 9.E. Rinse and dry cavity preparation if necessary.
10. **Prepare varnish (liner) for amalgam only.**
- 10.A. Obtain a small cotton pellet; grasp with the cotton forceps.
- 10.A.1. - Identify varnish, cotton pellet, cotton forceps.
- 10.B. Remove the cap on the varnish and saturate the cotton pellet.
- 10.C. Replace the cap on the varnish.
11. **Assist with placement of varnish (or G06: Apply varnish).**
- 11.A. Hand pellet in cotton forceps to dentist.
- 11.A.1. - Pass and receive cotton forceps properly.
- 11.B. Receive cotton forceps and pellet and replace on tray.
12. **Go to G08: Assist with amalgam restoration; or go to D09: Assist with composite restoration, as required.**

Dental Assistant Task Analysis

Competency D08: Assist with amalgam restoration.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|----------|---|
| 1. | Deliver assembled matrix band, retainer, and wedge(s) as necessary; receive and replace on tray (or place matrices and wedging, G05). |
| 1.A. | From D07: Assist with cavity preparation. |
| 1.B. | Assemble a mechanical matrix, retainer, and band; hand to dentist (if doing Class II restoration). |
| 1.B.1. | - Identify classification of cavities (from D3B). |
| 1.B.2. | - Select an appropriate matrix band to use with the Tofflemire retainer. |
| 1.B.2.a. | - Identify Tofflemire retainer. |
| 1.C. | Place wedge in cotton forceps or hemostat and hand to dentist. |
| 1.C.1. | - Pass and receive cotton forceps or hemostat properly. |
| 1.C.2. | - Identify cotton forceps, hemo.tat. |
| 2. | Prepare amalgam. |
| 2.A. | Place required number of drops of mercury in a capsule based on number of mixes—one drop per pellet of alloy. |
| 2.A.1. | - Identify number of amalgam mixes required for restoration. |
| 2.A.2. | - Identify how to handle mercury safely, and why. |

Dental Assistant Task Analysis

Competency D08: Assist with amalgam restoration.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

- 2.B. Using cotton forceps, add the pestle to the capsule.
- 2.B.1. - Identify why cotton forceps used.
- 2.C. Using cotton forceps, add the required number of alloy pellets to the capsule.
- 2.D. Place the cap on the capsule.
- 2.E. Load the capsule into the prongs of the amalgamator.
- 2.F. Activate the amalgamator for the required time.
- 2.F.1. - Identify time required for trituration; 10 seconds per pellet of alloy or per manufacturer's instructions.
- 2.G. Remove the capsule cap and dispense the amalgam mix and pestle into the amalgam well or squeeze cloth.
- 2.H. Remove the pestle with cotton forceps.
- 2.I. Mull the triturated amalgam if needed.
- 2.I.1. - Return the amalgam mix to the capsule.
- 2.I.1.a. - Identify if mulling is needed.
- 2.I.2. - Replace the cap on capsule and load onto amalgamator.
- 2.I.3. - Activate the amalgamator for 2 to 3 seconds.
- 2.I.4. - Remove the cap from the capsule; empty amalgam mix into amalgam well or onto squeeze cloth.

Dental Assistant Task Analysis

Competency D08: Assist with amalgam restoration.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	2.J.	Inspect the triturated amalgam.
	2.J.1.	- Check for smoothness (homogeneous, no lumps).
	2.J.2.	- Check for shine (slight metallic appearance).
	2.J.3.	- Check for plasticity (retains shape when deformed but does not crumble).
	3.	Assist with placement of amalgam.
	3.A.	Load the amalgam carrier and pass to dentist (or, if directed by dentist, place amalgam in cavity preparation).
	3.A.1.	- Pass and receive amalgam carrier properly.
	3.B.	Receive the amalgam carrier and pass the condenser to the dentist.
	3.B.1.	- Pass and receive condenser properly.
	3.C.	Reload the amalgam carrier, pass to dentist and receive the condenser.
	3.D.	Repeat Steps 3.B. and 3.C. as needed.
	4.	Assist with carving amalgam.
	4.A.	When condensing of amalgam is complete, pass the explorer to free amalgam from band if a Class II restoration.
	4.A.1.	- Pass and receive carvers properly.
	4.B.	Pass and receive carvers as indicated by dentist for preliminary carving.

Dental Assistant Task Analysis

Competency D08: Assist with amalgam restoration.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 4.C. Assist with removal of retainer and band.
- 4.C.1. - Receive retainer with one hand, pass cotton forceps or hemostat with the other hand to dentist to remove wedge(s).
- 4.C.2. - Receive cotton forceps or hemostate and wedges, place on tray.
- 4.D. Pass and receive carvers as indicated by dentist for final carving.
- 4.E. Pass explorer to dentist to check the gingival contact areas if necessary.
- 4.E.1. - Pass and receive explorers properly.
5. Rinse and evacuate patient's mouth as needed (see D31).
6. Remove rubber dam (see D35).
7. Assist the dentist in checking the occlusion.
- 7.A. Obtain a piece of articulating paper from cart.
- 7.A.1. - Identify articulating paper.
- 7.A.2. - Identify purpose of checking occlusion.
- 7.B. Place the articulating paper in the articulating paper forceps or the cotton forceps.
- 7.C. Pass forceps with articulating paper to dentist to check occlusion.

Dental Assistant Task Analysis

Competency D08: Assist with amalgam restoration.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|--------|---|
| 7.D. | Ask patient to close mouth and tap teeth together; then remove paper. |
| 7.D.1. | - Place the articulating paper over the occlusal surfaces of the maxillary teeth on the side of the arch where restoration is placed. (Place bar of the forceps on the cheek side.) |
| 7.D.2. | - Ask patient to close mouth and tap teeth together; then remove paper. |
| 7.E. | Receive or place the articulating paper and forceps and replace on tray. |
| 8. | If necessary, assist dentist with additional carving (Step 4). |
| 8.A. | Wipe off marks on teeth with gauze if needed. |
| 9. | Repeat Steps 7 and 8 as needed. |
| 10. | Give patient post-operative instructions (16). |
| 11. | Dismiss patient from chair (D37). |

Dental Assistant Task Analysis

Competency D09: Assist with composite resin (self-curing) restoration.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

1.
1.A.
1.B.
1.C.
 2.
2.A.
2.B.
2.C.
2.D.
2.E.
2.F.
2.G.
- Deliver matrix strip or crown former and wooden wedges or matrix clamp, if needed.
- From D07: Assist with cavity preparation.
- Identify matrix strip, crown former, wooden wedges, matrix clamp.
- Obtain a matrix strip or crown former, wooden wedges, or matrix clamp from cart, if needed.
- Prepare composite.
- Identify composite catalyst and base.
- If necessary, stir contents of catalyst and base jars, using separate ends of a plastic disposable spatula.
- Dispense equal amounts of base and catalyst on paper pad with the disposable spatula, being sure to use separate ends of the stick for each material.
- If necessary, add color tint to match shade of patient's teeth, as instructed by dentist.
- Mix the two portions for 20 to 30 seconds with disposable spatula or as per manufacturer's instructions.
- Check to be sure the mixture is uniform.
- Move mixture near the edge of pad.

Dental Assistant Task Analysis

Competency D09: Assist with composite resin (self-curing) restoration.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

3.

Assist with placement of composite.

3.A.

Assemble a composite syringe.

3.A.1.

- Identify components of composite syringe.

3.B.

Load the composite mix into the composite syringe and pass to dentist.

3.B.1.

- Pass and receive the composite syringe correctly.

3.C.

Pass the nylon or teflon-placing instrument to the dentist.

3.C.1.

- Pass and receive composite-placing instrument.

3.C.2.

- Identify composite placement instruments.

3.D.

Hold pad near patient's chin and hold a gauze sponge in the other hand close to the patient's mouth to wipe the placing instrument, as needed.

3.E.

When placement is completed, receive placement instrument or syringe and place on tray.

3.F.

Retain any unused material, roll into ball, and hold between thumb and forefinger to check set of material.

Dental Assistant Task Analysis

**Competency D09: Assist with composite resin (self-curing)
restoration.**

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

4.

Assist with finishing the composite.

4.A.

Receive matrix strip and place on a tray.

4.B.

If needed, place sandpaper disc on mandrel and mount mandrel on handpiece.

4.B.1.

- Identify the correct mandrel for the handpiece and disc.

4.B.2.

- Select sandpaper disc of proper grit as indicated by dentist.

4.C.

If needed, pass a finishing strip to the dentist.

4.C.1.

- Identify finishing strip.

4.D.

If needed, place a bur in the handpiece as indicated by the dentist and pass to dentist.

4.D.1.

- Select proper bur for finishing composite restoration.

4.E.

If needed, pass a mounted Bard-Parker scalpel handle and blade to the dentist.

4.E.1.

- Identify scalpel handles and blades.

4.E.2.

- Pass and receive scalpel handles and blades.

Dental Assistant Task Analysis

Competency D09: Assist with composite resin (self-curing) restoration.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	5.	Evacuate and rinse oral cavity as needed (D31).
	6.	Remove rubber dam (D35 or G).
	7.	Assist dentist with checking the occlusion (see D08, Step 7).
	8.	If necessary, assist dentist with additional finishing (Step 4).
	9.	Repeat Steps 7 and 8, as needed.
	10.	Give patient post-operative instructions (D36).
	11.	Dismiss patient from chair (D37).

Dental Assistant Task Analysis

**Competency D11: Prepare setup for anticario-
genic treatment.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Read patient's record to determine type of fluoride treatment.
	1.A.	Identify health factors associated with fluoride treatment.
	1.B.	Identify purposes of fluoride treatment.
	2.	Identify and obtain fluoride material (dentist chooses type); prepare as necessary.
	2.A.	For stannous fluoride, select the correct dosage and prepare the solution according to manufacturer's directions.
	2.A.1.	- Identify stannous fluoride and distilled water.
	2.A.2.	- Check reference charts for age and oral conditions.
	2.A.3.	- Read manufacturer's directions for preparation of stannous fluoride solution.
	2.B.	Obtain fluoride gel and place on tray.
	2.B.1.	- Identify fluoride gel.
	3.	Identify method of application; obtain needed materials.
	3.A.	If isolation and application by quadrant or arch, obtain cotton swabs, cotton rolls, cotton roll holders and dappen dish.
	3.B.	If using tray technique, select the proper size trays.
	3.B.1.	- Identify disposable fluoride trays.
	4.	Prepare saliva ejector (see D30).
	5.	Go to Standard G07: Apply cariogenic agents topically.

Dental Assistant Task Analysis

**ENTRY
COMPETENCIES**

STEP NUMBER

Competency D10: Prepare setup for oral prophylaxis.

STEP STATEMENT

1. Read patient's record to determine type of prophylaxis planned for patient.
2. Place patient's record in operatory and necessary X rays on viewbox.
3. Select preassembled prophylaxis tray and check for completeness or select the necessary instruments; place on tray and cover with sterile cloth.
 - 3.A. Identify instruments used in prophylaxis: probe scalers, cures, files, chisels, hoes, basic setup.
 - 3.B. Identify purpose of each instrument used in prophylaxis.
 - 3.C. Identify steps in oral prophylaxis procedure.
4. Prepare handpiece.
 - 4.A. Identify prophylaxis angle, low speed handpiece, prophylaxis cup, bristle brush.
 - 4.B. Obtain and place prophylaxis angle on low speed handpiece.
 - 4.C. Obtain and place prophylaxis cup or bristle brush on angle.
5. Obtain other necessary materials; place in convenient area.
 - 5.A. Identify other necessary materials: tooth brush, floss, gauze, patient napkin, discoloring tablets, polishing materials.
6. Prepare saliva ejector (see D30).

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D12: Prepare for oral surgery procedures.

STEP STATEMENT

- | | |
|------|---|
| 4. | Select and prepare other oral surgery materials, as needed, for type of treatment. |
| 4.A. | Identify irrigating syringe, saline solution, germicidal solution, cotton swabs. |
| 4.B. | Prepare warming unit for saline solution. |
| 5. | Prepare for administration of local anesthesia unless the aspirating syringe is within the surgical pack. |
| 6. | Go to D13: Assist with oral surgery procedures. |

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D13: Assist with oral surgery procedures.

STEP STATEMENT

1. **Seat and prepare patient for procedure (from D01).**
 - 1.A. **From D12: Prepare for oral surgery.**
2. **Follow approved hand washing procedures (D02).**
3. **Open sterile pack if being used (D34) or remove sterile cloth from tray.**
4. **Glove-up, using sterile technique (see D34).**
5. **Prepare instruments.**
 - 5.A. **Prepare sutures, if needed, by opening suture package and clamping needle with hemostat.**
 - 5.B. **Prepare for anesthesia (D03).**
 - 5.C. **If needed, prepare scalpel.**
 - 5.C.1. **- Open package of sterile blades.**
 - 5.C.2. **- Grasp blade with a hemostat and place on scalpel handle.**
6. **Prepare evacuation equipment, using surgical suction tip from the surgical package.**
 - 6.A. **Using sterile technique, select a sterile surgical suction tip and place in oral evacuator hose (see D34).**
7. **Drape patient with sterile drape (cloth) from within surgical package or tray.**

Dental Assistant Task Analysis

Competency D13: Assist with oral surgery procedures.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	8.	Assist with administration of local anesthesia (D04).
	8.A.	Scrub the surgical site with germicidal solution if requested by dentist.
	9.	Assist during the surgical procedure.
	9.A.	Continue monitoring patient's vital signs during procedure.
	9.B.	Deliver and receive mirror as needed by dentist.
	9.C.	Maintain the surgical field.
	9.C.1.	- Evacuate the surgical site (D31).
	9.C.2.	- Support the mandible if necessary.
	9.C.3.	- Retract as necessary.
	9.C.4.	- Protect patient's lips and tissue from pinching by instruments.
	9.D.	Deliver and receive necessary instruments as needed (see D14: Deliver and receive instruments for extraction procedure).
	9.D.1.	- Identify instruments used in oral surgery procedure.
	9.E.	As directed by dentist, irrigate the surgical site with warm saline solution.

Dental Assistant Task Analysis

Competency D13: Assist with oral surgery procedures.

**ENTRY
COMPETENCIES** **STEP NUMBER**

STEP STATEMENT

- 9.F. If necessary, pass medication or absorbable sponge(s) to dentist to place in socket.
- 9.G. Assist with suturing, if required.
 - Pass dentist clamped hemostat with needle.
 - Retract and suction as necessary.
 - If interrupted sutures, cut each suture close to knot.
 - If continuous suture, cut close to ending knot.
- 9.G.1.
- 9.G.2.
- 9.G.3.
- 9.G.4.
- 9.H. Place gauze over the surgical site and ask patient to bite on it.
- 9.I. Check patient's face; clean if necessary.
- 10. Give post-operative instructions as necessary (D36).
- 11. Record procedure and post-operative instructions on patient's chart.
- 12. Dismiss patient (D37).

**ENTRY
COMPETENCIES**

**Competency D14: Deliver and receive instruments
for extraction procedure.**

STEP NUMBER	STEP STATEMENT
1.	From D13, Step 9.D.: Assist with oral surgery procedures.
2.	Pass periosteal elevator to dentist to free the gingiva from around the neck of the tooth/teeth or to elevate mucoperiosteal flap.
3.	If necessary, pass a scalpel to the dentist to make a mucoperiosteal flap.
4.	When tissue is free, receive the periosteal elevator and place on tray.
5.	If necessary, pass handpiece with mounted surgical bur to dentist to section the tooth/teeth or to remove overlying bone.
6.	If necessary, pass and receive root elevator(s) following the sequence of small to large or as dentist indicates.
7.	As the dentist uses the last elevator, pick up the extraction forceps and prepare to transfer to dentist (hold in palm grasp transfer position).
8.	When tooth/teeth are sufficiently loosened in socket, receive the root elevator with the little finger of the hand holding the forceps, and place handle of forceps in dentist's hand. Place root elevator on tray.

Dental Assistant Task Analysis

**Competency D14: Deliver and receive instruments
for extraction procedure.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	9.	After tooth has been removed from socket, receive forceps and place on tray, or repeat steps 2-8 if additional teeth are to be removed.
	10.	If necessary, pass and receive rongeur to dentist to trim bone.
	11.	If necessary, pass and receive bone file to dentist to smooth bone.
	12.	Pass and receive surgical curet to dentist to curettage the wound or socket.
	13.	To D13, Step 9.B.: Irrigate as directed.

COMPETENCIES	STEP NUMBER	STEP STATEMENT
	4.	Select and prepare other oral surgery materials, as needed, for type of treatment.
	4.A.	Identify irrigating syringe, saline solution, germicidal solution, cotton swabs.
	4.B.	Prepare warming unit for saline solution.
	5.	Prepare for administration of local anesthesia unless the aspirating syringe is within the surgical pack.
	6.	Go to D13: Assist with oral surgery procedures.

Dental Assistant Task Analysis

Competency D15: Evacuate during surgical procedures.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Select and place the surgical tip in the adapter on the oral evacuator hose (see appropriate surgical procedure).
	2.	Position tip close to surgical site and evacuate as needed.
	3.	Place surgical suction tip within the socket or wound and evacuate as needed.

Dental Assistant Task Analysis

**ENTRY
COMPETENCIES**

STEP NUMBER

Competency D16: Prepare setup for endodontic treatment.

STEP STATEMENT

1.

Read patient's treatment plan to determine area of treatment and the type (or stage) of the endodontic treatment.

2.

Place patient's records in operatory and x-rays on viewbox.

3.

If necessary, turn on bead sterilizer.

4.

Select preassembled tray of endodontic instruments and check for completeness; or select the necessary instruments, place on tray and cover with sterile cloth.

4.A.

Select sterile instruments necessary to prepare tray, maintaining aseptic technique (see D34).

4.A.1.

- Identify instruments used in endodontic procedure: basic setup, spoon excavator, endodontic explorer, plastic instrument, scissors, spreader, irrigating syringes, stops for reamers, paper points, millimeter ruler, intracanal instruments (broaches, reamers, files).

4.A.2.

- Identify steps in endodontic procedure.

4.A.3.

- Identify purpose of each instrument used in endodontic procedure.

4.B.

Place instruments on tray in sequence of use.

Dental Assistant Task Analysis

Competency D16: Prepare setup for endodontic treatment.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

5.
5.A.
5.A.1.
5.B.
5.C.
5.D.
5.E.
5.E.1.
5.F.
6.
6.A.
- Select other endodontic materials, as needed, for type of treatment.
- Select and prepare irrigating solutions and syringes: irrigating syringes, sodium hypochlorite, alcohol, saline, distilled water, hydrogen peroxide.
- Identify irrigating solutions and syringes, acids, filling materials, disinfectants, cements used in endodontic procedure.
- If necessary, select acid: hydrochloric acid, sulfuric acid, EDTA.
- If necessary, select a disinfectant (medicament): cresanol, beechwood creosote, formocresol.
- Select temporary filling materials to close the preparation.
- For final treatment, select the permanent filling material to complete the root canal: gutta percha, silver points.
- Identify temporary and permanent filling materials.
- For final treatment, select the cement mixing pad and spatula to be used in placing permanent filling material.
- If possible, prepare reamers of appropriate diameters with stops at the length(s) determined by dentist, as found in record.
- Select reamers by size numbers.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D16: Prepare setup for endodontic treatment.

STEP STATEMENT

6.A.1.

- Identify the numbers associated with diameter of reamer (No. 10-100).

6.A.2.

- Identify types of handles on anterior and posterior reamers: Style D-(long) anterior handles; Style B-(short) posterior handles.

6.B.

Measure specified length(s) and mark reamers with stops.

6.B.1.

- Read ruler to nearest millimeter.

7.

Select proper bur for opening the tooth. Insert and tighten in handpiece using chucking tool (bur changer).

7.A.

If needed, select and place saliva ejector tip in adaptor on saliva ejector hose.

7.A.1.

- Identify saliva ejector tips and hose.

7.B.

Select and place oral evacuator tip in adapter on oral evacuator hose.

7.B.1.

- Identify oral evacuator hose and tip.

8.

Prepare evacuation equipment: oral evacuator, saliva ejector.

9.

If requested, prepare for a culture: Obtain sterile test tube with medium and sterile paper points.

9.A.

Identify purpose of endodontic culture.

9.B.

Identify sterile paper points.

9.C.

Prepare medium for culture; sterilize in test tubes.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

10.

11.

11.A.

12.

Competency D15: Prepare setup for endodontic treatment.

STEP STATEMENT

Prepare for the administration of local anesthetic (D03).

Prepare for the placement of a rubber dam (see D05).

Prepare a disinfectant to swab rubber dam area once in place on patient (untinted tincture of metaphen).

Go to D17: Assist with endodontic therapy.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D17: Assist with endodontic therapy.

STEP STATEMENT

1.

Seat and prepare patient for procedure (see D01).

1.A.

From Standard 48, prepare setup for endodontic procedure.

2.

Follow approved handwashing procedures (see D02).

3.

Open the preassembled tray or remove sterile cloth from tray of instruments.

4.

Assist with administration of anesthesia (see D04).

5.

Assist with application of or apply rubber dam (D?).

6.

Assist during endontic procedure.

6.A.

Pass the handpiece with the bur to the dentist to open the tooth or remove temporary restoration; evacuate and retract as necessary (D31).

6.B.

If necessary or requested, assist with taking a culture.

6.B.1.

- Pass dentist a sterile paper point, hold culture tube while dentist inserts the paper point.

6.B.2.

- Place culture tube in incubator for 72 hours to 7 days.

6.B.2.a.

- Identify incubator.

6.B.3.

- If necessary or requested, assist with taking a culture.

6.C.

When the opening into the pulp chamber is complete, pass and receive broaches or reamers as indicated by the dentist.

Dental Assistant Task Analysis

Competency D17: Assist in root canal therapy.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

- 6.D. Assist with Irrigation.
- 6.D.1. - Fill the irrigating syringe with the irrigating solution and pass to dentist; evacuate as dentist irrigates the canal.
- 6.E. Pass and receive the measured reamers as necessary as assist with irrigation.
- 6.E.1. - If first treatment, assist dentist with placement of the reamer(s). Take X rays of tooth with reamer(s) in place (G02 or G03).
- 6.E.2. - Process film (C06) and deliver to dentist to compute length of the canal(s). Pass millimeter ruler if necessary.
- 6.E.3. - With a millimeter ruler, measure each reamer to be used and set stop at the length indicated by the dentist.
- 6.E.4. - Place stop on each reamer anticipated for use starting with the diameter indicated by the dentist.
- 6.F. If necessary, fill an irrigating syringe with acid and pass to dentist. Be sure not to drop or spill any acid while passing syringe. Evacuate as dentist expresses acid into canal(s).
- 6.G. If necessary, pass sterile paper points to dentist to dry canal(s).

ENTRY

COMPETENCIES

STEP NUMBER

Competency D17: Assist in root canal therapy.

STEP STATEMENT

- 6.H.
- 6.H.1.
- 6.H.2.
- 6.I.
- 6.I.1.
- 6.I.2.
- 6.I.3.
- 6.I.3.a.
- 7.
- If necessary, assist with medicating the site.
- If necessary, obtain cotton pellet; medicate with disinfectant (medication); hold with cotton forceps and pass to dentist to place in canal.
 - If necessary, pass sterile paper points and disinfectant (medication) to dentist to place in canal.
- If necessary, assist with placement of permanent filling material.
- If necessary, pass permanent filling material (silver points or gutta percha) to dentist to try in canal to check fit, then pass scissors if requested.
 - For gutta percha, light bunsen burner.
 - Prepare cement for cementing permanent filling material; pass to dentist or hold near patient's chin.
 - Mix with spatula equal amounts of cement base and catalyst on paper pad until a uniform mix.
- If necessary, prepare a temporary restorative material and pass to dentist with a plastic instrument (or go to G14).

Dental Assistant Task Analysis

Competency D18: Prepare set-up for periodontal treatments.

ENTRY
COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. Read patient's treatment plan to determine procedure and area to be treated.
2. Place patient records in operatory and x-rays on viewbox.
3. Select preassembled tray or pack of instruments and check for completeness, or select the necessary instruments and place on tray.
 - 3.A. Identify instruments used in periodontal procedure. Periodontal surgery: basic setup; mirror, explorer, cotton forceps; probe, pocket marking forceps, scalpel handle and blades, periodontal knives, curettes, scalers, periodontal files, periosteal elevator, rongeurs, bone files, bone burs; hemostats, scissors, sutures and needle, plastic instrument, surgical evacuator tip, spatula, sponges, patient drape, non-metal mirror, irrigation syringe. Periodontal treatment (scaling and curettage): basic setup, probe, curettes, scalers, files, hoe, surgical evacuator tip, Porte polisher and tips.
 - 3.B. Identify steps in periodontal procedure (gingivectomy, scaling, and curettage).
 - 3.C. Identify purpose of each instrument used in periodontal procedure.
 - 3.D. Select instruments necessary to prepare tray, maintaining aseptic technique (see D27).
 - 3.E. Place instruments on tray in sequence of use from left to right (D06, Step 2); cover with sterile cloth.

Dental Assistant Task Analysis

Competency D18: Prepare set-up for periodontal treatments.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|--------|--|
| 4. | Select other periodontal materials as needed for type of treatment. |
| 4.A. | Identify which periodontal materials are needed. |
| 4.B. | Identify polishing materials, prophylaxis angle, rubber cup, bristle brush, floss, dressing material and pad, saline solution. |
| 5. | If necessary, prepare the ultrasonic scaling unit. |
| 5.A. | Identify if ultrasonic scaling unit is needed. |
| 5.B. | Place sterile tip insert in ultrasonic scaling unit handpiece and turn unit on. |
| 6. | If necessary, prepare handpiece. |
| 6.A. | Identify if handpiece is necessary. |
| 6.B. | Place prophylaxis angle on handpiece, then place rubber cup or bristle brush on angle. |
| 7. | If outside of sealed package, prepare evacuation equipment. |
| 7.A. | Select an oral evacuator tip and place in adaptor on hose. |
| 7.A.1. | - If using electrosurgery, select nonmetal evacuator tips. |

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D18: Prepare set-up for periodontal treatments.

STEP STATEMENT

8.

If necessary, prepare the electrosurgery unit.

8.A.

Place cutting tip indicated by dentist in handpiece of electrosurgery unit.

9.

If necessary, and not using sealed sterile packages, prepare for administration of local anesthesia (D03).

10.

Go to D19. Assist with periodontal surgery procedure; or D20: Assist with periodontal treatment.

Dental Assistant Task Analysis

Competency D19: Assist with periodontal surgery procedure (gingivectomy).

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

1. Seat and prepare patient for procedure (D01).
 - 1.A. From D18: Prepare setup for periodontal treatments.
2. Follow approved hand-washing procedures (D02).
3. Open sterile tray or pack (D34) or remove sterile cloth from tray.
4. Glove up, using sterile technique (see D34).
5. Prepare instruments as needed.
 - 5.A. Assemble irrigating syringe and draw up saline solution.
 - 5.B. If needed, prepare sutures.
 - 5.B.1. - Open package of sterile suture material and needle.
 - 5.B.2. - Clamp needle with hemostat.
 - 5.C. If needed, prepare scalpel.
 - 5.C.1. - Open package of sterile blades.
 - 5.C.2. - Grasp blade with hemostat and place on scalpel handle.
6. If within pack, prepare syringe for anesthesia (D03).
7. Prepare evacuation equipment.
 - 7.A. Select sterile suction tip from surgical package.
 - 7.B. Place tip on oral evacuator hose using sterile techniques (D34).

Dental Assistant Task Analysis

Competency D19: Assist with periodontal surgery procedure (gingivectomy).

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	8.	Drape patient with sterile drape from within the surgical package.
	9.	Assist with administration of local anesthesia (see D04).
	10.	Assist with gingivectomy procedure.
	10.A.	Using cotton swabs, swab the surgical site with germicidal solution.
	10.B.	Pass and receive the pocket-marking forceps or probe to the dentist to mark the base (depth) of the pockets.
	10.B.1.	- Pass and receive pocket marking forceps, probe, scalpel, periodontal knife, curettes, files, scalers; and suture properly.
	10.C.	Pass and receive a scalpel or knife to the dentist to incise the tissue.
	10.D.	Pass and receive a periodontal knife to the dentist to incise the interdental papillae.
	10.D.1.	- Maintain the surgical field (see D13, Step 9.C.).
	10.E.	Using sterile gauze or evacuation tip, assist with the retraction and/or removal of incised tissue as dentist cuts free.
	10.F.	Pass and receive curettes, files, and scalers as the dentist requests, to remove deposits or to smooth root surfaces.
	10.G.	Rinse and evacuate the surgical site (see D15).

Dental Assistant Task Analysis

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ENTRY
COMPETENCIES

STEP NUMBER

STEP STATEMENT

Competency D19: Assist with periodontal surgery procedure (gingivectomy).

10.H.

Irrigate with saline solution and evacuate the surgical site (D15).

10.H.1.

- Identify resins for using saline solution.

10.I.

Apply direct pressure with a sterile gauze as needed to control hemorrhage.

10.J.

If necessary, assist with suturing (see D13, Step 9.G.).

10.K.

Check patient's face; clean if necessary.

11.

Prepare a periodontal dressing.

11.A.

Prepare a non-eugenol-based dressing.

11.A.1.

- Squeeze equal amounts of periodontal dressing base and catalyst onto mixing pad.

11.A.1.a.

- Identify amount of dressing needed.

11.A.1.b.

- Identify periodontal dressing base and catalyst.

11.A.2.

- With metal spatula or tongue blade, mix material until a smooth and uniform mix appears.

11.A.3.

- When dressing material is workable, lubricate fingers lightly with petroleum jelly, then pick up dressing and roll into a thin rope.

11.B.

Prepare eugenol-based dressing.

11.B.1.

- Measure appropriate amounts of powder and liquid onto mixing pad.

11.B.1.a.

- Identify powder and liquid used (eugenol and periodontal pack powder).

Dental Assistant Task Analysis

Competency D19: Assist with periodontal surgery procedure (gingivectomy).

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	11.B.1.b.	-- Identify amount of dressing needed.
	11.B.2.	- Use flexible spatula to miss as much powder as possible into liquid.
	11.B.3.	- Continue mixing until material is firm and non-sticky, the consistency of putty.
	11.B.4.	- Lubricate fingers lightly with petroleum jelly, then roll material into appropriate length to cover surgical site.
	12.	Assist with placement of a periodontal dressing (or place periodontal dressing; see G11).
	12.A.	Pass periodontal dressing to dentist to apply.
	12.B.	If needed, pass plastic instrument to dentist to trim dressing.
	13.	Give post-operative instructions (see D36).
	14.	Record procedure and post-operative instructions on patient's chart.
	15.	Dismiss patient (see D37).

Dental Assistant Task Analysis

Competency D20: Assist with periodontal treatment (scaling and curettage).

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Seat and prepare patient for procedure (D01).
	1.A.	From D18, prepare setup for periodontal treatments.
	2.	Follow approved handwashing procedures (D02).
	3.	Open sterile tray or pack (D34) or remove sterile cover or cloth from tray.
	4.	If necessary, assist with administration of local anesthesia (see D04).
	4.A.	Identify if anesthetic will be used.
	5.	Assist with scaling and curettage.
	5.A.	If needed, pass the ultrasonic handpiece and evacuate as dentist scales patient's teeth.
	5.A.1.	- Maintain the field by evacuating, rinsing and retracting as needed (see D31).
	5.B.	Pass and receive the periodontal scalers to the dentist.
	5.B.1.	- Pass and receive periodontal scalers, curettes, hoes, and files properly.
	5.C.	Pass and receive the periodontal curettes to the dentist.
	5.D.	If necessary, pass and receive the periodontal hoe or file to the dentist.
	5.E.	Pass dental floss to dentist as needed.
	5.F.	Check patient's face; clean if necessary.

Dental Assistant Task Analysis

**Competency D20: Assist with periodontal treatment
(scaling and curettage).**

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

- | | |
|----|--|
| 6. | Give patient post-operative instructions as needed (see D36). |
| 7. | Record procedure and post-operative instructions on patient's chart. |
| 8. | Dismiss patient (see D37). |

Dental Assistant Task Analysis

Competency D21: Prepare alginate impression materials.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Use water measure to obtain amount of cool water needed for amount of powder to be used; place in rubber bowl.
	1.A.	Identify amount of powder needed for lower (2) and upper (3) trays.
	1.B.	Match water level to line on measure.
	2.	Measure amount of powder needed to fill impression tray.
	2.A.	Before opening can, fluff powder by inverting closed can several times.
	2.A.1.	- Identify alginate materials; note whether regular or fast-setting.
	2.B.	Use scoop and spatula to obtain level scoopfuls; place in paper cup.
	2.C.	Close can tightly after obtaining amount of powder needed.
	3.	Using spatula, slowly fold powder from cup into water, until powder is thoroughly wetted.
	4.	Mix with spatula until a smooth homogeneous mixture has been achieved; no more than 1 minute.

Dental Assistant Task Analysis

Competency D22: Assist with taking alginate impressions.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Hand tray(s) to dentist to try in patient's mouth, to check size and fit.
	1.A.	Identify alginate impression trays by number and type.
	2.	Once tray(s) fitted, prepare the alginate impression material for one tray (D21).
	3.	Fill impression tray and pass to dentist to place in patient's mouth.
	3.A.	Identify areas of impression trays.
	3.B.	To fill maxillary tray, lift some material with the spatula and place the base against the posterior palatal heels, pull spatula downward so material rolls off into tray. Use the tip of the spatula to draw material into the anterior portion of the tray. Repeat this for the opposite side of the tray.
	3.C.	To load mandibular tray, lift some material with spatula and place base of spatula against the posterior lingual aspect of the tray, then pull spatula downward so material rolls off spatula into tray. Use the tip of the spatula to draw material into the anterior portion of the tray. Repeat this for the opposite side of the tray.
	3.D.	Slightly overfill tray.
	3.E.	With a wet finger, smooth material in the tray to reduce surface tension.
	3.F.	Have excess material ready for dentist, if needed.

Dental Assistant Task Analysis

Competency D22: Assist with taking alginate impressions.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	4.	Stabilize impression in mouth after dentist places impression tray (D23).
	5.	Receive impression tray from dentist; wrap in a damp towel or place tray in humidior (or D24: Remove impression tray).
	5.A.	Identify humidior.
	6.	Repeat Steps 2-5 for second impression tray, as required.
	7.	Record treatment in patient's record.
	8.	Dismiss patient (D37).
	9.	Go to F01: Care for impressions.

Dental Assistant Task Analysis

Competency D23: Stabilize impressions in mouth.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	To hold maxillary tray, stand behind patient, bring arms around in front of patient and apply equal pressure on each side of tray.
	2.	To hold mandibular tray, face the patient and apply equal bilateral pressure firmly, holding middle fingers over bicuspid region and using thumbs to support the mandible.
	3.	Hold for time recommended by material manufacturer.
	3.A.	Read manufacturer's instructions to identify time.

Dental Assistant Task Analysis

**Competency D24: Remove (alginate) impression(s)
from patient's mouth.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Remove lower (mandibular) tray.
	1.A.	Hold tray with right thumb and fingers; retract patient's right cheek and lip with left hand.
	1.B.	Release the edge of the impression by depressing the buccal mucosa, then remove impression with sudden snap.
	2.	Remove upper (maxillary) tray.
	2.A.	Hold the tray handle with the right thumb and fingers; retract the left cheek and lip with the left fingers.
	2.B.	Elevate the cheek on the left side over the edge of the impression and break the seal, then remove impression with a sudden snap.

Dental Assistant Task Analysis

Competency D25: Prepare rubber base impression materials.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Prepare tray material.
	1.A.	Identify rubber base tray materials accelerator and base.
	1.A.1.	- Read manufacturer's instructions.
	1.B.	Extrude equal lengths of the accelerator and base separately on a pad.
	1.B.1.	- Estimate amount of tray materials needed.
	1.C.	Mix the material by picking up the accelerator with spatula and mixing into the base until a uniform color with no streaks.
	1.D.	Use spatula to fill impression tray with material.
	1.D.1.	- Lift some material with spatula and place the base of the spatula blade against the posterior lingual aspect of the tray, then pull spatula downward so materials rolls off the spatula into the tray. Use the tip of the spatula to draw the materials into the anterior portion of the tray. Repeat this for the opposite side of the tray.
	2.	Prepare syringe material as needed.
	2.A.	Identify rubber base syringe material accelerator and base.
	2.A.1.	- Read manufacturer's instructions.
	2.B.	Extrude equal lengths of the accelerator and base separately on a pad.
	2.B.1.	- Estimate amount of syringe material needed.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

2.C.

Mix the material by picking up the accelerator with a spatula and mixing into the base until a uniform color with no streaks.

2.D.

Load syringe with rubber base material.

2.D.1.

- Identify parts of syringe.

2.D.2.

- Place mix in a paper funnel, then squeeze from funnel into syringe.

2.D.3.

- Place open end of syringe at a 90° angle on the mixing pad next to the mixed material, scrape the syringe through the material several times until the mass is inserted into the shank of the syringe.

2.D.4.

- Lift some of the mix with the spatula; holding syringe with tip pointing down, place base of spatula against the lip of the loading attachment ring, then pull spatula downward so material enters shank of syringe. Continue until syringe is full.

2.D.5.

- Replace plunger in syringe.

Competency D25: Prepare rubber base impression materials.

STEP STATEMENT

Dental Assistant Task Analysis

Competency D26: Assist with taking rubber-base impressions.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. Hand trays to dentist to try in patient's mouth to check fit.
- 1.A. From F02: Fabricate custom trays for impressions.
2. Once fitted, apply a coat of rubber base adhesive to the inside of the tray and allow to dry (10 minutes).
3. If needed, assemble the rubber base syringe.
- 3.A. Check that syringe is clean.
- 3.A.1. - Identify the rubber base syringe.
- 3.B. Assemble the syringe by unscrewing the hub, place a plastic tip over end of barrel, then reposition hub snugly; remove plunger.
4. If necessary, arrange mixing pad(s).
- 4.A. Secure mixing pad(s) for syringe and tray material by taping to counter on three sides.
5. Prepare rubber base impression material (D25).
6. Prepare patient as necessary.
- 6.A. Assist dentist with removal of retraction cord, cotton rolls.
- 6.B. Inform patient of what will happen next.

Dental Assistant Task Analysis

Competency D26: Assist with taking rubber-base impressions.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|-----|---|
| 7. | If needed, pass the prepared syringe to the dentist. |
| 8. | Assist with evacuation, rinsing, drying, or retraction, as necessary, while dentist injects syringe material. |
| 9. | Pass prepared tray to dentist. |
| 10. | Stabilize impression in mouth after dentist places impression tray (D23). |
| 11. | Receive impression tray from dentist. |
| 12. | Record treatment in patient's record. |
| 13. | Dismiss patient (D37). |
| 14. | Go to F01: Care for impressions. |

Dental Assistant Task Analysis

**Competency D27: Prepare cement for cementation of gold;
prepare cement for protective base.**

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

1.
 - 1.A.
 - 1.A.1.
 - Identify cements which can be used as a protective base.
 - 1.A.2.
 - Identify cements which can be used for permanent cementation of gold.
 - 1.B. If zinc phosphate, select a cool glass slab (65 degrees) and cement spatula.
 - 1.C. If polycarboxylate, select a cool glass slab or a disposable treated paper pad and cement spatula.
 - 1.C.1.
 - Identify the purpose for keeping liquid tightly stoppered at all times when not in use (gains or losses in water affects setting time).
2. **Prepare the powder and liquid.**
 - 2.A. Read manufacturer's instructions to identify powder and liquid ratio.
 - 2.B. Dispense required amount of powder onto one end of slab or pad, then replace stopper on powder.
 - 2.C. Agitate bottled liquid and place required amount of liquid onto opposite end of slab or pad from powder; replace stopper on liquid.

Dental Assistant Task Analysis

**Competency D27: Prepare cement for cementation of gold;
prepare cement for protective base.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	3.	Mix the cement.
	3.A.	Read manufacturer's instructions to identify appropriate mixing procedure.
	3.B.	Mix according to manufacturer's instructions or see D28, D29.
	3.B.1.	- If base: mix will be thick, putty-like consistency and dull in appearance. Hangs but does not drop from spatula.
	3.B.2.	- If cement: mix is creamy, follows spatula before breaking into a thin thread; will fall from spatula in gummy drop, hold its form for a moment, and then spread slightly.
	4.	Move mixed cement or base to the exchange zone or work area.
	4.A.	Identify the exchange zone.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D28: Mix zinc phosphate cement.

STEP STATEMENT

1. If zinc phosphate, use spatula to form powder into thin, flat, rectangular shape on cool glass slab.
2. Divide powder into halves, quarters, and eighths, then divide four of the eighths into halves (i.e., sixteenths).
3. Pull one-sixteenth portion of powder into liquid, spatulate, holding the blade flat against the slab with rotary motion for 15 seconds.
 - 3.A. Mix should be homogeneous before adding any more portions of powder.
 - 3.B. Spread the mix out to aid in dissipation of heat.
4. Pull in second one-sixteenth portion, spatulating for 15 seconds.
5. Pull in one-eighth portions, one at a time, and spatulate each for 15 seconds.
6. Pull in one-fourth portions, one at a time, and spatulate each for 20 seconds.
7. Determine if additional powder is needed by checking consistency (see D27, Step 3.B.2.).
8. Pull in and mix remaining one-eighth portions, one at a time, if needed.

Dental Assistant Task Analysis

Competency D29: Mix zinc oxide eugenol (ZOE) base.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Divide powder into four equal portions on slab or pad.
	2.	Mix one-fourth of the powder into the liquid; spatulate for approximately 15 seconds with flat side of spatula, using small circular motions.
	3.	Determine if additional powder is needed by checking consistency (see D27, Step 3.B.1.).
	4.	Mix additional quarters of powder into mix until the required consistency is attained.
	5.	If requested by dentist, dip index finger and thumb into remaining powder; roll mixed zinc oxide eugenol into a rod or cylinder shape between fingertips. Place prepared material back on slab or pad.

Dental Assistant Task Analysis

Competency D30: Apply saliva ejector.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Select a disposable saliva ejector tip.
	1.A.	Identify saliva ejector tips.
	2.	Place the unguarded end of the saliva ejector tip in the saliva ejector hose adapter.
	3.	Bend the end of the tip over into proper shape.
	3.A.	Identify proper shape for bending saliva ejector.
	4.	Place tip over patient's lower teeth on the side opposite the area to be worked on.
	5.	Adjust the bend in the tip if necessary to stabilize the saliva ejector in the mouth.
	6.	Turn the valve located on the hose adapter to activate the suction.

Dental Assistant Task Analysis

Competency D31: Evacuate the oral cavity during dental procedures.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Select and place the oral evacuator tip in the hose adapter. (See appropriate operative procedure.)
	1.A.	Identify the purposes of oral evacuation.
	2.	Hold the oral evacuator tip.
	2.A.	Hold oral evacuator tip in right hand if working with right-handed dentist; left hand if working with left-handed dentist.
	2.B.	Use an acceptable grasp (thumb-to-nose grasp, modified pen grasp, reverse-palm-thumb, fingertip grasp).
	3.	Turn the oral evacuator on by turning the valve on the hose or by flipping the switch to ON position.
	4.	Position the oral evacuator tip in patient's mouth and evacuate.
	4.A.	Position tip appropriately.
	4.A.1.	- Position the tip first, then dentist positions the handpiece or mirror (sometimes this is reversed).

Dental Assistant Task Analysis

Competency D31: Evacuate the oral cavity during dental procedures.

**ENTRY
COMPETENCIES**

STEP NUMBER	STEP STATEMENT
4.A.2.	- Position the tip for posterior evacuation.
4.A.2.a.	- If assisting right-handed dentist, angle tip on the buccal aspect for patient's left side. If left-handed dentist, angle tip on buccal aspect for patient's right side.
4.A.2.b.	- If assisting right-handed dentist, angle tip on the lingual aspect for patient's right side. If left-handed dentist, angle tip on the lingual aspect of patient's left side.
4.A.3.	- Position the tip for anterior evacuation.
4.A.3.a.	- Hold tip on opposite side of area being worked on.
4.A.4.	- Use cross-chest approach where necessary, using other hand.
4.A.4.a.	- Identify need for cross-chest approach.
4.A.4.b.	- If lingual tip placement is impossible, switch oral evacuator tip to other hand, reach across patient's chest, and position tip on buccal surface.
4.A.4.c.	- If buccal tip placement is impossible, switch oral evacuator tip to other hand, reach across patient's chest, and position tip on lingual surface.
4.A.5.	- Position tip opening parallel to the tooth and level with the occlusal plane.
4.A.5.a	- Upper edge of tip even with occlusal surface for mandibular teeth.
4.A.5.b	- Lower edge of tip even with occlusal surface for maxillary teeth.

Dental Assistant Task Analysis

Competency D31: Evacuate the oral cavity during dental procedures.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	4.A.6.	- Hold tip as close as possible (1/8-1/4 inch) to the tooth and slightly distal to the area.
	4.B.	Keep the floor of the mouth and throat clear of water and debris.
	4.B.1.	- Rotate tip opening to prevent catching tissue or making excessive noise.
	4.B.2.	- Maintain a clear field of vision during the procedure.

Dental Assistant Task Analysis

Competency D32: Rinse the oral cavity.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Perform full mouth rinse.
	1.A.	Place saliva ejector in patient's mouth (see D30).
	1.B.	Hold syringe in one hand and retract patient's lips with the other hand.
	1.C.	Rinse by quadrants, starting at the maxillary midline and rinsing toward the posterior region.
	1.D.	Rinse between the teeth, avoiding direct spray on facial or lingual surfaces.
	2.	Rinse limited area while evacuating.
	2.A.	Adjust tip of syringe downward or upward as required.
	2.B.	If evacuation required, hold syringe in one hand and evacuation tip in the other hand. Hold syringe parallel to evacuator tip.
	2.C.	If evacuation is not required, retract lips or tissue with other (free) hand while rinsing with syringe.
	2.D.	When the dentist pauses for cavity inspection, immediately rinse, evacuate, and dry the area (see D31, D33).

Dental Assistant Task Analysis

Competency D33: Dry the work area.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Adjust tip of syringe downward or upward as required.
	2.	Gently apply air in a steady stream for no longer than 10 seconds; use only enough air to clear the area or preparation.
	3.	Apply air to clear mirror as required.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency D34: Maintain asepsis while handling sterile items.

STEP STATEMENT

1.
Maintain aseptic storage of material.
 - 1.A. Remove items from storage with sterile transfer forceps, not touching anything.
 - 1.B. Store material trays or surgical packs in dry, covered area.
2.
Maintain surface disinfection.
 - 2.A. Use sterile or disposable patient drapes during procedure.
 - 2.B. Use disposable items where possible.
 - 2.C. Disinfect operatory. (See E13)
3.
Demonstrate personal hygiene.
 - 3.A. Wear gloves or finger cots during surgical procedure.
 - 3.B. Wear short fingernails and use good handwashing technique. (See D02)
 - 3.C. Wear face mask and safety glasses.
 - 3.D. Wear clean uniform daily.
 - 3.E. Keep hair clean; wear up and off uniform collar.
4.
Avoid contamination of sterile items.
 - 4.A. If possible, maintain a dry surface at all times.
 - 4.B. Do not cross hand or arm over the sterile area or allow anything non-sterile to touch pack or tray.

Dental Assistant Task Analysis

Competency D34: Maintain asepsis while handling sterile items.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

4.C.

If necessary, add sterile items to a sterile field.

4.C.1.

- Transfer sterile items by picking up under the sterile wrap, gather the ends back around wrist to cover hand and gently place or drop well within sterile site.

4.C.2.

- Sterile transfer forceps may be used to remove an item from a wrap and place within the sterile field.

4.D.

Demonstrate opening a sterile pack and covered tray.

4.D.1.

- Hold package or tray out and away from body contact or place on a secure surface (counter or cabinet).

4.D.2.

- If tray, lift cover of tray by touching the outside surface only; place cover aside. Do not touch contents.

4.D.3.

- If wrapped or sealed package, remove tape or open, grasp outside flaps, one side at a time and fold back. Do not touch contents.

5.

Demonstrate sterile gloving technique.

5.A.

Obtain a sealed package of gloves. Open wrapper so that areas touched do not touch gloves (follow directions on package).

5.B.

Pick up the first glove touching only the inside surface and put glove on without allowing outside to touch anything else.

Dental Assistant Task Analysis

Competency D34: Maintain asepsis while handling sterile items.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	5.C.	Pick up second glove from under cuff with gloved hand. Put on glove, touching only the inside of the second glove with the bare hand.
	5.D.	Turn up cuffs, touching gloved hand only to outside of other glove. Do not roll cuff so that outside of glove touches skin.
	6.	Use oral aseptic measures with patients.
	6.A.	Apply a rubber dam if required (D33 or G04).
	6.B.	If indicated by dentist, perform a gentle preoperative irrigation of gingival crevices prior to surgery (See D13).
	6.C.	Wipe injection or surgical sites with sterile gauze soaked in germicidal solution.
	6.D.	Use preoperative mouth rinse.
	7.	Maintain asepsis while assisting during procedure.
	7.A.	Consider anything out of sight to be unsterile.
	7.B.	Do not pick up any item dropped on the floor (or out of the sterile field) until the procedure is over.
	7.C.	Pick up and return instruments and materials to sterile field.

Dental Assistant Task Analysis

Competency D34: Maintain asepsis while handling sterile items.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

7.D.

Do not allow ends of wrap or sutures to touch unsterile areas.

7.E.

Once a sterile field has been established, DO NOT TOUCH anything outside sterile field.

8.

Identify facts about microorganisms.

8.A.

Microorganisms are transferred from one surface to another whenever a nonsterile item touches a sterile one.

8.B.

Microorganisms move rapidly along any moisture through a wicking motion, but slowly along a dry surface.

8.C.

Microorganisms are released into the air on droplet nuclei whenever a person breathes or speaks.

8.D.

Microorganisms move as a result of gravity (holding unsterile item over sterile item).

9.

Define terms related to aseptic techniques: sterile, cross-infection, autoinfection, pathogen, bactericidal, bacteriostatic.

Dental Assistant Task Analysis

**Competency D35: Assist with the removal of the rubber dam
(when treatment procedure is completed).**

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

1. Remove saliva ejector, if used.
2. Assist with wingless clamp removal procedure.
 - 2.A. Using scissors, cut the interproximal rubber and any ligatures; or pass scissors to dentist and assist as he cuts rubber dam and ligatures.
 - 2.A.1. - If cutting, stretch rubber dam materials away from teeth on buccal side and slide finger under materials to protect tissue.
 - 2.B. Deliver clamp forceps to dentist to remove wingless clamp.
 - 2.C. Receive forceps and clamp from dentist and replace on tray.
 - 2.D. Receive rubber dam, napkin (if used) and frame, and replace on tray.
3. Assist with winged clamp removal procedure.
 - 3.A. Pass clamp forcep to dentist to engage winged clamp and remove.
 - 3.B. See 2.C.
 - 3.C. See 2.A. and 2.A.1.
 - 3.D. See 2.D.
4. Rinse and evacuate patient's mouth.

Dental Assistant Task Analysis

Competency D36: Explain post-operative instructions to the patient.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Confirm with dentist instructions to be given.
	2.	Give home care instructions verbally and, if applicable, in writing; discuss with patient.
	2.A.	Identify patient home-care procedures following restorations, oral surgery, endodontics, periodontics, prosthetics, fluoride treatment; explain.
	3.	Demonstrate the preparation, insertion, or application of material if indicated; e.g., folding gauze, use of irrigating syringe, prosthetic removal and insertion.
	4.	Answer any question the patient asks or refer to dentist.
	5.	Tell patient to contact office if any problem develops.
	6.	Record the post-operative instructions on the patient's chart.
	7.	To D37: Dismiss patient from chair.

Dental Assistant Task Analysis

Competency D37: Dismiss patient from chair.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. After treatment is completed, inspect patient's face and wipe clean, if necessary.
2. Ask patient if mouth rinse needed; if yes, give cup of water and indicate where to expectorate.
3. Return chair to upright position.
 - 3.A. Push exit button on dental chair to return patient to upright, lowered position.
 - 3.B. Push buttons to raise chair back to upright position while lowering chair.
 - 3.C. If necessary, raise dental chair arm.
4. Remove patient napkin or towel.
5. Move bracket table and operatory light out of patient's way.
6. Return personal belongings to patient.
7. Assist patient from dental chair if necessary.
8. Escort patient to reception area and return record to desk.
9. To B03: Collect fees for dental services.
10. Schedule further appointment if necessary (see A02).

Dental Assistant Task Analysis

Competency D38: Chart oral conditions on clinical record
as dictated by dentist.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Chart dental conditions on clinical record, using correct symbols.
	1.A.	Classify teeth by their shape.
	1.B.	Identify teeth by name.
	1.C.	Draw outlines and contours of teeth.
	1.C.1.	- Identify charting symbols.
	1.D.	Identify six classifications of cavities.
	1.D.1.	- Identify surfaces of teeth.
	1.D.1.a.	- Recognize definitions of "tooth surface."
	1.E.	Identify primary teeth by letters.
	1.E.1.	- Distinguish directions: left from right, upper from lower (always the patient's left or right).
	1.F.	Identify permanent teeth by Palmer charting system.
	1.G.	Identify permanent teeth by universal charting system.
	2.	Write dentist's comments on clinical records as dictated (e.g., tongue thrust, malocclusion, oral inspection, periodontal condition, etc.).
	3.	To A02: Receive and dismiss patients.
	4.	To C09: File dental radiographs.

Dental Assistant Task Analysis

**ENTRY
COMPETENCIES**

STEP NUMBER

Competency D39: Assist in administering first aid.

STEP STATEMENT

1.

Use preventive measures.

1.A.

Maintain a safe office environment (see A01).

1.B.

Obtain pretreatment physical evaluation of all patients (complete medical-dental histories; record vital signs).

1.C.

Color code or otherwise mark the records of potential risk patients.

1.C.1.

- Identify potential complications from patient history.

1.D.

Modify dental therapy for patient's individual needs (medical consultations, premedication, shorter appointments, stress reduction, etc.).

2.

Prepare for potential emergencies.

2.A.

Prepare and maintain oxygen source.

2.A.1.

State emergency procedures.

2.B.

Prepare and maintain emergency kit or tray.

2.B.1.

- Identify components of an emergency kit.

3.

Monitor patient during procedure (respiration, skin color, awareness).

3.A.

Identify normal and abnormal vital signs: blood pressure, pulse rate, respiration rate, skin color, temperature.

Dental Assistant Task Analysis

Competency D39: Assist in administering first aid.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	4.	Recognize an emergency situation requiring first aid and notify dentist if not in operatory.
	4.A.	Identify symptoms of common medical emergencies: allergic reaction, arterial hemorrhage, asthmatic attack, capillary hemorrhage, diabetic coma, heart attack, insulin shock, shock, syncope, venous hemorrhage, seizures, hysteria, hyperventilation, anaphylactic shock, toxic reaction to anesthesia, foreign objects in the eye.
	5.	Assist with determining nature of medical emergency.
	5.A.	Describe what has happened and symptoms exhibited.
	5.B.	Position the patient as indicated by dentist.
	5.B.1.	- For vital sign measurement, position patient upright with arm flexed and level with heart.
	6.	Measure vital signs, if possible.
	6.A.	Determine pulse rate.
	6.A.1.	- Place tips of fingers on patient's radial or carotid artery.
	6.A.1.a.	- Identify radial, carotid, and brachial arteries.
	6.A.2.	- With a second hand clock or watch, count the pulse beat for 15 seconds, multiply by 4; 30 seconds, multiply by 2; or for 60 seconds.

Dental Assistant Task Analysis

Competency D39: Assist in administering first aid.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 6.B.
- 6.B.1.
- Apply deflated blood pressure cuff to patient's upper arm with the lower edge of the cuff about one inch above the bend in the arm. Be sure the tubes fall over the brachial artery.
- 6.B.2.
- Locate and feel patient's radial pulse.
- 6.B.3.
- Inflate the cuff to the point where you can no longer feel the pulse beat. Note the number on the mercury column.
- 6.B.4.
- Deflate the cuff and wait 30 seconds.
- 6.B.5.
- Place stethoscope earpieces in ears and the diaphragm (bell) over the patient's brachial artery at the arm flexion.
- 6.B.6.
- Inflate the cuff 20-30 millimeters of mercury higher than where the pulse was no longer felt (normally 140-160).
- 6.B.7.
- Deflate the cuff gradually; listen for the first sound and remember the number on the mercury column where first heard the sound (systolic), then listen for the last sound (or definite change in sound) and remember the number where heard the last sound (diastolic). Continue a slow descent for a few more numbers.
- 6.B.7.a.
- Identify systolic and diastolic pressure and readings on manometer.

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

6.C.

6.C.1.

6.C.1.a.

6.C.2.

6.C.3.

6.D.

6.D.1.

7.

7.A.

7.A.1.

7.A.1.a.

7.A.2.

Competency D39: Assist in administering first aid.

S. 3P STATEMENT

Take temperature.

- Reduce mercury reading of the thermometer by shaking down.
- Identify contraindications for taking temperature (unconscious patient, patient with very dry mouth, very small child, confused or irrational patient).
- Place thermometer under patient's tongue for one minute.
- Remove the thermometer and take the reading to the nearest 0.1 degree.

Take respiration rate.

- With a second hand clock or watch, count the number of times a patient breathes within one minute or 15 seconds x 4; or 30 seconds x 2.

Assist with proper first aid treatment.

Assist with syncope (fainting).

- Place patient in horizontal position with head lower than feet.
- If patient is seated in contour dental chair, recline chair back, then tilt chair until patient's head is lower than feet.
- Monitor breathing; check patient's airway; loosen tight clothing.

Dental Assistant Task Analysis

Competency D39: Assist in administering first aid.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	7.A.3.	- Administer spirits of ammonia as an inhalent.
	7.A.4.	- If necessary, place cold towel on patient's forehead.
	7.A.5.	- If necessary, administer oxygen (see Step 7.B.).
	7.A.6.	- Monitor vital signs and inform dentist (see Step 6).
	7.A.7.	- When patient returns to normal, set up gradually.
	7.B.	Administer oxygen.
	7.B.1.	- Refer to appropriate chart to identify the recommended liters per minute of oxygen to be delivered to patient in distress.
	7.B.2.	- Place mask snugly over patient's mouth and nose.
	7.B.3.	- Adjust the flowmeter to deliver recommended flow of oxygen to the patient's lungs.
	7.B.3.a.	- Identify readings on oxygen flow meter.
	7.B.4.	- Observe patient's chest moving and note the color of the skin.
	7.C.	Prepare necessary injection as indicated by dentist.
	7.C.1.	- Identify requested drugs/injections.
	7.C.2.	- Select and assemble syringe with appropriate size of needle; draw up dosage as indicated by dentist.

Dental Assistant Task Analysis

Competency D39: Assist in administering first aid.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	7.C.3.	- If prepackaged unit dose injectables are used, open syringe, drop in capsule, then close syringe; remove the external wrapping but leave needle cover on.
	7.D.	Apply cardiopulmonary resuscitation (see G19).
	7.E.	Following the dentist's instructions, assist with all other emergency situations.
	7.F.	Monitor patient until return to normal.
	7.G.	If necessary, monitor patient until medical help takes over.
	8.	Record the episode and treatment on patient's record.
	9.	Dismiss patient (D37), if possible.

Dental Assistant Task Analysis

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**ENTRY
COMPETENCIES**

STEP NUMBER

Competency E01: Clean dental laboratory instruments.

STEP STATEMENT

1.
1.A. Assemble cleaning supplies and chemical solutions.
Identify supplies and chemical solutions used for cleaning laboratory instruments.
2.
2.A. Assemble and sort instruments to be cleaned.
Identify laboratory instruments requiring cleaning with detergent solution or chemical solution (e.g., wax carvers, utility knives, spatulas, burs, impression trays).
3.
3.A. Soak and/or clean instruments.
If soaking necessary, soak instruments in appropriate chemical solution to remove stubborn debris, according to manufacturer's instructions, as needed.
3.A.1. - Read manufacturer's instructions for use of chemical solution of cleaning.
- 3.B. Wash instruments again in detergent solution.
- 3.C. If soaking not necessary, wash and scrub instruments with brush in detergent solution to remove gross debris, or place in ultrasonic cleaner.
4. Rinse and dry instruments.
5. Return clean instruments not requiring disinfecting to laboratory storage.
5.A. Identify instruments requiring disinfecting.
6. E02 (Disinfect those instruments requiring disinfecting.)

Dental Assistant Task Analysis

Competency E02: Disinfect laboratory instruments using chemical disinfectant solutions.

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ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Assemble and sort instruments to be disinfected.
	1.A.	From E01 (Clean dental laboratory instruments.)
	2.	Select appropriate disinfectant solution to be used, based on type of instrument.
	2.A.	Identify types of disinfectant solution for different instruments.
	3.	Disassemble as necessary and submerge instruments in appropriate disinfectant solution for time indicated by manufacturer's instructions.
	3.A.	Read chemical solution manufacturer's instructions.
	4.	Use clean, disinfected forceps to remove instruments from solution.
	4.A.	Identify reasons for using forceps with disinfecting solution.
	5.	Drain and dry instruments (air dry or use sterile towel).
	6.	Return instruments to appropriate laboratory storage.
	6.A.	Identify laboratory storage location.

Dental Assistant Task Analysis

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JZ Page 1

Competency E03: Maintain dental laboratory instruments.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Inspect laboratory instruments for defects (e.g., broken blades, chips, cracks, and wear).
	1.A.	From E02, clean dental laboratory instruments.
	2.	Arrange for replacement of worn, defective laboratory instruments as needed.
	2.A.	Identify person responsible for ordering laboratory instruments.

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Dental Assistant Task Analysis

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Competency E04: Clean dental lathe.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. Assemble cleaning supplies (oil, detergent solution, sponge, disinfectant).
 - 1.A. Identify cleaning supplies required.
2. Inspect engine belt for fraying or wear; replace as necessary.
 - 2.A. Read manufacturer's instructions for cleaning lathe.
 - 2.A.1. - Identify type of dental lathe.
 - 2.A.2. - Identify purpose of dental lathe.
 - 2.A.3. - Identify parts of dental lathe.
3. Remove pumice splash pan, replace with new pumice.
 - 3.A. Obtain pumice from laboratory storage.
4. Remove rag wheel; clean, disinfect, dry; replace as necessary.
 - 4.A. E02 (disinfect instruments).
5. Remove protective shield; clean; disinfect; replace as necessary.
6. Oil engine joints, following manufacturer's instructions.
7. Clean area around lathe, using sponge and detergent solution.

Dental Assistant Task Analysis

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JZ Page 1

Competency E05: Clean model trimmer.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

1.

Remove back plate.

1.A.

Identify parts of model trimmer.

1.B.

Identify purpose of model trimmer.

2.

Empty out accumulated plaster.

3.

Wash with water, dry, and replace back plate.

4.

Remove hose and run brush through outlet.

5.

Examine grinding wheel for wear.

5.A.

Identify excess grinding wheel wear.

6.

Reverse grinding wheel as necessary.

6.A.

Unscrew bolts and remove wheel housing.

6.A.1.

- Use screwdriver and wrench.

6.B.

Remove nut holding stone to backing.

6.C.

Remove stone.

6.D.

Replace housing bolts; tighten them.

7.

Check model trimmer for cleanliness and reassemble.

Dental Assistant Task Analysis

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ENTRY

COMPETENCIES

STEP NUMBER

Competency B06: Identify various types of dental instruments.

STEP STATEMENT

1.

Identify cutting instruments:

- chisels
- burs*
- hatchets
- excavators
- margin trimmers
- angle formers
- reamers*
- files*

1.A.

Identify handle, shank, and blade of instruments (except *).

2.

Identify non-cutting instruments:

- amalgam condensers
- gold foil condensers
- burnishers
- carvers

Dental Assistant Task Analysis

Competency E06: Identify various types of dental instruments.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	2.A.	Identify handle, shank, and blade of instruments.
	3.	Identify miscellaneous instruments: <ul style="list-style-type: none">- cotton pliers*- mirrors*- explorers- handpieces*- mandrels*- discs*- contra angle*- cups*- brushes*- forceps*- evacuators*- periodontal instruments- scalers
	3.A.	Identify handle, shank, and blade of instruments (except *).

Dental Assistant Task Analysis

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ENTRY

COMPETENCIES

STEP NUMBER

Competency E07: Clean dental instruments (operatory).

STEP STATEMENT

- | | |
|--------|--|
| 1. | Identify autoclavability of each instrument, and sort appropriately. |
| 1.A. | E06 (identify dental instruments). |
| 1.A.1. | <ul style="list-style-type: none">- Identify appropriate cleaning solution (for tool and situation)- detergent- disinfectant- commercial (e.g., hexachlorophene, zephirin)- ultrasonic cleaning solution |
| 2. | If autoclavable, clean instruments. |
| 2.A. | Check patient health history to identify transmittable disease potentiality (e.g., hepatitis, v.d.). |
| 2.A.1. | <ul style="list-style-type: none">- Identify transmittable diseases. |
| 2.B. | If history found, wear rubber gloves for all cleaning. |
| 2.C. | If history not found, dismantle, then rinse in cold water to remove blood and debris. |
| 2.D. | If available, use commercial cleaner to clean instruments following manufacturer's instructions. |
| 2.E. | If commercial cleaner not available, use detergent solution to clean instruments. |

Dental Assistant Task Analysis

Competency E07: Clean dental instruments (operatory).

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

2.E.1.

- Place instruments in detergent solution and scrub with stiff brush.

2.E.2.

- Use pipe cleaner or cotton tip to clean opening in saliva ejector and other instruments with lumens.

3.

Rinse and dry instruments.

3.A.

To E08 (prepare for sterilization).

4.

If not autoclavable, (such as handpiece, some burs, stones, evacuation tips), dismantle instrument as necessary and clean using disinfectant or ultrasonic equipment.

4.A.

Wipe off excess oil, prophy paste as necessary with paper towel or gauze sponge.

4.B.

If ultrasonic not used, put instrument in disinfectant solution following manufacturer's directions (E02).

4.C.

Use ultrasonic cleaning equipment.

4.C.1.

- Prepare ultrasonic equipment following manufacturer's directions.

4.C.2.

- Add ultrasonic cleaning solution.

4.C.3.

- Place instrument in tray or basket and submerge in solution.

4.C.4.

- Close ultrasonic cleaner and set timer; consulting manufacturer's chart.

4.C.5.

- When cycle complete, lift carrier, drain instruments and dry thoroughly with paper towel.

Dental Assistant Task Analysis

Competency E07: Clean dental instruments (operator).

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	5.	Remove, rinse as necessary, and dry instruments.
	6.	Return instrument to appropriate storage in operator.

Dental Assistant Task Analysis

Competency E06: Identify various types of dental instruments.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

Identify cutting instruments:

- chisels
- burs*
- hatchets
- excavators
- margin trimmers
- angle formers
- reamers*
- files*

1.A.

Identify handle, shank, and blade of instruments (except *).

2.

Identify non-cutting instruments:

- amalgam condensers
- gold foil condensers
- burnishers
- carvers

Dental Assistant Task Analysis

Competency B12: Operate (endodontic) bead sterilizer.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. **Select instruments and supplies to be sterilized.**
 - 1.A. **Identify instruments and supplies to be sterilized with glass bead sterilizer.**
2. **Preheat sterilizer to 218 degrees C.**
 - 2.A. **Read sterilizer manufacturer's operating instructions.**
3. **Separate instruments, points, and cotton pellets.**
4. **Assemble cotton pellets and points loosely in tray.**
5. **Assemble instruments on tray.**
6. **Submerge tray in machine and set timer.**
7. **Sterilize cotton pellets and absorbent points for 10 seconds.**
8. **Sterilize instruments for 20 to 30 seconds.**
9. **Remove instruments or supplies from sterilizer tray; place them on endodontic tray.**

Dental Assistant Task Analysis

Competency E13: Clean dental operatory equipment.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

Clean operatory before first patient.

1.A.

Assemble armamentarium for cleaning before first patient of day.

1.A.1.

- Identify appropriate cleaning solutions (disinfectant solutions, detergents, cleansers, alcohol).

1.A.2.

- Identify needed cleaning supplies (sponges, gauzes, cotton tips, pipe cleaners, towels.)

1.B.

Remove any gross debris from operatory.

1.C.

Sponge off counter tops and sinks with cleanser.

1.D.

Disinfect non-unit components of operatory.

1.D.1.

- Use disinfectant-soaked gauze sponge to wipe all components of any treatment apparatus that might be a source of contamination.

1.D.1.a.

- Identify possible sources of contamination in operatory.

1.D.2.

- Apply disinfectant solution to x-ray tube head, towel dispensers, aspirator cabinets, if present. Wipe off as indicated by solution manufacturer.

1.D.3.

- Apply disinfectant solution to operator and assistant chairs. Wipe off as indicated by solution manufacturer.

Dental Assistant Task Analysis

Competency E13: Clean dental operatory equipment.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 1.E. Disinfect unit.
- 1.E.1. - Apply disinfectant solution of each component of unit. Wipe off as indicated by solution manufacturer.
- 1.E.2. - Apply disinfectant solution to headrest, backrest, seat, footrest, and base of chair. Wipe off as indicated by solution manufacturer.
- 1.E.3. - Apply disinfectant solution to unit light surfaces. Wipe off as indicated by solution manufacturer.
- 1.F. Inspect disinfected operatory to be sure nothing was missed.
2. Clean operatory after each patient.
- 2.A. Assemble armamentarium for cleaning after each patient.
- 2.A.1. - Identify needed solutions and supplies (e.g., disinfectant solution, alcohol, gauze).
- 2.B. Remove debris after patient leaves operatory.
- 2.C. Disinfect non-unit components of operatory used with each patient.
- 2.C.1. - Identify non-unit components of operatory used with patient.
- 2.D. Disinfect unit.
- 2.D.1. - Apply disinfectant solution to each component of unit. Wipe off as indicated by solution manufacturer.

Dental Assistant Task Analysis

Competency E13: Clean dental operatory equipment.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|--------|---|
| 2.D.2. | - Apply disinfectant solution to headrest, backrest, seat, and base of chair. Wipe off as indicated by solution manufacturer. |
| 2.D.3. | - Apply disinfectant solution to unit light surfaces. Wipe off as indicated by solution manufacturer. |
| 2.D.4. | - Use disinfectant- or alcohol-soaked gauze sponge to clean handpiece and prophylaxis angle, air and water syringes. |
| 2.E. | Inspect disinfected operatory to be sure nothing was missed. |

Dental Assistant Task Analysis

Competency E14: Maintain dental operatory equipment.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Determine maintenance schedule for operatory equipment, based on manufacturers' recommendations.
	1.A.	Read manufacturers' directions for operatory equipment.
	2.	Assemble maintenance supplies and equipment.
	2.A.	Identify supplies and equipment used for maintenance.
	3.	Perform required maintenance as scheduled, following manufacturers' instructions.
	3.A.	Inspect filters on saliva ejector, suction reservoirs and air syringe; replace as necessary.
	3.B.	Inspect saliva ejector apparatus for clogged or defective screens; clean or replace as necessary.
	3.C.	Inspect all hose connections for wear, fraying, or defects; replace as necessary.
	3.D.	Inspect air, water, and oil lines of rheostat for leakage, frayed connections; replace as necessary.
	3.E.	Inspect cuspidor trap; clean or replace as necessary.
	3.F.	Inspect air and water syringes for leaks; repair as necessary.
	3.G.	Inspect engine belt for fraying, proper tension; replace or adjust as necessary; tighten any loose screws.

Dental Assistant Task Analysis

Competency B14: Maintain dental operatory equipment.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|------|--|
| 3.H. | Inspect water and air syringe tips; clean or replace as necessary. |
| 3.I. | Inspect handpiece couplings and gears; arrange repair or replacement as needed; tighten any loose screws. |
| 3.J. | Inspect dental engine and rheostat; clean and oil according to manufacturer's instructions; arrange repair as necessary. |
| 3.K. | Arrange inspection of X-ray unit; arrange repair or replacement as necessary. |
| 3.L. | Drain steam autoclave water reservoir, add commercial cleaning solution, run a cycle, drain the solution, rinse if indicated by cleaning solution instructions, refill with distilled water. |
| 3.M. | Disassemble equipment as necessary following manufacturer's instructions. |
| 4. | Assemble equipment making sure all connections are tight. |

Dental Assistant Task Analysis

Competency B15: Maintain dental instruments (operator).

ENTRY

COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Locate and read manufacturer's instructions for each instrument.
	1.A.	From E06, identify dental instruments.
	2.	Follow manufacturer's instructions for maintaining each instrument.
	2.A.	Disassemble instrument as necessary.
	2.B.	Clean instruments.
	2.C.	Evacuate and flush hoses, and hose connections (using air or solution as necessary.)
	2.D.	Lubricate instrument.
	2.E.	Assemble instrument as necessary, and mount.
	3.	Use instruments properly.

Dental Assistant Task Analysis

Competency F01: Care for preliminary or final impressions.

ENTRY

COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Prepare to pour study model.
	1.A.	From D22: Assisting with, or G01: Preparing alginate impressions.
	2.	Give model to lab technician to pour study model.
	3.	Assemble materials needed for preparation of final impression for delivery to dental lab.
	3.A.	From D26: Assist with taking rubber-base impressions.
	3.B.	Identify delivery container and work order form.
	4.	Complete work order per dentist's instructions; obtain dentist's signature.
	5.	Place impression in delivery container; enclose work order.
	6.	Arrange delivery to dental lab.

Dental Assistant Task Analysis

Competency F02: Fabricate custom trays for impressions.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.
1.A. Assemble necessary materials, instruments, and equipment.
Identify armamentarium for fabrication of custom-made impression tray: powder and liquid tray materials, measuring devices, paper cups and wooden tongue blades, petroleum jelly, glass slab, tray former, base-plate wax sheets, Bunsen burner, tin foil substitute and brush, wax knife and wax spatulas, indelible pencil, dental lathe, acrylic burs and stones, molding clay.
- 1.B. Identify purpose of instruments and equipment used to fabricate custom-made tray.
2. Prepare preliminary plaster cast for tray fabrication.
 - 2.A. Prepare or obtain preliminary cast.
 - 2.B. Draw tray outline with indelible pencil on preliminary cast to match proposed outline of tray, following instructions from dentist.
 - 2.C. Fill in all tissue undercuts with softened baseplate wax or molding clay.
 - 2.C.1. - Pass the baseplate wax sheet over the flame of the Bunsen burner quickly to soften the wax.
 - 2.C.2 - Identify tissue undercuts on preliminary cast.
 - 2.D. Adapt softened baseplate wax to the preliminary cast, fitting it over all the teeth in the cast to form a spacer.

Dental Assistant Task Analysis

Competency F02: Fabricate custom trays for impressions.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 2.E. Use wax knife to trim baseplate wax so that it is 2mm short of penciled outline.
- 2.F. Paint thin layer of tin foil substitute on exposed plaster cast to ensure separation of resin tray material.
3. Lubricate glass slab with petroleum jelly.
4. Prepare self-curing resin tray mixture.
- 4.A. Use paper cup and tongue blade to mix resin powder and liquid according to manufacturer's instructions.
- 4.A.1. - Read manufacturer's instructions.
- 4.B. Let resin mixture set until it is a doughy consistency.
5. Form the acrylic (resin) tray.
- 5.A. Place tray former on lubricated glass slab.
- 5.B. Use petroleum jelly to lubricate fingers to keep mixture from sticking.
- 5.C. Mold the resin mixture to the tray former to a uniform thickness.
6. Fit the acrylic (resin) tray to the preliminary cast.
- 6.A. Carefully lift the acrylic tray from the slab.
- 6.B. Place the tray on the preliminary cast and check fit.

Dental Assistant Task Analysis

Competency F02: Fabricate custom trays for impressions.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 6.C. If necessary, trim excess material with warm blade.
- 6.C.1. - Identify excess material by comparing to penciled outline.
- 6.C.2. - Pass blade of wax knife over Bunsen burner to warm it.
7. **Prepare and attach handle.**
- 7.A. Roll out appropriate length of excess resin material.
- 7.A.1. - Identify length of handle needed for tray.
- 7.B. Flatten roll of material to make a handle.
- 7.C. Attach handle at anterior midline of tray by molding with fingers.
- 7.D. Wet fingers with acrylic liquid material and apply to area where handle attached to assure good bond.
8. **Allow material to cure for about 15 minutes or when cooled.**
9. **Separate tray from cast by lifting off tray gently.**
10. **Remove all baseplate wax spacer from tray.**
11. **Trim tray as necessary.**
- 11.A. Identify where trimming is needed on tray.
- 11.B. Use acrylic burs and stones in a straight handpiece.
- 11.C. Use grinding stone on dental lathe.

Dental Assistant Task Analysis

Competency F02: Fabricate custom trays for impressions.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	12.	Use ragwheel on dental lathe and dental pumice to polish tray.
	13.	Clean cast by removing any excess material and place tray on cast for delivery to dentist.
	14.	Go to D26: Assist with taking rubber-base impressions.

Dental Assistant Task Analysis

Competency F03: Fabricate custom trays for edentulous casts.

**ENTRY
COMPETENCIES STEP NUMBER**

STEP STATEMENT

See F02, Steps 1-13.

Revise Step 2.B.: Draw a pencil outline 2mm above depth of the peripheral roll and 2mm in from the distal borders of the cast and follow dentist's instructions.

Dental Assistant Task Analysis

Competency F04: Pour up impressions; trim and polish study models.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. **Assemble needed materials and supplies.**
 - 1.A. Select material to be used to pour models (stone or plater).
 - 1.B. Obtain rubber bowl, spatula, paper cup, laboratory knife, paper cup, water measure.
2. **Prepare dental stone or plaster mixture.**
 - 2.A. Measure the required amount of powder and place in paper cup.
 - 2.B. Measure the required amount of water in the water measure.
 - 2.C. Follow recommended or manufacturer's directions for mixing powder with water.
3. **Prepare the impression tray.**
 - 3.A. Turn the vibrator on and hold the impression tray tilted on the vibrator table.
 - 3.B. Transfer a small amount of stone or plaster from the spatula to the heel (mandibular) or palatal (maxillary) portion of the tray. Allow the material to gradually fill the teeth imprints, being careful not to trap air.
 - 3.C. Continue to transfer small amounts of stone or plaster until the teeth imprints have been completely filled.
 - 3.D. Remove the impression from the vibrating table and add two or three small amounts of stone or plaster to produce a rough, undercut surface.

Dental Assistant Task Analysis

Competency F04: Pour up impressions; trim and polish study models.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

3.E.

Place the poured impression aside, tray surface on the counter top, to allow for initial set.

3.F.

Repeat Steps 2 and 3 for second impression if necessary.

4.

Prepare base and invert the poured impression.

4.A.

Make a second, but thicker, mix of stone or plaster, as in Step 2, for the base.

4.B.

Pour the mixed stone or plaster on a base-former, glass slab, or smooth surface and shape it with the spatula so that it is about 3/4 in. thick and spread over an area large enough to receive the poured impression.

4.C.

Invert the tray containing the poured impression onto the prepared base and hold it steady while shaping the sides of the base with the spatula and join them to the poured impression.

4.C.1.

- For mandibular impressions, prevent plaster from filling lingual area by using wax, damp towel or spatula to level the tongue area.

4.C.2.

- If the poured impression has assumed a final set, it must be soaked in water for five minutes before inverting.

4.C.3.

- If only the initial set has taken place, it need not be soaked before inverting.

4.D.

Allow it to remain until the final set has occurred at least one hour.

Dental Assistant Task Analysis

Competency F04: Pour up impressions; trim and polish study models.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

4.E.

Repeat Step 4 for second impression if necessary.

5.

Separate the impression from the poured model.

5.A.

Trim any excess stone or plaster that may be contacting the sides of the impression tray with a laboratory knife.

5.B.

Loosen the anterior portion of the tray from the model, raise it slightly, and then lift the impression from the model with a straight pull. Do not rock or twist as this may fracture portions of the model.

5.C.

If necessary remove any excess stone or plaster that would interfere with checking the occlusion of the model(s).

5.D.

Clean the impression material from the tray; scrub and sterilize or disinfect as necessary (E09, E01).

6.

Trim the model or models.

6.A.

Soak the model(s) in water for five minutes.

6.B.

With the model trimmer, roughly trim the sides fo maxillary and mandibular models to produce a flat surface.

6.B.1.

- Operate model trimmer.

Dental Assistant Task Analysis

Competency F04: Pour up impressions; trim and polish study models.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

6.C.

Trim with a knife any models from the occlusal surfaces or any excess in the posterior regions that may prevent the teeth from resting on a flat surface.

6.D.

Place maxillary model, teeth down, on a flat surface. Set dividers at 32 mm (approximately 1 1/2 in.) and, holding the model rigid, inscribe on a line around the base portion of the model. The model should be held so the anterior and premolar teeth are touching the counter surface. The inscribed line will be parallel to the flat surface and the plane of occlusion.

NOTE: The total thickness of the model should be one-third greater than the greatest freight of the anatomic portion (height from the depth of mucobuccal of old to tip of canine or incibal edge of anterior teeth).

6.E.

Trim the base of the maxillary model to this inscribed line on the model trimmer.

6.F.

Trim the back of the maxillary model in a line perpendicular to the median line of the arch to within 6 mm (approximately 1/4 in.) from the most posterior tooth or anatomic registration.

Dental Assistant Task Analysis

Competency F04: Pour up impressions; trim and polish study models.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

6.G.

Using a wax bite, occlude the maxillary and mandibular models, and place on a flat surface with the maxillary base down. Set the dividers at 58 mm (approximately 2 1/4 in.) and inscribe a line around the base of the mandibular model. This line will then be parallel to the base of the maxillary model and also the occlusal plane.

6.H.

Trim the mandibular model to the inscribed line on the model trimmer.

6.I.

Occlude the models, place them on the model trimmer table with mandibular base down, and trim the back of the mandibular model until it is in line with the back line cut on the maxillary model.

6.J.

With only the mandibular model on the model trimmer table, trim back both sides parallel with an imaginary line running mesiodistally through the centers of the premolars and first molar to 6 mm (approximately 1/4 in.) buccal (facially) to the gingival portion of the buccal surface of the teeth.

6.K.

Trim the anterior portion of the mandibular model back to 6 mm (approximately 1/4 in) or from the gingival portions of the labial surfaces of the anterior teeth. This cut will be in the form of an arc terminating opposite the midline of the canines (cuspids).

6.L.

Trim two diagonal heel cuts 12 mm (approximately 1/2 in.) wide. The cuts are made parallel to the mesiodistal plane of the canine on the opposite side of the arch.

Dental Assistant Task Analysis

Competency F04: Pour up impressions; trim and polish study models.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	6.M.	Occlude the models, place on model trimmer table maxillary base down, and make the side and heel cuts until they are in line with those made on the mandibular model.
	6.N.	Separate the models and make two anterior cuts on the maxillary models 6 mm (approximately 1/4 in.) from the gingival portions of the labial surfaces portions of the labial surfaces of the anterior teeth, terminating at the midline and the mesiodistal centers of the canines (cuspids).
	6.O.	Smooth all cut areas with a fine grain sandpaper, then place the sandpaper on a flat surface and draw the base edges of the models across it one time to produce a very slight level on all base angles.
	6.P.	Fill in all voids or discrepancies with plaster or stone. Sand as necessary.
	6.Q.	With a sharp knife, trim the lingual area of the mandibular model to produce a smooth, esthetic appearance. If the mucobuccal fold is present, trim the outer stone to a point where the depth of the fold is easily observed.
	6.R.	Allow models to dry.
	7.	Polish and identify the model(s).
	7.A.	After the model(s) have thoroughly dried, soak them in a concentrated soap solution for one hour, then rinse and rub with a soft cloth to produce a glossy finish.

Dental Assistant Task Analysis

Competency F04: Pour up impressions; trim and polish study models.

**ENTRY
COMPETENCIES STEP NUMBER**

STEP STATEMENT

7.B.

If soaking is undesirable, apply several thin layers of plaster model spray.

7.C.

With an indelible pencil, write patients' name, age, and the date the impression was taken on the posterior portions of the model(s).

Dental Assistant Task Analysis

Competency G01: Take impression for study models.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.
 - 1.A. Drape patient with plastic apron.
 - 1.B. Inspect oral cavity to identify contraindications.
 - 1.B.1. - Identify contraindications to taking impression; e.g., extraction, periodontal abscess.
 - 1.C. Rinse oral cavity to remove any debris (see D32: Rinsing).
 - 1.D. Dry teeth (see D33: Drying).
2. **Try tray(s) in patient's mouth to check size and fit; select best tray.**
 - 2.A. Identify proper fitting tray.
3. **Prepare best fitting tray.**
 - 3.A. Border periphery of tray with utility wax.
 - 3.B. Try rimmed tray in mouth and re-examine for proper fit.
4. **Prepare alginate impression material (see D21).**
5. **Fill impression tray (refer to D21, Steps 3.A.-3.F.).**
6. **Insert tray in patient's mouth.**
 - 6.A. Position heel of tray first so that utility wax contacts retromolar pads.
 - 6.A.1. - Identify retromolar pads.

Dental Assistant Task Analysis

Competency G01: Take impressions for study models.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|-------|--|
| 6.B. | Lower handle of tray, bringing impression material down and over. |
| 6.C. | Gently pull lip outward and upward. |
| 7. | Stabilize tray in mouth (see D23). |
| 8. | Check excess alginate to determine if it has set. |
| 8.A. | Identify when alginate material is set (firm, glossy, not sticky). |
| 9. | Remove impression tray from patient's mouth (see D24). |
| 10. | Check impression for air bubbles, voids, and accurate anatomy. |
| 10.A. | Identify dental anatomy and marks in a good reproduction (impression). |
| 11. | Wrap impression in damp towel or place in humidor. |
| 12. | Repeat steps 1-10 for second impression tray, as required. |
| 13. | Record treatment in patient's record. |
| 14. | Dismiss patient (D37). |
| 15. | Go to D07: Care for impressions. |

Dental Assistant Task Analysis

Competency G02: Expose intraoral radiographs using paralleling (long cone) technique.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Position the film packet properly in the patient's mouth.
	1.A.	From C05: Select film size, and C04: Select accessories.
	1.B.	Insert film packet into appropriate film holding device (on assembled ring and bar).
	1.C.	Insert the bar, film holder and film packet so the holder and packet are placed lingually.
	1.D.	Move the assembly to center the film with the teeth to be x-rayed and to position the film parallel with the long axis of the teeth.
	1.E.	Ask patient to bite down gently on bite block.
	1.F.	Retract the patient's lips to check that the occlusal or incisal edges of the teeth are appropriately placed (i.e., so that the film is still centered and parallel).
	2.	Align the cone of the x-ray tube head.
	2.A.	Slide the paralleling ring down the rod until the ring lightly touches the patient's face.
	2.B.	Check that long cone is attached; if not, obtain and install.
	2.C.	Position the cone as close to the paralleling ring as possible.
	2.D.	Align the cone so that the central ray will be perpendicular to the film.
	2.D.1.	- Identify the central ray of the x-ray beam.
	2.E.	Move the cone so that it is centered in the paralleling ring, preventing cone-cutting.
	2.E.1.	- Identify exposure problem that resulted from cone-cutting.

Dental Assistant Task Analysis

**Competency G02: Expose intraoral radiographs using paralleling
(long cone) technique.**

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	3.	Expose film.
	3.A.	Direct patient to remain still during exposure.
	3.B.	Leave room or go behind shield, observing patient to be sure there has been no movement of film.
	3.C.	Push exposure (timer) button.
	4.	Retrieve film.
	4.A.	Return to patient and remove the assembly from the patient's mouth.
	4.B.	Remove the exposed film from the film holder; wipe with paper towel to remove saliva.
	4.C.	Place the exposed film in a lead-lined container until ready to process all films.
	5.	Repeat Steps 1-4 for each additional exposure prescribed by dentist.
	5.A.	Identify needed x-rays prescribed by dentist.
	6.	Remove lead apron from patient.
	7.	Enter procedure on patient's record.
	8.	Dismiss patient unless otherwise directed by dentist.
	9.	Go to C06: Develop and fix radiographic film.

Dental Assistant Task Analysis

Competency G03: Expose intraoral radiographs using bisecting (short cone) technique.

ENTRY

COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Position the film packet properly in the patient's mouth.
	1.A.	From C05: Select film size, and C04: Select accessories.
	1.B.	Insert film packet into the appropriate film holder, as necessary.
	1.C.	Place film packet (or film packet in holder) lingually, centering the packet over the teeth to be exposed.
	1.D.	Have patient hold the film packet against the teeth with a finger to stabilize it.
	2.	Align the cone of the X-ray tube head.
	2.A.	Check to see that the short cone is attached. If not, obtain and install.
	2.B.	Position the short cone so that the central ray will be perpendicular to the plane, bisecting the angle formed by the film plane and the tooth plane.
	2.B.1.	- Identify exposure problem that resulted from poor vertical angulation (fore-shortening, elongation of the image).
	2.C.	Adjust the cone horizontally to direct the central ray through the center of the interproximal spaces.
	2.C.1.	- Identify exposure problem that resulted from poor horizontal angulation (overlapping of images).

Dental Assistant Task Analysis

Competency G03: Expose intraoral radiographs using bisecting (short cone) technique.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|------|--|
| 2.D. | Check alignment cone to be sure all of film packet will be exposed, preventing cone cutting. |
| 3. | Expose film (see G02). |
| 4. | Retrieve film (see G02). |
| 5. | Repeat Steps 1-4, as necessary. |
| 6. | Remove lead apron from patient. |
| 7. | Enter procedure on patient's record. |
| 8. | Dismiss patient unless otherwise directed by dentist. |
| 9. | Go to C06: Develop and fix radiographic film. |

Dental Assistant Task Analysis

Competency G04: Place and remove rubber dam.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. **Prepare basic setup.**
 - 1.A. From D04: Local anesthetic.
 - 1.B. Obtain sterile mirror, explorer, and cotton forceps.
 - 1.C. Place on tray.
2. **Prepare rubber dam equipment and materials.**
 - 2.A. Identify need for rubber dam by type of procedure being done, patient tolerance, and office practice.
 - 2.A.1. - Explain purpose and application of rubber dam to patient.
 - 2.B. Select frame, forceps, and punch, crown and bridge scissors, inversion instrument, template or stamp (if needed).
 - 2.C. Select rubber dam square (thin, medium, or heavy).
 - 2.D. Obtain dental floss, napkin (if used, lubricant).
 - 2.E. Look in patient's mouth to determine operation field to be isolated; select anchor tooth and determine teeth to be punched out.
 - 2.E.1. - Read patient's chart to identify tooth being worked on.
 - 2.F. Select clamp(s) for anchor tooth or teeth.
 - 2.F.1. - Apply rule to clamp at least one tooth distal, if possible, to tooth being worked on.
 - 2.F.2. - Identify clamps for molars, premolars, and anteriors.

Dental Assistant Task Analysis

Competency G04: Place and remove rubber dam.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 3.**
3.A.
3.A.1.
3.A.2.
3.A.3.
4.
4.A.
4.B.
5.
5.A.
5.A.1.
5.A.2.
5.A.3.
- Punch rubber dam square for application.**
- Prepare rubber dam square for punching as necessary.
- Identify if rubber dam preparation is needed.
 - If necessary, use rubber dam template to mark the holes for the teeth to be isolated.
 - If necessary, stamp the rubber dam square.
- Prepare for application of rubber dam.**
- Floss patient's teeth to be isolated to clear contact area and identify any potential difficulties.
- Lubricate patient's lips and the tissue side of rubber dam.
- Apply rubber dam.**
- Apply winged clamp procedure.
- If using a winged clamp, place clamp in anchor hole in rubber dam square.
 - Center rubber dam square and attach to frame if necessary or requested.
 - Engage the clamp forceps in the clamp with frame attached.

Dental Assistant Task Analysis

Competency G04: Place and remove rubber dam.

**ENTRY
COMPETENCIES**

STEP NUMBER

STEP STATEMENT

- 5.A.4. - Place rubber dam napkin over patient's mouth.
- 5.A.5. - Use clamp forceps to apply clamp and rubber dam material/frame.
- 5.A.6. - Pass floss through contact points as rubber dam is stretching over teeth.
- 5.B. Use wingless clamp procedure.
- 5.B.1. - If using a wingless clamp, engage the clamp forceps in clamp and place on appropriate tooth.
- 5.B.2. - Receive clamp forceps after dentist applies clamp.
- 5.B.3. - Place rubber dam napkin over patient's mouth.
- 5.B.4. - Stretch rubber dam over teeth to be isolated.
- 5.B.5. - Secure frame to dam.
- 5.B.6. - Floss through contact points of teeth.
- 5.C. Ligate anterior isolated tooth; cut off excess or wind around frame.
- 5.D. Use inversion instrument to invert the dam around teeth. Apply air to isolated teeth as needed.
- 5.E. If requested, lubricate any isolated silicate restorations.
- 5.F. If necessary, snip a hole in rubber dam square and place a saliva ejector (see 34).
- 5.F.1. - Identify if saliva ejector is needed by patient.
- 5.G. Place inversion instrument back on tray.

Dental Assistant Task Analysis

Competency G04: Place and remove rubber dam.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|--------|---|
| 6. | Remove saliva ejector, if used. |
| 7. | Use wingless clamp removal procedure. |
| 7.A. | Using scissors, cut the interproximal rubber and any ligatures. |
| 7.A.1. | - Stretch rubber dam materials away from teeth on buccal side and slide finger under materials to protect tissue. |
| 7.B. | Use clamp forceps to to remove wingless clamp and replace on tray. |
| 7.C. | Receive forceps and clamp from dentist and replace on tray. |
| 7.D. | Remove rubber dam, napkin (if used) and frame, and replace on tray. |
| 8. | Assist with winged clamp removal procedure. |
| 8.A. | Use clamp forcep to engage winged clamp and remove. |
| 8.B. | See 7.C. |
| 8.C. | See 7.A. and 7.A.1. |
| 8.D. | See 7.D. |
| 9. | Rinse and evacuate patient's mouth. |

Dental Assistant Task Analysis

Competency G05: Place matrices and wedging.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

Assemble matrix retainer and band.

1.A.

From D07: Assist with cavity preparation.

1.B.

Prepare the retainer to receive the band.

1.B.1.

- Turn outer nut of retainer counterclockwise until spindle no longer visible in diagonal slot.

1.B.1.a.

- Identify parts of Tofflemire matrix assembly and their functions.

1.B.2.

- Hold retainer with guidepost pointing up.

1.B.3.

- Check to be sure that the diagonal slot is against the guide channels; if not, turn outer nut clockwise as necessary.

1.C.

Prepare the band.

1.C.1.

- Pull the ends of the band together to form a loop, being careful not to crease the band.

1.C.2.

- Hold band by the ends with the gingival edge up.

1.C.2.a.

- Identify gingival and occlusal edges of matrix band.

1.D.

Place and secure matrix band in retainer.

1.D.1.

- Hold band in one hand and retainer in other.

1.D.2.

- Place ends of band into the diagonal slot, allowing ends to protrude slightly.

Dental Assistant Task Analysis

Competency G05: Place matrices and wedging.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 1.D.3. - Check to be sure ends are even; if not, adjust as necessary.
- 1.D.4. - Direct the band loop through the appropriate guide channel.
 - 1.D.4.a. - Use right guide channel for upper right and lower left quadrants.
 - 1.D.4.b. - Use left guide channel for lower right and upper left quadrants.
- 1.D.5. - Place thumb over diagonal slot to hold band in place.
- 1.D.6. - With opposite hand, turn outer nut clockwise until spindle holds band securely.
- 1.D.7. - Place instrument handle through the loop, pressing band against thumb with handle to produce a round loop.

- 1.E. Adjust band.
 - 1.E.1. - Identify approximate size of tooth being treated.
 - 1.E.2. - Hold retainer in one hand; with other hand turn inner nut counterclockwise to make loop larger, clockwise to make loop smaller.
 - 1.E.3. - Adjust loop size to be slightly larger than tooth being treated.
- 2. Place matrix assembly on tooth being worked on.
 - 2.A. Place matrix assembly on tooth.
 - 2.A.1. - Slide matrix band over crown.

Dental Assistant Task Analysis

Competency G05: Place matrices and wedging.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

2.A.2.

- While sliding, tighten band around tooth to avoid laceration of gingiva.

2.A.3.

- Slide band until gingival edge is about 1 mm below gingiva.

2.B.

Check guide channels.

2.B.1.

- Check that guide channels are in center of buccal or lingual aspect of tooth being prepared.

2.B.2.

- Adjust position of band, as necessary.

2.C.

Tighten band around crown by turning inner nut clockwise.

2.D.

Place wooden wedges in each interproximal area being restored.

2.D.1.

- Identify purpose of wedges.

3.

To D08: Assist with amalgam restoration, Step 2.

Dental Assistant Task Analysis

Competency G06: Apply cavity liners (varnishes), bases.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Assemble appropriate materials and instruments.
	1.A.	Identify materials and instruments for application of a base: cavity base and catalyst, small paper mixing pad, mixing spatula, ball-pointed placing instrument, gauze sponges.
	1.B.	Identify materials and instruments for application of a liner (varnish): cotton pellet, cotton pliers, cavity liner (varnish) gauze sponges.
	1.C.	Identify purposes of liners and bases.
	2.	D07: Assist with cavity preparation, Steps 8,9.
	3.	Mix the base material.
	3.A.	Dispense equal amounts of base and catalyst material onto mixing pad.
	3.A.1.	- Read manufacturer's instructions and follow procedure prescribed by dentist.
	3.B.	Replace caps on tubes immediately to prevent moisture contamination.
	3.C.	Use mixing spatula or ball-pointed instrument to mix material about 10 seconds, until a homogenous, uniform mixture is achieved.
	3.D.	Wipe excess material from mixing instrument with 2 x 2 gauze sponge.
	4.	Place the base material in floor of the cavity preparation.
	4.A.	Dry prepared tooth thoroughly with compressed air (D31).
	4.B.	Place appropriate amount of base material on placement instrument and insert in prepared cavity.

Dental Assistant Task Analysis

Competency G06: Apply cavity liners (varnishes), bases.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 4.C. Smooth base material over floor of cavity preparation in about 2 mm thickness or as specified by dentist.
- 4.C.1. - Identify 2 mm thickness.
5. **Allow material to set.**
- 5.A. After about 2-1/2 minutes, check that excess mix on paper pad is firm, smooth, manipulable.
- 5.A.1. - Identify factors affecting setting time: moisture, temperature, thickness.
6. **Apply cavity liner (varnish), as directed by dentist.**
- 6.A. Dry prepared tooth thoroughly with compressed air.
- 6.B. Use cotton pliers to select small cotton pellet.
- 6.C. Remove cap from varnish bottle and place cotton pellet into the bottle.
- 6.D. Allow cotton pellet to become saturated with varnish solution.

Dental Assistant Task Analysis

Competency G06: Apply cavity liners (varnishes), bases.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

6.E.

Remove cotton pellet and replace cap on bottle to prevent evaporation and contamination.

6.F.

Apply cavity liner evenly to floor and walls of cavity preparation over base material.

7.

Go to D08: Assist with amalgam restoration.

Dental Assistant Task Analysis

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JZ Page 1

**ENTRY
COMPETENCIES**

STEP NUMBER

Competency G07: Apply anti-cariogenic agents topically.

STEP STATEMENT

1.

Prepare patient.

1.A.

From D11: Prepare setup for anti-cariogenic treatment.

1.B.

Isolate teeth by using cotton rolls and place saliva ejector.

1.B.1.

- If stannous fluoride, isolate by quadrants.

1.B.2.

- If fluoride gel, isolate by arch.

1.C.

Dry selected teeth with compressed air.

2.

Apply fluoride.

2.A.

If stannous fluoride, apply solution with cotton swabs continuously for prescribed period of time.

2.B.

Repeat steps 1. and 2.A. for other three quadrants.

2.C.

If fluoride gel, place gel in appropriate size tray.

2.D.

Insert tray in patient's mouth covering one arch.

2.E.

Check tray to be sure gel is in contact with all the teeth.

2.F.

Allow gel to contact teeth for prescribed period of time.

2.G.

Repeat steps 1. and 2.C.-2.F. for each arch.

3.

Remove cotton rolls, saliva ejector, tray.

4.

Allow patient to expectorate excess solution or gel and saliva.

Dental Assistant Task Analysis

Competency G07: Apply anti-cariogenic agents topically.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|----|---|
| 5. | Give patient post-operative instructions (do not eat, rinse, drink for 30 minutes) (D36). |
| 6. | Record treatment on patient's record. |
| 7. | Dismiss patient (D37). |

Dental Assistant Task Analysis

Competency G08: Polish clinical crowns.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1.

Assemble needed materials and instruments.

1.A.

Identify instruments and materials for polishing clinical crowns: slow speed handpiece, prophylaxis angle, rubber cup, bristle brush, abrasive polishing agent, dappen dish, gauze sponges, dental floss, disclosing solution or tablets.

2.

Seat and prepare patient (See D01).

2.A.

Check patient record for contraindications.

2.A.1.

- Identify contraindications for procedure, e.g., calculus on teeth, medical history.

2.B.

Explain procedure to patient.

2.B.1.

Identify steps in polishing clinical crown procedure.

3.

Polish the crowns.

3.A.

Insert rubber cup and fill with polishing agent.

3.B.

Select quadrant to begin polishing.

3.C.

Place outer edge of rubber cup at distal-buccal surface over the cervical third of the first or last tooth in quadrant and begin polishing.

3.C.1.

- Use slow speed handpiece properly (modified pen grasp, appropriate fulcrum)

3.C.2.

- Regulate rheostat and use low and constant rpm when cup is in contact with tooth.

Dental Assistant Task Analysis

Competency G08: Polish clinical crowns.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 3.C.3. - Apply intermittent, light, firm pressure with rubber cup.
- 3.D. Flex rubber cup subgingivally, moving from distal to middle to mesial surfaces.
- 3.E. Polish remaining portions of tooth (middle and occlusal thirds) beginning at distal, moving to mesial.
- 3.F. Proceed in systematic sequence through each quadrant; polish all distal, mesial, buccal, and lingual surfaces.
- 3.G. Polish all occlusal and incisal surfaces with bristle brush.
4. Use disclosing solution or tablets to check for thorough plaque and stain removal. Repolish as necessary.
- 4.A. Identify uses of disclosing tablets/solutions.
5. Floss the teeth.
- 5.A. Select appropriate type of dental floss for patient.
- 5.A.1. - Identify when waxed dental floss should be used.
- 5.B. Obtain a 12-15 inch length of dental floss.
- 5.C. Secure the ends of the floss around the index fingers.
- 5.D. Ease dental floss through a selected tooth contact area with a gentle sawing motion.

Dental Assistant Task Analysis

Competency G08: Polish clinical crowns.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 5.E. Slide floss down length of interproximal space, below gingival margin.
- 5.E.1. - Use fulcrum fingers as rests to keep floss from lacerating tissue.
- 5.E.1.a. - Identify fulcrum fingers.
- 5.F. Curve floss around the tooth, and slide up and down entire proximal surface.
- 5.G. Repeat on other proximal surface.
- 5.H. Move to the next interproximal surface with an unused portion of the floss and repeat steps.
- 5.I. Rinse and evacuate as necessary.
6. Give oral hygiene instructions as prescribed by dentist.
7. Enter treatment and instructions on patient's record.
8. Dismiss patient (D37).

Dental Assistant Task Analysis

Competency G09: Apply unfilled (pit and fissure) sealant.

ENTRY

COMPETENCIES

STEP NUMBER	STEP STATEMENT
1.	Prior oral prophylaxis procedure performed (e.g., G08: Polish clinical crowns) using a non-fluoride, oil-free prophylaxis paste.
2.	Assemble instruments and materials required.
2.A.	Identify instruments and materials required to apply pit and fissure sealant: cotton rolls, cotton roll holders, cotton pliers, cotton pledgets, pit and fissure sealant kit, slow handpiece, basic setup, dampen dishes, timer, alcohol, rubber dam, lip retractors.
3.	Seat and prepare patient.
3.A.	Review procedure with patient.
3.A.1.	- Identify steps in procedure and reasons.
4.	Select appropriate tooth surfaces to be sealed, as prescribed by dentist.
4.A.	Identify indications and contraindications for use of sealant.
5.	Isolate and prepare tooth surface.
5.A.	Isolate quadrant to be treated with cotton rolls or use a rubber dam (G04).
5.B.	Dry selected tooth for at least 30 seconds with compressed air.
5.C.	Apply etching solution with a cotton pledget for 60 seconds for each tooth.
5.C.1.	Open sealant kit and read manufacturer's instructions.
5.C.2.	Identify components of pit and fissure sealant kit.

Dental Assistant Task Analysis

**ENTRY
COMPETENCIES STEP NUMBER**

5.D.

Rinse treated teeth thoroughly and dry well.

5.E.

Check treated teeth for frosty, opaque appearance; if not, apply etching solution again.

5.F.

Do not allow teeth to be contaminated with saliva.

5.G.

If rubber dam not used, re-isolate quadrant with fresh cotton rolls.

5.H.

Dry each tooth for at least 30 seconds.

6.

Mix sealant material according to manufacturer's instructions.

6.A.

Dispense amounts of sealant material and catalyst specified by manufacturer into a mixing well.

6.B.

Use mixing stick to mix thoroughly for time specified by manufacturer.

7.

Apply sealant according to manufacturer's instructions.

7.A.

Insert a disposable tube in applicator and depress applicator lever.

7.B.

Immerse tip of tube in sealant mix and release lever to draw up adequate amount for one occlusal surface.

7.C.

Touch applicator tip to occlusal surface; depress lever gradually while moving tube slowly along fissures.

7.D.

Allow sealant to flow ahead of the tube into all crevices, avoiding air bubbles.

7.E.

Allow sealant to set, following manufacturer's instructions.

Competency G09: Apply unfilled (pit and fissure) sealant.

STEP STATEMENT

Dental Assistant Task Analysis

Competency G09: Apply unfilled (pit and fissure) sealant.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	7.F.	Wipe occlusal surface with cotton roll and check with explorer for complete coverage and retention of sealant.
	7.G.	Discard applicator tube; clean applicator with alcohol.
	8.	Repeat Steps 5-7 for each identified tooth in each quadrant.
	9.	Check occlusion.
	9.A.	Examine margins of each treated tooth by moving explorer from sealed to unsealed tooth surface.
	9.B.	Determine extent of marginal discrepancy.
	9.B.1.	- If moderate to gross overextension or overcontour, excess sealant must be removed by dentist.
	9.B.2.	- If slightly overextended and overcontoured, margins are normal.
	10.	Rinse and evacuate oral cavity (D31).
	11.	Give patient post-procedural instructions as prescribed by dentist.
	12.	Record procedure and instructions on patient's record.
	13.	Dismiss patient.

Dental Assistant Task Analysis

Competency G10: Remove sutures.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. **Assemble materials.**
 - 1.A. Identify materials and instruments used to remove sutures: cotton pliers, suture scissors, gauze sponges, antiseptic solution.
2. **Review patient records to identify surgical site(s) and number of sutures placed.**
3. **Seat and prepare patient.**
 - 3.A. Explain procedure to patient.
 - 3.A.1. - Identify steps in procedure.
4. **Clean surgical site with sterile gauze or water irrigation.**
5. **Locate suture site(s) and determine type(s) of suture(s) used.**
 - 5.A. Identify purposes and types of sutures (continuous on facial, lingual, and edentulous surfaces; interrupted on interproximal surfaces).
6. **Remove continuous sutures as necessary.**
 - 6.A. Cut end knots and remove.
 - 6.B. Cut vertical loops where they enter tissue in interproximal area on lingual and buccal surfaces.
 - 6.C. Use cotton pliers to gently pull strands of suture material from around the teeth.
 - 6.D. Check surgical site(s) to be sure all sutures removed.
7. **Remove interrupted sutures as necessary.**

Dental Assistant Task Analysis

Competency G10: Remove sutures.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- | | |
|------|--|
| 7.A. | Gently pull each suture away from tissue with cotton piers to expose knot in suture. |
| 7.B. | With scissors in other hand, cut each suture between knot and tissue. |
| 7.C. | Grasp knot end of each cut suture with cotton pliers and gently remove from tissue. |
| 7.D. | Check surgical site(s) to be sure all sutures removed. |
| 8. | Rinse surgical site with antiseptic solution. |
| 9. | Give patient oral hygiene instructions as prescribed by dentist. |
| 10. | Record procedure and instructions on patient's chart. |
| 11. | Dismiss patient (D37). |

Dental Assistant Task Analysis

Competency G11: Place periodontal dressing (gingivectomy).

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	From D19: Assist with periodontal surgery procedure (gingivectomy), Step 11, prepare dressing.
	2.	Dry surgical site with gauze sponges.
	3.	Contour the dressing to the surgical site.
	3.A.	Place dressing on buccal and lingual surface of surgical site.
	3.B.	Adapt dressing material to the cervical contour of the teeth and gingiva using light finger pressure.
	3.C.	Press dressing material into interproximal spaces using fingers or instrument.
	3.D.	Remove excess dressing material and smooth with fingers.
	4.	Check dressing; trim as necessary.
	4.A.	Check that dressing does not extend beyond cervical area of teeth.
	4.B.	Check that dressing doesn't interfere with occlusion.
	4.C.	Trim additional excess using fingers or instruments.
	5.	Give post-operative instruction (D36).
	6.	Record procedure and post-operative instructions on patient's record.
	7.	Dismiss patient (D37).

Dental Assistant Task Analysis

Competency G12: Remove periodontal surgical packs.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. Assemble materials and instruments for removal of surgical pack.
 - 1.A. Identify cotton pliers, explorer or curette; lukewarm mouth rinse.
 - 1.B. Prepare luke-warm mouth rinse (water or mouthwash).
2. Instruct patient on procedure to be followed.
 - 2.A. Identify steps in procedure.
3. Use explorer or curette to gently loosen edge of pericdental dressing.
4. Use cotton pliers to remove wedges and dressing material from interproximal spaces.
5. Check surgical site to be sure all dressing material is removed.
6. Rinse surgical site with luke-warm water or mouthwash as prescribed by dentist.
7. Give patient post-operative instruction and preventive oral hygiene procedures as prescribed by dentist.
8. Enter procedure and instruction on patient's record.
9. Dismiss patient (D37).

Dental Assistant Task Analysis

Competency G13: Polish an amalgam restoration.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. Assemble required materials and instruments.
 - 1.A. Identify instruments and materials required for polishing an amalgam restoration: explorer, rubber cups, bristle brush, dappen dishes, dental floss, scissors, mouth mirror, handpiece—slow speed, finishing bur, finishing stone, contra-angle prophylaxis angle, flour of pumice or other mild abrasive, tin oxide/other fine polishing agents, sandpaper disc, other appropriate polishing materials
2. Seat and prepare patient (D01).
3. Explain procedure to patient.
 - 3.A. Identify steps in the amalgam polishing procedure and advantages of process.
4. Select appropriate restoration(s) to polish.
 - 4.A. Identify restoration(s) at least 24 hours old, not decayed or fractured.
 - 4.B. Identify areas needing smoothing by checking the margins with an explorer.
5. Polish the restoration(s).
 - 5.A. Assist the dentist, with polishing using larger burs and stones in the straight handpiece.

Dental Assistant Task Analysis

Competency G13: Polish an amalgam restoration.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 5.A.1. - Insert burs and stones in handpiece.
- 5.B. Assist dentist to continue polishing procedure, using finer burs and stones.
- 5.B.1. - Margins of the restorations should be smooth so that explorer slides from restoration to tooth surface smoothly.
- 5.C. Polish, using a mild abrasive (e.g., flour of pumice), with a rubber cup and bristle brush.
- 5.C.1. - Properly fill cup or brush with polishing agent.
- 5.C.2. - Operate handpiece at low speed to minimize frictional heat.
- 5.D. Use tin oxide or other fine polishing agents for final polish with rubber cup and bristle brush.
- 5.E. Rinse and evacuate as necessary (D31,D32).
- 6. Check the restoration(s).
- 6.A. Check interproximal surfaces with dental floss for smoothness
- 6.B. Recheck polished restoration(s) with explorer for smoothness.
- 7. Enter procedure on patient's record.
- 8. Dismiss patient from chair (D37).

Dental Assistant Task Analysis

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JZ Page 1

ENTRY

COMPETENCIES

STEP NUMBER

Competency G14: Place temporary restorations.

STEP STATEMENT

1.
1.A. Assemble materials and instruments.
Identify required materials and instruments: restoration material, plastic instrument, mixing pad or glass slab, articulating papers.
2. Seat and prepare patient (D01).
3. Mix restoration material if prescribed by dentist.
3.A. Read manufacturer's instructions.
3.B. Mix as directed by manufacturer.
3.C. Mix zinc oxide-eugenol (ZOE) base (see D29).
4. Place restorative material.
4.A. Roll mixture into a large ball and deliver to oral cavity with plastic instrument.
4.B. Place temporary restorative material into cavity preparation using plastic instrument.
4.C. Gently press (condense) material using condenser on one end of plastic instrument.
4.D. As necessary, add more material and condense until cavity is overfilled slightly (over occlusal margins).
4.D.1. - Identify overfilled cavity.
4.E. Trim excess material as needed.
5. Instruct patient to bite down while mix is hardening to form occlusion.
6. Check occlusion for high spots with articulating paper.

Dental Assistant Task Analysis

Competency G14: Place temporary restorations.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

7.

As necessary, inform dentist of need to remove high spots with stone.

8.

Give patient post-operative instructions.

8.A.

Identify functions of temporary restoration.

8.B.

Identify recommended life of different types of restoration material: Zinc Phosphate - 1 month, ZOE - 2-3 months, IRM - 1 year.

9.

Enter procedure and instructions on patient record.

10.

Dismiss patient (D37).

Dental Assistant Task Analysis

Competency G15: Remove temporary restoration.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	If possible, dislodge restoration with hand instruments (e.g., explorer).
	2.	If not possible, inform dentist who will remove with bur.
	3.	To remove temporary crown, gently lift with firm finger pressure or use temporary crown removing forceps.

Dental Assistant Task Analysis

Competency G16: Cemet temporary crown and bridges with temporary cemet.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

1. **Select and contour the appropriate temporary crown or bridge.**
 - 1.A. **Select appropriate temporary crown or bridge.**
 - 1.A.1. **- Identify tooth and gingival contours.**
 - 1.A.2. **- Identify tooth forms.**
 - 1.B. **Check temporary crown or bridge for fit by looking at margins and contour.**
 - 1.B.1. **- Contour temporary crown or bridge to gingival margin using contour scissors.**
 - 1.C. **If fit not proper, remove crown or bridge and contour as necessary or select another.**
2. **Prepare mix for cementing of temporary crowns and bridges (see D27).**
3. **Cement crown or bridge.**
 - 3.A. **Dry prepared tooth and temporary restoration with compressed air (D33); avoid overdrying.**
 - 3.B. **Apply cement to temporary in small amounts using a plastic instrument to avoid trapping air in the cement.**
 - 3.C. **Fill temporary to margin of restoration with cement.**
 - 3.D. **Apply small amount of cement mixture to tooth surface with plastic instrument.**
 - 3.E. **Place temporary crown or bridge in proper position over prepared tooth.**
4. **Seat crown or bridge by gently pressing with fingers to apply firm pressure to occlusal or incisal surface.**

Dental Assistant Task Analysis

ENTRY

COMPETENCIES

STEP NUMBER

Competency G16: Cement temporary crown and bridges with temporary cement.

STEP STATEMENT

- | | |
|-----|---|
| 5. | Use explorer to recheck marginal fit and move as necessary. |
| 6. | Allow cement to harden for 10 minutes total. |
| 7. | Remove all excess cement from gingival margin using explorer (see G17). |
| 8. | Check occlusion with articulating paper. |
| 9. | Inform dentist of high spots; dentist will remove with stone. |
| 10. | Give post-operative instructions. |
| 11. | Enter procedure and instructions on patient record. |
| 12. | Dismiss patient (D37). |



Dental Assistant Task Analysis

Competency G17: Remove excess cement from dental restorations and appliances.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Select appropriate hand instruments (e.g., explorers, scalers).
	1.A.	From G16: Cement temporaries, Step 7.
	2.	Remove cement from around margins.
	2.A.	Dislodge cement with an instrument (explorer or curet).
	2.B.	Rinse then floss around margins.
	3.	Go to G16: Cement temporaries, Step 8; check occlusion.

Dental Assistant Task Analysis

Competency G18: Monitor nitrous oxide.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

8.C.

After 5 minutes, remove nasal mask and slowly position patient in semi-supine position.
Turn off oxygen.

8.D.

Monitor patient until all sedation effects are gone.

9.

Enter procedure on patient's record.

10.

Dismiss patient (See D37).

11.

Disinfect mask following manufacturer's instructions.

12.

Shut down and secure system as necessary.

Dental Assistant Task Analysis

Competency G19: Apply cardiopulmonary resuscitation.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	1.	Establish unresponsiveness of person by shaking and shouting; call for help.
	2.	As a unit, roll person over onto back.
	2.A.	If necessary, get person out of dental chair.
	3.	Open airway.
	3.A.	Kneel near person's head.
	3.B.	Place palm of one hand on person's head.
	3.C.	Place other hand under person's neck.
	3.D.	Press firmly back on forehead, causing head to tilt, and lift neck to hyperextend it into open airway position.
	4.	Assess breathing.
	4.A.	Lean over person's head; face toward chest and ear within one inch of person's mouth and nose.
	4.B.	Feel for air movement at mouth and nose.
	4.C.	Listen for air movement at mouth and nose.
	4.D.	Look for chest or belly movement.

Dental Assistant Task Analysis

Competency G19: Apply cardiopulmonary resuscitation.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 5.
- 5.A. Pinch person's nostrils closed with thumb and forefinger.
- 5.B. Open your own mouth wide enough to fully cover person's mouth.
- 5.C. Take a big breath and completely seal your lips around person's mouth.
- 5.D. Blow forcefully four quick breaths into person's mouth.
- 6. **Assess person's response.**
- 6.A. Watch to observe chest rise and fall.
- 6.B. If observation of good chest rise and fall, then check pulse.
- 7. **If chest did not rise and fall, clear airway obstruction.**
- 7.A. Reposition head to achieve open airway position with neck hyperextended and chin lifted.
- 7.B. Rescue-breathe again and watch for rise and fall of chest.
- 7.C. If successful (i.e., chest rises and falls), check pulse.
- 7.D. If unsuccessful, proceed to roll person on side, facing you.
- 7.E. Give a sharp blow between shoulder blades over backbone with heel of hand.
- 7.F. Repeat four (4) times in rapid succession.
- 7.G. Roll person on back again.

Dental Assistant Task Analysis

Competency G19: Apply cardiopulmonary resuscitation.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	7.H.	Deliver manual abdominal thrusts.
	7.H.1.	- Kneel beside person and place one hand over the other.
	7.H.2.	- Position heel of hand on abdomen between navel and ribs.
	7.H.3.	- Lean shoulders over the person's abdomen and press firmly into the abdomen and upward toward head.
	7.I.	Check mouth for foreign object; remove if found.
	7.I.1.	- Grasp lower jaw and tongue with thumb and fingers, and lift to open mouth.
	7.I.2.	- Use sweeping motion with fingers to remove any object or foreign debris from mouth.
	7.J.	Establish open airway position again and attempt to ventilate.
	7.K.	If successful rise and fall of chest is observed, check pulse.
	8.	Assess status of pulse.
	8.A.	Locate carotid pulse in neck.
	8.A.1.	- Use fingertips to feel the Adam's apple location halfway between chin and collarbone.
	8.A.2.	- Move fingers toward you into the groove beside the Adam's apple.
	8.B.	Press lightly to feel the pulse with the most sensitive part of your fingertips.

Dental Assistant Task Analysis

Competency G19: Apply cardiopulmonary resuscitation.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 8.C. If pulse is present, even if weak, continue rescue breathing. Never attempt external cardiac massage on person who has a pulse.
- 8.D. Check pulse once per minute and continue rescue breathing as long as need exists.
- 8.E. If pulse absent, begin external cardiac massage.
9. **As necessary, do external cardiac massage (one-person rescue).**
- 9.A. Locate sternum (breastbone).
- 9.B. Place heel of hand 2 to 3 fingers above lowest part of sternum (xiphoid process).
- 9.C. Place heel of one hand directly over heel of other hand.
- 9.D. Interlace fingers and raise fingers upward so that they never contact person's chest.
(Only heel of hand contacts person's chest.)
- 9.E. Keep hands in place on chest and straighten arms, positioning shoulders directly over the person's sternum.
- 9.F. Assume kneeling position with one knee near person's shoulders; the other knee near person's waist.
- 9.G. Lean forward with arms straight and push with enough force to depress person's sternum 1-1/2 to 2 inches.
- 9.H. Release pressure, leaving hand in contact with proper position on sternum.

Dental Assistant Task Analysis

Competency G19: Apply cardiopulmonary resuscitation.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

- 9.I. Maintain rhythmic compression.
- 9.I.1. - Count aloud "one and two and three" to maintain both speed and rhythm.
- 9.I.2. - Compress sternum on count of "one."
- 9.I.3. - Release pressure on "and." Compress on count of "two" and release on "and."
- 9.I.4. - Chest should be compressed 15 times while counting "one and two and three."
- 9.J. Keep knees in place and lean from waist to perform rescue breathing again.
- 9.K. Open airway, pinch nose, and give two quick full breaths and watch for chest to rise.
- 9.L. Quickly relocate hand position for chest compressions and perform alternate cycles of 15 chest compressions and 2 breaths when performing CPR as a single rescuer (15:2 ratio).
- 9.M. Perform 60 compressions and 8 breaths every 60 seconds.
- 9.M.1. - Pause after one minute and every few minutes thereafter to check carotid pulse and breathing.
- 9.M.2. - Never stop for more than 5 seconds because blood flow and blood pressure will drop to 0 when CPR stops.

Dental Assistant Task Analysis

Competency G19: Apply cardiopulmonary resuscitation.

ENTRY

COMPETENCIES

STEP NUMBER

STEP STATEMENT

9.M.3.

- Observe person for signs of improvement.

9.M.3.a.

- If CPR is performed correctly, person's color will improve and pupils of eyes will react to light by constricting; chest will rise and fall when ventilations are given and pulse will be present when you compress.

10.

As necessary, do external cardiac massage (two-person rescue).

10.A.

Position rescuer "A" at person's side to perform external chest compressions.

10.B.

Position rescuer "B" at person's head to keep airway open and continue rescue breathing.

10.C.

Compress chest at a rate of 60 per minute.

10.D.

Interpose one breath after each 5 chest compressions at a 5:1 ratio.

10.E.

Maintain rate of 60 compressions per minute by counting "1 one thousand, 2 one thousand, 3 one thousand," etc.; compress on numbers and release on thousands; maintain smooth, equal compression rhythm; do not pause for ventilations.

10.F.

Switch positions without any interruption in the rhythm.

10.F.1.

- Resucer "A" signals the change.

10.F.2.

- Instead of the usual count of "1 one thousand, 2 one thousand," Rescuer "A" says, "change, 1 thousand, 2 one thousand, 3 one thousand, 4 one thousand, 5 one thousand."

Dental Assistant Task Analysis

Competency G19: Apply cardiopulmonary resuscitation.

ENTRY COMPETENCIES	STEP NUMBER	STEP STATEMENT
	10.F.3.	- Rescuer "A" finishes the fifth compression and quickly moves into position at the person's head.
	10.F.4.	- Rescuer "B" completes ventilation and immediately positions himself at the chest of the person to become the compressor.
	10.F.5.	- Rescuer "A" immediately opens the airway and checks for spontaneous pulse and breathing.
	10.F.6.	- Rescuer "B" locates prior hand position to resume compressions and wait for directions from rescuer "A" to continue CPR.
	11.	Continue CPR until emergency medical help arrives or until person is revived.

APPENDIX E
Item Matrices, Forms A & B
Dental Assistant

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form A

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
001	B	A02	3A
002	A	A02	3A1
003	B	A02	3A2c
004	A	A02	3B
005	A	A02	3D
006	C	A03	1
007	D	A03	1A
008	D	A04	2B
009	C	A06	2A
010	A	A07	3
011	B	A08	1
012	C	A09	1A
013	B	A09	1
014	C	B01	1B
015	B	B01	3D
016	D	B02	4
017	B	B02	4B1
018	C	B03	2B1
019	A	B03	2D
020	D	B06	1-3
021	C	B06	2A1
022	D	C01	1E1
023	C	C01	2
024	D	C01	2A3
025	D	C01	3

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form A

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
026	C	C01	3B2
027	D	C01	2A2
028	A	C02	6
029	A	C03	2
030	C	C05	2C
031	C	G02/03	2
032	B	C06	1E1
033	D	C06	2C
034	C	C06	3A1
035	A	C06	3B1
036	D	C06	4D3
037	B	C07	2A
038	D	C11	1A
039	B	D01	4
040	B	D38	1A
041	B	D38	1A
042	A	D38	1F
043	C	D03	1A
044	A	D03	1A2
045	B	D03	1A4
046	A	D03	1B1b
047	B	D03	1B1
048	A	D03	4
049	D	D04	1A
050	D	D05	2A1
051	B	G04	5

**DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form A**

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
052	D	G18	1A
053	A	G18	6
054	C	G18	6C/8B
055	B	D06	1A
058	C	D06	2A1a
057	C	D06	2A1b
058	C	D06	2A1d
059	D	D06	2A1d
060	B	D06	2A1e
061	C	G06	1C
062	A	G06	1A
063	B	D06	3
064	C	D06	3A
065	B	D06	3C
066	B	D06	3C
067	D	D31	1A
068	D	D31	4
069	A	D07/D08	5
070	A	D08	1B2
071	D	D08	2A2
072	A	D08	2B
073	D	G05	2
074	C	G05	2D1
075	B	G09	3A1
076	C	G09	4A
077	C	D33	2A

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form A

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
078	B	D27	1A1
079	D	D27	1A1
080	A	D27	3B
081	B	G16	10
082	A	G17	1B
083	C	D08	7A
084	C	G14	8B
085	D	G15	1
086	B	G13	3A
087	B	G13	3A
088	B	G13	5B1
089	B	D36	2A
090	A	D10/G08	1A
091	D	D10	3B
092	A	D11	1A
093	B	D11	1B
094	C	D11	3
095	C	G07	2F
096	A	G07/D36	5
097	B	G08	5
098	C	D34	7/8
099	B	D12	3A1
100	D	D12	3A3
101	C	D12	3A2

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form A

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
102	A	D13	5A
103	C	G10	6/7
104	B	D14	7
105	C	D16	4A1
106	A	D16	4A3
107	A	D16	5A1
108	B	D16	6B
109	D	D17	6E1a
110	C	D38	2
111	D	D18	3C
112	A	D18	3B
113	B	D36	2A
114	B	D21	1B1
115	A	D21	2A
116	D	D21(25)	1B
117	D	G01	1B1
118	D	D22	3E/5B
119	B	D25	1B
120	B	D26	2A
121	A	F02	1B
122	C	F02/03	10/7
123	C	F04	1A
124	C	F04	1-9
125	A	F04	3B
126	A	F04	8
127	C	F04	3/9

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form A

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
128	B	E02	1
129	A	E06	1
130	A	E07	1
131	C	E07	2A
132	C	E07	1A1
133	D	E07	4C
134	B	E08	2,3
135	C	E09	7
136	C	E09	10
137	A	E10/E08	1A
138	C	E10	1/3
139	D	E11	1B
140	A	E12	1A
141	B	E13	1
142	B	E14	3
143	B	D39	3A
144	D	D39	4
145	A	D39	7
146	C	D39	7
147	A	D39	4
148	C	D39	7
149	C	D39	4
150	B	D39	6A

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form A

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
151	C	D39	6B
152	B	G19	9
153	B	G19	3/4

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form B

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
001	C	A02	3A
002	C	A02	3A1
003	B	A02	3A2c
004	C	A02	3B
005	B	A02	3D
006	C	A03	1
007	C	A03	1A
008	D	A04	2B
009	B	A06	2A
010	B	A07	3
011	C	A08	1
012	D	A09	1A
013	B	A09	1
014	C	B01	1B
015	C	B01	3D
016	D	B02	4
017	D	B02	4B1
018	A	B03	2B1
019	C	B03	2D
020	B	B06	1-3
021	B	B06	2A1
022	D	C01	1E1
023	B	C01	2
024	A	C01	2A3
025	C	C01	3

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form B

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
026	B	C01	3B2
027	A	C01	2A2
028	D	C02	6
029	B	C03	2
030	D	C05	2C
031	A	G02/03	2
032	C	C06	1E1
033	C	C06	2C
034	B	C06	3A1
035	D	C06	3B1
036	D	C06	4D3
037	D	C07	2A
038	D	C11	1A
039	D	D01	4
040	B	D38	1A
041	B	D38	1A
042	A	D38	1F
043	C	D03	1A
044	D	D03	1A2
045	A	D03	1A4
046	B	D03	1B1b
047	A	D03	1B1
048	B	D03	4
049	B	D04	1A
050	D	D05	2A1

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form B

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
051	D	G04	5
052	B	G18	1A
053	A	G18	6
054	A	G18	6C/8B
055	B	D06	1A
056	C	D06	2A1a
057	A	D06	2A1b
058	C	D06	2A1d
059	D	D06	2A1d
060	A	D06	2A1e
061	C	G06	1C
062	D	G06	1A
063	D	D06	3
064	D	D06	3A
065	D	D06	3C
066	C	D06	3C
067	B	D31	1A
068	C	D31	4
069	C	D07/D08	5
070	B	D08	1B2
071	C	D08	2A2
072	D	D08	2B
073	C	G05	2
074	B	G05	2D1
075	B	G09	3A1

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form B

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
076	D	G09	4A
077	B	D33	2A
078	A	D27	1A1
079	A	D27	1A1
080	C	D27	3B
081	C	G16	10
082	B	G17	1B
083	C	D08	7A
084	B	G14	8B
085	B	G15	1
086	D	G13	3A
087	C	G13	3A
088	A	G13	5B1
089	C	D36	2A
090	B	D10/G08	1A
091	C	D10	3B
092	B	D11	1A
093	A	D11	1B
094	B	D11	3
095	D	G07	2F
096	C	G07/D36	5
097	A	G08	5
098	B	D34	7/8
099	D	D12	3A1
100	C	D12	3A3

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form B

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
101	D	D12	3A2
102	D	D13	5A
103	B	G10	6/7
104	A	D14	7
105	B	D16	4A1
106	B	D16	4A3
107	B	D16	5A1
108	D	D16	6B
109	C	D17	6E1a
110	D	D38	2
111	C	D18	3C
112	A	D18	3B
113	B	D36	2A
114	A	D21	1B1
115	B	D21	2A
116	A	D21 (25)	1B
117	B	G01	1B1
118	C	D22	3E/5B
119	D	D25	1B
120	C	D26	2A
121	B	F02	1B
122	B	F02/03	10/7
123	B	F04	1A
124	C	F04	1-9
125	C	F04	3B

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form B

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
126	A	F04	8
127	D	F04	3/9
128	B	E02	1
129	A	E06	1
130	A	E07	1
131	B	E07	2A
132	B	E07	1A1
133	B	E07	4C
134	C	E08	2,3
135	B	E09	7
136	A	E09	10
137	B	E10/E08	1A
138	D	E10	1/3
139	A	E11	1B
140	D	E12	1A
141	C	E13	1
142	A	E14	3
143	C	D39	3A
144	A	D39	4
145	B	D39	7
146	A	D39	7
147	D	D39	4
148	B	D39	7
149	B	D39	4
150	C	D39	6A

DENTAL ASSISTANT ANSWER KEY AND ITEM MATRIX
Form B

<u>Item Number</u>	<u>Answer</u>	<u>Competency</u>	<u>Enabler</u>
151	B	D39	6B
152	A	G19	9
153	B	G19	3/4

APPENDIX F
Dental Assistant Written Tests
Forms A & B

**DENTAL ASSISTANT WRITTEN TEST
Form A**



State of Florida
Ralph D. Turlington, Commissioner of Education
Tallahassee, Florida
Affirmative action/equal opportunity employer

Division of Vocational, Adult, and Community Education

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FLORIDA VOCATIONAL ACHIEVEMENT TEST

Directions to the Student

1. Before starting the examination, use a soft lead pencil to enter your name and the other data required on side 1 of the answer sheet. The evaluator will go over specific directions with you.
2. The answer sheet has space for 200 responses. Use only as many as are called for in this test.
3. Use a soft lead pencil to blacken the letter grid of each correct answer.
4. If you want to change an answer, erase the original mark completely; then blacken the grid for the answer you think is correct. You must erase your first mark completely; failure to do so may result in a wrong reading by the scanner.
5. Mark only one answer for each item. Items marked in more than one space are automatically scored incorrect. You should answer all the questions to the best of your ability.
6. Do not fold your answer sheet nor make any stray marks on it.
7. If you have any doubts about the answer to a question, make a light check mark in the margin. Return to that question when all the other questions have been answered.
8. When you finish the test, look back over your answer sheet and darken any marks that are not black and shiny. Erase any stray marks.
9. The time limit for completing this written test will be announced by the evaluator.

001

A regular patient calls the office to inform the dentist that one of her teeth was fractured during a baseball game. Which of the following questions should be asked?

1. Can you describe the fracture?
2. What type of discomfort are you having?
3. Is there any swelling?
4. When was your last visit to the office?

- A. 1 and 2 only
- B. 1, 2, and 3 only
- C. 2, 3, and 4 only
- D. 1, 2, 3, and 4

002

Under which of the following circumstances would an unscheduled patient be worked into the schedule that day?

1. The patient has an acute toothache that kept him up all night.
2. The patient has had a chronic toothache for the last month.
3. The patient has dislodged a tooth.
4. The patient's gingiva are sore because his teeth haven't been cleaned in quite a while.

- A. 1 and 3 only
- B. 2 and 4 only
- C. 1, 2, and 3 only
- D. 1, 2, 3, and 4

003

Which of the following patients would best be suited for shorter appointment sessions?

1. Patients with heart problems
2. Mentally retarded patients
3. Patients taking tranquilizers
4. Children
5. Adults during working hours

- A. 3 and 4 only
- B. 1, 2, and 4 only
- C. 2, 3, and 4 only
- D. 1, 2, 3, 4, and 5

004

If patients are waiting to see a dentist who has been delayed in surgery, you should:

- A. inform the patients of the delay and offer to reschedule if necessary
- B. ignore the delay, since most patients expect to wait for the dentist anyway
- C. keep the patients entertained until the dentist is ready
- D. offer to provide coffee

005

When a regular salesperson calls on your office and the dentist wishes to see the person, you most likely would:

- A. seat the salesperson in the dentist's private office and inform the dentist
- B. escort the salesperson to the operatory where the dentist is working
- C. leave the salesperson in the reception area until the dentist is available
- D. show the salesperson to the lab and provide coffee

006

Why is having an accurate medical and dental history important prior to treating a patient?

1. It provides information about medications the patient is using.
2. It provides information about any systemic diseases.
3. It provides information on the patient's income.
4. It helps to provide legal protection for the dentist.

- A. 1 and 2 only
- B. 3 and 4 only
- C. 1, 2, and 4 only
- D. 1, 2, 3, and 4

007

Patients with which of the following medical conditions must be premedicated prior to dental treatment?

1. Heart murmur
2. Glomerulonephritis
3. Hepatitis B
4. Herpes simplex
5. Rheumatic fever

- A. 1 and 5 only
- B. 2 and 4 only
- C. 3, 4, and 5 only
- D. 1, 2, and 5 only

008

Patient information which is confidential includes the patient's:

1. name and address
2. medical and dental histories
3. ongoing treatment
4. account balance
5. marital status

- A. 3 only
- B. 2 and 3 only
- C. 2, 3, and 4 only
- D. 1 through 5

009

A scheduled patient cancels two hours before her appointment. The assistant should:

- A. arrange a staff meeting to fill the time
- B. ask the dentist what needs to be done
- C. call a patient who is able to come in on short notice
- D. use the time to clean up the waiting area

010

Which of the following is true about a patient's dental treatment record?

- A. It indicates the services performed.
- B. It contains the medical release.
- C. It must be initialed by the patient.
- D. It cannot be shown to the patient.

011

Look at the names below. Where would the records for Marion Baxter be filed?

1. M. T. Bauer
2. Daniel Baxter
3. Marvin Baxter, Sr.
4. George Beecher

- A. Between 1 and 2
- B. Between 2 and 3
- C. Between 3 and 4
- D. After 4

012

What is one reason to keep a current inventory list?

- A. To have a record of all products ordered
- B. To have a system for dating supplies
- C. To help identify quantities to be ordered
- D. To move supplies from place to place

013

Your office uses a maximum-minimum inventory system. Listed below is a record of supplies.

<u>Supply</u>	<u>Maximum</u>	<u>Minimum</u>
Alloy	30 oz.	10 oz.
X ray	25 pkgs.	5 pkgs.
#557 bur	24	10
Copolite	3	1

After inventory, you have the following amounts on hand: Alloy, 15 oz.; X-ray packages, 5; #557 burs, 5; Copalite, 2. Which supplies would need to be ordered?

1. Alloy
2. X rays
3. #557 burs
4. Copolite

- A. 1 only
- B. 2 and 3 only
- C. 1 and 4 only
- D. 1, 2, 3, and 4

014

A patient is seen for a prophylaxis, full mouth X rays, and study models for a total fee of \$65. If the previous balance on the account is \$85, and the patient pays \$60, what is the new balance?

- A. \$5
- B. \$25
- C. \$90
- D. \$150

015

The outstanding accounts total is \$8,985. To verify that figure, you add all the ledgers and arrive at a total of \$8,950. A possible error is that:

- a charge of \$35 has not been posted on the day sheet
- a patient was charged \$35 and it has not been posted to the ledger
- a payment of \$35 has not been deducted from the ledger
- a payment of \$35 has not been posted on the day sheet

018

Suppose a patient offers the check shown below to pay for services.

James P Johnson 344 Any Street Yountown, FL 35442	3834 <i>March 14, 84</i>
Pay to the Order of	\$ <u>38.50</u>
<i>Thirty and No/100</i>	
Yountown National Bank Yountown, FL 35442	L. J. 1875
For <i>Dental Services</i>	<i>James P Johnson</i>

Should this check be accepted?

- Yes, it is OK.
- No, the signature is not proper.
- No, the amounts don't match.
- No, the payee is not filled in.

016

The completed pegboard daily journal page shows:

- all patients seen on that day
- all professional services rendered that day
- all financial transactions for that day
- a list of all receipts issued for that day

- 1 only
- 1 and 2 only
- 1, 2, and 3 only
- 1, 2, 3, and 4

017

The total fees charged out for June 15 were \$230. Fifty dollars was given in discounts and \$350 received in payments. The previous balance total was \$475. Using pegboard proof of posting, the current balance total would be:

- \$75
- \$305
- \$705
- \$1,105

019

When should a firm payment plan be established with a patient?

- Before any services are rendered
- During the final appointment
- Whenever desired by the patient
- When treatment is finished

020

Which of the following are important when receiving and storing dental supplies?

- Old supplies should be placed behind new supplies.
- Damaged items should be discarded.
- Supplies should be stored in a dark, dry area.
- All supplies received should be checked with the invoice slip.

021

A dental office receives three times as much rubber dam material as was ordered. It is best to:

- A. place the material in storage since it has a long shelf life
- B. keep the material since there is usually a better price on a bulk order
- C. return the extra material to the supplier and request a credit slip
- D. trade it to a nearby dentist who uses a lot of rubber dam material

022

Filtration of the X-ray beam:

- A. affects the size of the beam
- B. decreases exposure time
- C. intensifies the central rays
- D. absorbs most of the longer wavelength X rays

023

Which of the following procedures would be effective in protecting patients from unnecessary radiation exposure?

1. Use of paralleling (long-cone) technique
2. Examination of equipment for proper filtering and collimation
3. Use of a slow-speed film
4. Use of an open-end cone

- A. 1 and 3 only
- B. 2 and 4 only
- C. 1, 2, and 4 only
- D. 1, 2, 3, and 4

024

A pregnant patient may be exposed to x-radiation:

- A. any time during pregnancy
- B. during the first trimester only
- C. during the third trimester only
- D. only when absolutely necessary

025

Which of the following is a method of monitoring the dental assistant's exposure to x-radiation?

- A. Checking fingernails for redness
- B. Having a yearly physical examination
- C. Using a geiger counter in the lab
- D. Wearing a film badge

026

The maximum whole body dose considered permissible for those who work with radiation is:

- A. 0.5 rem/week
- B. 5 rems/week
- C. 5 rems/year
- D. 50 rems/year

027

The first sign indicating overexposure to X rays would probably be:

- A. loss of fingernails
- B. loss of hair
- C. minor pain
- D. peeling of skin

028

What is the correct patient position for taking radiographs of the right mandibular quadrant using the bisecting (short-cone) technique?

- A. The occlusal plane of the mandibular arch should be parallel to the floor.
- B. The occlusal plane of the mandibular arch should be perpendicular to the floor.
- C. The occlusal plane of the maxillary arch should be parallel to the floor.
- D. The sagittal plane of the mandibular arch should be parallel to the floor.

029

To obtain a short-scale, high-contrast radiograph, you would:

- A. decrease the kilovoltage
- B. decrease the exposure time
- C. decrease the miliamperage
- D. increase the target-film distance

030

Occlusal radiographs are used to show:

- 1. anterior cavities
- 2. buccolingual orientation
- 3. pathological cyst formations

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2, and 3

031

When using the short-cone technique, how is the central ray aligned?

- A. Parallel to the film pack
- B. Perpendicular to the long axis of the tooth
- C. Perpendicular to the imaginary line dividing the angle between the film pack and the long axis of the tooth
- D. Parallel to the imaginary line dividing the angle between the film pack and the long axis of the tooth

032

The time required for developing a radiograph:

- A. decreases with decreasing developing solution temperature
- B. decreases with increasing developing solution temperature
- C. increases with increasing developing solution temperature
- D. does not depend on the developing solution temperature

033

Agitation of the loaded radiographic film rack is recommended in order to:

- A. activate the bromide crystals
- B. equalize temperature and chemical distribution
- C. hasten the processing time
- D. remove any air trapped on the film

034

Identify reasons for processing radiographic film through the fixer solution.

1. To darken the contrast of the film
2. To reharden the emulsion
3. To remove developer
4. To remove unexposed silver bromide

- A. 1 and 2
- B. 1 and 3
- C. 2 and 4
- D. 3 and 4

035

An unexposed area on a radiograph may be caused by:

- A. aligning the cone improperly
- B. placing the film improperly
- C. fixing for too long
- D. using outdated film

036

Identify situations where a patient's radiographs would be duplicated.

1. For insurance purposes
2. For malpractice litigation
3. For a patient who moves
4. As a professional courtesy to other dentists

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1, 2, and 3 only
- D. 1, 2, 3, and 4

037

The most common and easily observable anatomical landmark used to locate the upper arch molar film is the:

- A. descending ramus of the mandible
- B. maxillary sinus
- C. maxillary tuberosity
- D. nasal floor

038

With manual processing solutions, fresh fixer is mixed:

- A. once a week
- B. once a month
- C. after a fixed number of film sets
- D. whenever fresh developer is mixed

039

For work on the mandibular arch, how should the patient be positioned?

- A. The dental chair should be parallel to the floor.
- B. The patient's back should be at a 25 to 35 degree angle to the floor.
- C. The patient's feet should be on the same plane as the mouth.
- D. The patient should be positioned as close to the floor as possible.

040

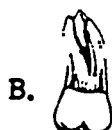
Trifurcated roots are usually found on the:

1. mandibular molars
2. mandibular first premolars
3. maxillary molars
4. maxillary first premolars

- A. 1 only
- B. 3 only
- C. 1 and 3 only
- D. 2 and 4 only

041

Which of the following is the facial view of a maxillary right second molar?



042

Using the Palmer method of charting, what tooth is represented by └3?

- A. Maxillary left cuspid
- B. Maxillary left first molar
- C. Mandibular right first molar
- D. Mandibular right cuspid

043

Why are vasoconstrictors added to local anesthetics?

- A. To increase the patient's heart rate and pulse
- B. To prevent toxic reaction to the anesthetic
- C. To prolong the time of anesthesia
- D. To reduce bleeding during treatment

044

Which of the following is a commonly used local anesthetic?

- A. Carbocaine
- B. Codeine
- C. Epinephrine
- D. Pentobarbital sodium

045

Select the anesthetic vasoconstrictor ratio for a patient without any medical or heart problems who is scheduled for a crown and bridge appointment and requires prolonged anesthesia.

- A. no vasoconstrictor
- B. 1:20,000
- C. 1:50,000
- D. 1:100,000

046

The aspirating syringe is used to administer anesthetic because it allows the dentist to:

- A. determine if the needle is in a blood vessel
- B. inject directly into a blood vessel
- C. inject quickly and without much pain
- D. penetrate the muscular tissue of the oral cavity

047

To assemble a syringe for a mandibular block injection, the needle normally used would be:

- A. short
- B. long
- C. either short or long
- D. standard

048

Which of the following applies to the handling and use of an anesthetic carpule?

1. Extruded rubber plugs may indicate leakage into the carpule.
2. The carpule must not be used if large bubbles are present.
3. A week's supply can be prepared by placing several in a container with alcohol covering the fixed plugs.
4. The carpule must be autoclaved before handling.
5. The fixed plug must be wiped with 70% alcohol before it is loaded into the syringe.

- A. 1, 2, and 5 only
- B. 2, 4, and 5 only
- C. 1, 2, 3, and 5 only
- D. 1 through 5

049

Topical anesthetics are used in routine dental care to:

1. act as a tissue irritant
2. desensitize terminal nerve endings of mucous membranes
3. inhibit the gag reflex
4. reduce sensitivity during scaling

- A. 4 only
- B. 1 and 2 only
- C. 3 and 4 only
- D. 2, 3, and 4 only

050

Identify reasons for use of the rubber dam in operative dentistry.

1. The contrast with the teeth provides better vision.
2. It increases the speed of the procedure.
3. It helps maintain a clear field of operation.
4. It maintains a more sanitary field of operation.
5. It protects a patient from aspirating objects down the throat.

- A. 1 and 4 only
- B. 2, 4, and 5 only
- C. 2, 3, 4, and 5 only
- D. 1 through 5

051

Lubricant may be used in the rubber dam procedure to:

- A. ease the clamp over the anchor tooth
- B. facilitate slipping the dam material between the contacts
- C. reduce the glare of the operating light
- D. retard saliva from seeping through the punched holes

052

Which of the following patients should not be given nitrous oxide?

1. A middle-aged patient who is very apprehensive
2. A patient requiring extensive periodontal surgery and several extractions
3. A preschool child on an introductory visit to the dentist
4. A teenager who is asthmatic

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 4 only
- D. 3 and 4 only

053

When nitrous oxide is being administered, the dental assistant must monitor the patient continuously for:

1. following directions
2. eye contact
3. responsiveness
4. pulse rate

- A. 1 and 3 only
- B. 2 and 4 only
- C. 1, 3, and 4 only
- D. 1, 2, 3, and 4

054

During sedation with nitrous oxide, a patient becomes uncomfortable and anxious and attempts to remove the nasal mask. The dental assistant should:

- A. allow the patient to remove the mask and discontinue the flow of nitrous oxide
- B. carefully subdue the patient
- C. gently prevent mask removal while flushing the system with 100% oxygen
- D. immediately hold the mask into position and flush the system with 100% nitrous oxide

055

A cavity preparation involving the mesial surface of the central incisor is a class ____?____; a fracture that involves the disto-incisal edge of a mandibular incisor is a class ____?____.

- A. II, III
- B. III, IV
- C. IV, III
- D. V, IV

056

Look at the six instruments pictured below.

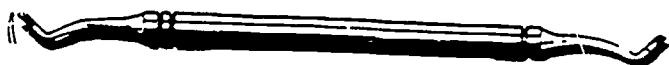
1.



2.



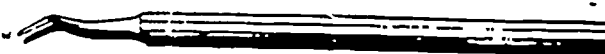
3.



4.



5.



6.



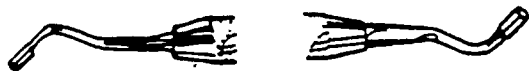
Identify the spoon excavator, the straight chisel, and the Wedelstaedt chisel.

- A. 1, 2, 4
- B. 2, 4, 6
- C. 2, 6, 4
- D. 3, 6, 5

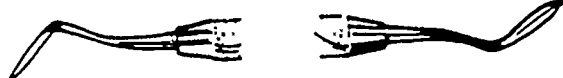
057

Look at the six instruments pictured below.

1.



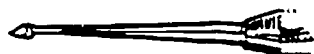
2.



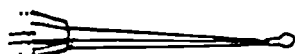
3.



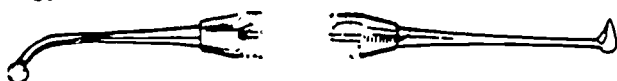
4.



5.



6.



Identify the burnisher, the Hollenback carver, and the discoid.

- A. 1, 3, 4
- B. 2, 5, 3
- C. 6, 2, 5
- D. 6, 2, 4

058

Spoon excavators are used primarily during a cavity preparation to:

- A. plane line angles
- B. remove fractured enamel
- C. remove carious dentin
- D. smooth the floor of the preparation

059

Which instrument must be included on the tray for a composite restoration?

- A. A plain condenser
- B. A plastic carrier
- C. A serrated condenser
- D. A plastic filling instrument

060

What material is placed first in the cavity preparation when restoring with amalgam?

- A. The amalgam
- B. The base
- C. The liner
- D. The varnish

061

The purpose of a cavity lining agent is to:

- A. clean and disinfect the cavity preparation
- B. lute composite restorations
- C. reduce microleakage
- D. reduce setting time

062

Which of the following are types of liners?

- 1. Calcium hydroxide
- 2. Copalite
- 3. IRM
- 4. ZOE

- A. 2 only
- B. 2 and 3 only
- C. 1, 2, and 4 only
- D. 1, 2, 3, and 4

063

Match each of the following burs to the number with which the bur is associated.

<u>Bur</u>	<u>Number</u>
1. Inverted cone	a. 6
2. Round	b. 14
3. Straight fissure crosscut	c. 33 1/2
4. Tapered fissure plain	d. 169
	e. 557

- A. 1-c, 2-a, 3-d, 4-e
- B. 1-c, 2-a, 3-e, 4-d
- C. 1-c, 2-b, 3-d, 4-e
- D. 1-b, 2-c, 3-e, 4-d

064

Match the handpiece listed with the shanks illustrated below.

- 1. Laboratory handpiece
- 2. Low speed handpiece with contra-angle attachment
- 3. Ultraspeed handpiece



- A. 1-a, 2-c, 3-b
- B. 1-b, 2-a, 3-c
- C. 1-c, 2-b, 3-a
- D. 1-c, 2-a, 3-b

065

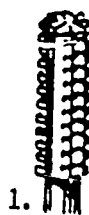
The handpiece and bur normally used to initially remove enamel in a Class II preparation are:

- A. the ultraspeed handpiece and the inverted cone bur
- B. the ultraspeed handpiece and the fissure bur
- C. the low speed handpiece and the round bur
- D. the low speed handpiece and the fissure bur

066

Look at the following numbered illustrations.

art: illustrations of the following burs:



Identify the straight fissure crosscut, the tapered fissure plain, and the round bur.

- A. 1, 3, 5
- B. 1, 4, 5
- C. 2, 4, 3
- D. 2, 5, 6

067

Which of the following is a major purpose of high speed oral evacuation?

- A. To decrease aerosols the patient is exposed to
- B. To inhibit the patient's gag reflex
- C. To keep the patient's mouth open during the procedure
- D. To minimize the patient's need to rinse and expectorate

068

When assisting a right-handed dentist, where should the high speed evacuation tip be placed for a preparation in the mandibular right quadrant?

- A. In the floor of the mouth
- B. As far from the tooth as possible
- C. On the buccal surface on the opposite side of the mouth
- D. On the lingual surface, slightly posterior to the preparation area

069

When exchanging carving instruments with the dentist, the handles of the instruments should be:

- A. parallel to each other
- B. angled to the dentist's hand
- C. perpendicular to the patient's mouth
- D. below the zone of transfer

070

Identify a band that could be used for a Class II cavity preparation with a proximal box above the gingival line.



071

How should an accidental spill of mercury be cleaned up?

- A. Coat the mercury with talcum powder and then sweep it up.
- B. Evacuate the spill with the high-volume suction.
- C. Wipe the counter or area with a soft, absorbent cloth.
- D. Trap the mercury under water using a suction device.

072

The dental assistant should use cotton forceps to remove the pestle after trituration of amalgam in order to:

- A. avoid contamination of the mix
- B. accurately count the pellets of alloy
- C. check the uniformity of the mix
- D. provide access for the amalgam carrier

073

The widest part of the circumferential matrix band will be positioned towards the:

- A. facial surface
- B. gingival surface
- C. lingual surface
- D. occlusal surface

074

A wedge is used whenever a cavity preparation involves the proximal surface of the tooth in order to:

- A. slightly separate the contact area
- B. limit the height of the restoration
- C. prevent an overhanging margin
- D. prevent the amalgam from slipping

075

One reason for using a pit and fissure sealant is to reduce:

- A. interproximal and some occlusal caries
- B. occlusal and some buccal caries
- C. lingual caries
- D. plaque accumulation

076

Which of the following is a contraindication for the application of a pit and fissure sealant?

- A. The patient is mentally retarded.
- B. The teeth are deciduous.
- C. There is interproximal decay present.
- D. The teeth are newly erupted.

077

The assistant should dry a tooth preparation for no more than ten seconds at a time in order to:

- A. prevent discoloration of the tooth
- B. prevent the spread of microorganisms
- C. prevent pulpal damage
- D. prevent interference with the dentist

078

Which material(s) may be placed in a deep cavity with possible pulp exposure?

- A. A thick mix of zinc phosphate only
- B. Calcium hydroxide followed by zinc oxide-eugenol
- C. Coe-pack or Cavit
- D. A varnish followed by zinc oxide-eugenol

079

The material commonly used to cement gold crowns is:

- A. calcium hydroxide
- B. resin
- C. zinc oxide-eugenol
- D. zinc phosphate

080

The consistency of zinc phosphate cement when mixed for cementing purposes should be:

- A. creamy; flows spatula before breaking into thin thread
- B. putty-like; easily handled with fingers
- C. thick; has a dull appearance
- D. thin; flows easily from spatula

081

Which of the following are true for a temporary crown which has been properly fitted?

1. The contacts with the adjacent teeth are open.
2. The crown margin meets and covers the gingival preparation margin.
3. The lingual contour is in the same plane as the adjacent teeth.

- A. 1 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

082

A dental assistant is legally permitted to remove excess cement from dental restorations and appliances using:

- A. hand instruments only
- B. rotary instruments only
- C. either hand or rotary instruments
- D. any instrument as directed by the dentist

083

The purpose for using articulating paper is to:

- A. check the movement of a crossbite
- B. determine if the patient has an overbite
- C. identify high spots on restorations
- D. locate ditched areas in amalgams

084

The recommended life of an IRM is about:

- A. One month
- B. Three months
- C. One year
- D. Three years

085

If the chairside assistant is unable to dislodge a temporary restoration with hand instruments, what should be done?

- A. Use a bur.
- B. Use the diamond instrument.
- C. Use a ruby stone.
- D. Inform the dentist.

086

Identify the proper sequence of steps for polishing an amalgam restoration.

1. Use finishing burs and greenstones.
2. Use abrasive pumice.
3. Use cuttle disks for proximal surfaces.
4. Use tin oxide.

- A. 1, 2, 4, 3
- B. 1, 3, 2, 4
- C. 1, 3, 4, 2
- D. 1, 4, 2, 3

087

The primary reason to polish an amalgam restoration is to:

- A. improve appearance
- B. reduce surface irregularities
- C. reduce airborne particulates
- D. soften the luster

088

When an amalgam has been properly polished, an explorer run across the margins will:

- A. catch gently
- B. move smoothly
- C. dip slightly
- D. rise slightly

089

A patient has just had a buccal amalgam placed in tooth #18. What post-operative instructions should be given?

- 1. Do not floss the area for 24 hours.
- 2. Do not eat or chew anything hard or sticky for 24 hours
- 3. Do not grind teeth if the filling feels high.

- A. 1 only
- B. 2 only
- C. 2 and 3 only
- D. 1, 2, and 3

090

Which of the following are contraindications for performing an oral prophylaxis?

- 1. aphthous ulcers
- 2. emphysema
- 3. gingivitis
- 4. heart bypass (unmedicated)
- 5. same-day extraction

- A. 1, 4, and 5 only
- B. 2, 3, and 4 only
- C. 1, 2, 4, and 5 only
- D. 1 through 5

091

Which of the following are purposes for performing an oral prophylaxis?

- 1. To help teeth resist deposits
- 2. To improve oral aesthetics
- 3. To prepare teeth and gingiva for operative procedures
- 4. To help prevent periodontal disease

- A. 2 only
- B. 1 and 3 only
- C. 1, 2, and 3 only
- D. 1, 2, 3, and 4

092

Before giving a patient a fluoride treatment, what must a dental assistant know?

- 1. If the patient has any allergies to citrus or other flavorings
- 2. If the patient has ever had a reaction to a fluoride
- 3. The age of the patient
- 4. The weight of the patient

- A. 1 and 2 only
- B. 3 and 4 only
- C. 2, 3, and 4 only
- D. 1, 2, 3, and 4

093

What are the major purposes of fluoride treatment?

- 1. Kill bacteria on the teeth
- 2. To reduce dental caries
- 3. To strengthen the teeth
- 4. To whiten the teeth

- A. 1 and 4 only
- B. 2 and 3 only
- C. 1, 2, and 3 only
- D. 2, 3, and 4 only

094

Which of the following is the common method for applying acidulated phosphate fluoride gel?

- A. isolating and using a cotton swab
- B. swishing it in the patient's mouth
- C. using a disposable tray
- D. using a toothbrush

095

When giving a patient a topical fluoride treatment in a gel preparation, how long should the gel remain on the teeth?

- A. 1 minute
- B. 2 minutes
- C. 4 minutes
- D. 6 to 10 minutes

096

What post-operative instructions should be given to a patient after a fluoride treatment?

- A. Do not eat or drink anything for 30 minutes.
- B. Do not chew anything for 1 hour.
- C. Do not drink any liquids for 3 hours.
- D. Do not use a fluoride toothpaste the evening following the treatment.

097

When flossing a patient's teeth, the assistant should:

- A. use a fresh piece of floss for each arch
- B. work the floss between the teeth with a gentle sawing motion
- C. slide the floss under the areas of tissue resistance
- D. pull the floss mesially to clean mesial surfaces

098

A sterile instrument should not be carried openly from one operatory to another because:

- A. the instrument may be dropped on the floor
- B. microorganisms move as a result of gravity
- C. microorganisms are present in air currents
- D. someone may touch it

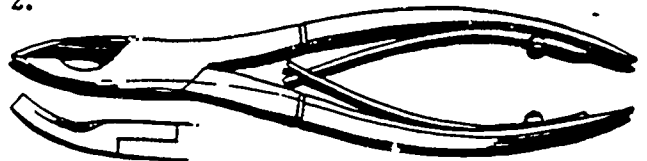
099

Look at the illustrations below.

1.



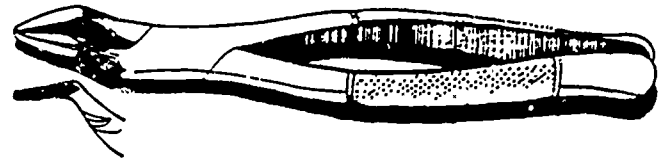
2.



3.



4.



Identify the following oral surgery instruments:

- a. rongeur
- b. surgical bone file

- A. a-1, b-4
- B. a-2, b-3
- C. a-3, b-2
- D. a-4, b-1

100

The rongeur is used during oral surgery to:

- A. curette the socket
- B. extract deciduous teeth
- C. loosen the teeth from the periosteum
- D. surgically cut bone

101

Arrange the following five steps into proper order to show the sequence for the extraction of a tooth.

1. Curette the socket as necessary.
2. Elevate the tooth as necessary.
3. Loosen the surrounding periosteum.
4. Perform osteoplasty with a bone file.
5. Remove the tooth with forceps.

- A. 2, 3, 1, 4, 5
- B. 3, 2, 5, 4, 1
- C. 3, 2, 5, 1, 4
- D. 2, 3, 4, 5, 1

102

One advantage for using nylon rather than gut sutures is that:

- A. healing can be checked when the sutures are removed
- B. infection is less likely
- C. they're less irritating than gut sutures
- D. the patient doesn't have to return

103

Continuous suture removal is best done by cutting the suture knots and then:

- A. pulling the knots through the tissue
- B. using the free end to pull the entire suture through the tissue
- C. cutting one side of the loops and pulling the loops out of the tissue
- D. cutting the loops at each entry point on both sides of the tissue

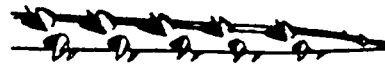
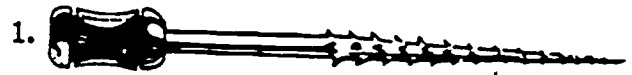
104

Surgical forceps should be passed to the dentist in such a way that they can be received by using the:

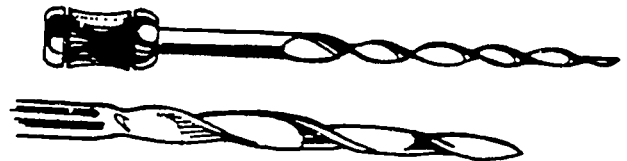
- A. finger grasp
- B. palm grasp
- C. palm thumb grasp
- D. pen grasp

105

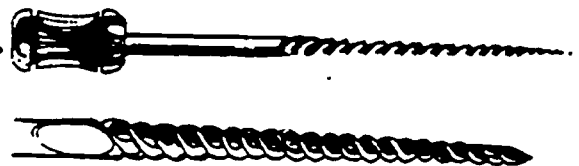
Look at the numbered illustrations below.



2.



3.



Identify the file and the barbed broach.

- A. 1, 2
- B. 2, 3
- C. 3, 1
- D. 3, 2

106

Identify the instruments designed for removing the pulp in a root canal.

1. Barbed broaches
2. Files
3. Reamers

- A. 1 only
- B. 2 only
- C. 1 and 3 only
- D. 2 and 3 only

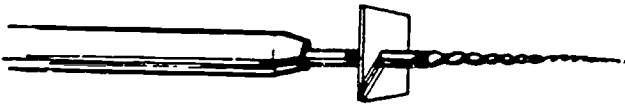
107

Alcohol and sodium hypochlorite is commonly used during root canal therapy to:

- A. irrigate the canals
- B. medicate the canals
- C. blanch the tissue
- D. disinfect the paper points

108

Look at the illustration below. What does the distance from the instrument stop to the point of the instrument correspond to?



- A. The length of absorbent paper required
- B. The length of the tooth
- C. The size of the broach required
- D. The size of the file required

109

What is the reason for taking a radiograph before starting endodontic therapy?

- A. To determine the vitality of the pulp
- B. To help decide how many appointments are needed
- C. To estimate how much temporary material will be needed
- D. To measure the length of the tooth

110

Periodontal probing measurements are taken at how many points around a molar?

- A. Two
- B. Four
- C. Six
- D. Eight

111

During a gingivectomy, a curette is used to:

- A. open a gingival flap
- B. recontour the bone around the teeth
- C. remove bony spicules
- D. smooth the surfaces of the roots

112

Before scaling and curettage, the dentist will:

- A. determine pocket depth
- B. polish the clinical crowns
- C. remove submarginal calculus
- D. remove supramarginal calculus

113

A patient has just had gingivectomy surgery and a periodontal dressing placed. What postoperative instructions should be given?

- A. Report to the office immediately if any dressing breaks off.
- B. Return in five to seven days for dressing replacement.
- C. Continue with your normal diet.
- D. Rinse with antiseptic or saline solution.

114

Cooling the water to be used in mixing alginate will result in a mix that is:

- A. faster setting
- B. slower setting
- C. stronger
- D. weaker

115

When bulk alginate in a can is used, the can should be shaken several times. This will:

- A. allow for accurate measurement of the powder
- B. blend the calcium sulfate with the filler
- C. pack the powder level in the can
- D. mix the various powders

116

For which of the following would alginate be the preferred impression material?

- A. A crown or bridge impression
- B. A denture impression
- C. A partial impression
- D. A study model impression

117

Contraindications for taking a set of alginate impressions include:

- 1. a periodontal abscess
- 2. a recent extraction
- 3. recent restorative work
- 4. Vincent's disease

- A. 1 only
- B. 1 and 2 only
- C. 1, 2, and 3 only
- D. 1, 2, and 4 only

118

Wrapping an alginate impression in a damp towel while waiting to pour it will prevent:

- A. contamination
- B. gelation
- C. imbibition
- D. syneresis

119

When dispensing rubber-base impression accelerator and base, the assistant should dispense equal:

- A. amounts
- B. lengths
- C. volumes
- D. weights

120

What might happen if an adhesive is not used in a tray when taking a rubber-base impression?

- A. The materials may not set up properly.
- B. The impression material may come out of the tray upon removal.
- C. The assistant will have difficulty cleaning the tray.
- D. The impression material will adhere to the tray.

121

What is the purpose of placing a wax spacer over the model before constructing a custom tray?

- A. To allow for an even thickness of impression material throughout the tray
- B. To increase the height of the tray when seated in the mouth
- C. To decrease the depth of the custom tray, requiring less adhesive
- D. To line the interior of the custom tray with a soft wax

122

In the fabrication of a custom tray, the wax spacer is removed:

- A. before preparing the preliminary cast
- B. before preparing the self-curing resin mixture
- C. after the tray is separated from the cast
- D. after the tray is delivered to the dentist

123

Plaster or stone study models may be used by the dentist to:

1. wax up dies for bridgework
2. design partial dentures
3. explain the patient's dental needs
4. evaluate the patient's dental situation
5. provide a permanent record of the patient's dental arches

- A. 1 and 3 only
- B. 2, 4, and 5 only
- C. 2, 3, 4 and 5 only
- D. 1 through 5

124

If the original pour of an alginate impression reaches a final set before it is inverted onto a base, it should be:

- A. brushed with a debubbler
- B. painted with an adhesive
- C. soaked in water for five minutes
- D. trimmed of excess stone

125

The first increments of plaster in pouring a mandibular alginate impression should be placed:

- A. on the heel portion
- B. on the facial portion
- C. over the occlusal surfaces
- D. over the retromolar pad area

126

The first trimming on a stone model is to:

- A. flatten the back of the cast
- B. produce an angle across the heels
- C. produce a flat base
- D. produce flat side surfaces

127

To polish a completed set of study models, the assistant should:

- A. apply a thin coat of white shoe polish, then buff with a soft cloth
- B. buff the outer surfaces on the dental lathe using a clean rag wheel
- C. soak them in a concentrated soap solution, rinse, then rub them with a soft cloth
- D. soak the models in a weak wax solution, dry then buff them

128

Identify categories of laboratory instruments that require the use of a disinfectant solution.

1. Those that will be sterilized.
2. Those that are used with the handpiece.
3. Those that are used on appliances which go in a patient's mouth.

- A. 2 only
- B. 3 only
- C. 1 and 3 only
- D. 1, 2, and 3

129

Which of the following are considered hand cutting instruments?

1. Angle formers
2. Burnishers
3. Condensers
4. Reamers

- A. 1 only
- B. 2 only
- C. 1 and 3 only
- D. 2 and 4 only

130

Which of the following should be autoclaved?

1. Currettes
2. Probes
3. Mouth mirrors
4. Prophylaxis brushes
5. Film holders
6. Hand brushes

- A. 1, 2, and 3 only
- B. 1, 3, and 4 only
- C. 2, 5, and 6 only
- D. 4, 5, and 6 only

131

Why is it important that rubber gloves be worn when dental operatory instruments are cleaned?

1. To maintain a sterile environment
2. To prevent infection
3. To prevent instrument damage
4. To prevent contamination of the cleaning solution
5. To protect against injury

- A. 1 and 3 only
- B. 2 and 4 only
- C. 2 and 5 only
- D. 1, 3, and 5 only

132

The ultrasonic cleaner can be used to clean which of the following?

- A. Cotton swabs
- B. Gauze sponges
- C. Hand instruments
- D. Rheostats

133

Once nonautoclavable instruments are cleaned in an ultrasonic cleaner, they should next be:

- A. dried with clean paper towels
- B. stored in their proper locations
- C. placed on a sterile tray
- D. soaked in disinfectant

134

Before sterilizing clean operatory instruments in an autoclave, the assistant may:

1. lay the instruments in closed metal containers
2. package the instruments in paper bags
3. wrap the instruments in foil

- A. 1 only
- B. 2 only
- C. either 1 or 2
- D. either 1, 2 or 3

135

Under optimum temperature and pressure, how much time is required to achieve sterilization in an autoclave?

- A. 5 minutes
- B. 10 minutes
- C. 20 minutes
- D. 40 minutes

136

When autoclaving instruments used on a patient with a history of hepatitis, what should be done?

- A. The instruments should be cultured before autoclaving.
- B. The instruments should be discarded.
- C. The instruments should be autoclaved a second time.
- D. The instruments should be soaked in disinfectant before autoclaving.

137

What is the major advantage of using dry heat sterilization?

- A. Corrosion is eliminated.
- B. Spores of microorganisms are killed.
- C. The temperature needed for sterilization is lower.
- D. The sterilization process is speeded up.

138

When using the dry heat sterilizer, what is the recommended time and temperature?

- A. 20 minutes at 160 degrees F
- B. 35 minutes at 250 degrees F
- C. 60 minutes at 320 degrees F
- D. 60 minutes at 425 degrees F

139

Which of the following is an advantage of using an ethylene oxide (or gaseous) sterilizer?

- A. The unit takes up less space than an autoclave.
- B. Instruments don't require precleaning before sterilization.
- C. The unit can clean more instruments at one time.
- D. The unit can sterilize nonwetable instruments.

140

The glass bead sterilizer is used primarily to sterilize:

- A. endodontic instruments
- B. glass beads
- C. periodontal instruments
- D. oral surgery instruments

141

Which of the following should be disinfected last when cleaning the operatory?

- A. Chair
- B. Cuspidor
- C. Light
- D. Unit

142

How often should the saliva ejector suction and screen be flushed and cleaned?

- A. After every patient
- B. Daily
- C. Weekly
- D. Monthly

143

Look at the data below.

<u>Patient</u>	<u>Blood Pressure</u>	<u>Pulse Rate</u>	<u>Respiration Rate</u>
1	90/60	45	12
2	160/90	100	20
3	110/70	60	18

Which of the patients has abnormal vital signs?

- A. Patient 1 only
- B. Patient 2 only
- C. Patient 3 only
- D. Patients 2 and 3 only

144-146

Use the following information to answer questions 144-146.

Mr. Jones arrives late for his appointment for third molar extractions. He is seated in the operatory but before any treatment begins, he complains of being hot and feeling dizzy, and breaks out into a cold sweat. His pulse is 110 and his blood pressure is 85/65.

144

The diagnosis at this point would be:

- A. abnormal blood pressure
- B. allergic reaction
- C. angina pectoris
- D. vasovagal syncope

145

Select the sequence of steps or actions that should be taken to respond to Mr. Jones' crisis.

1. Have him recline in a head-down position.
2. Monitor his airway and provide oxygen.
3. Administer ammonia.
4. Administer epinephrine.
5. Administer benadryl.
6. Administer nitroglycerin.
7. Administer wyamine.

- A. 1, 2, and 3
- B. 1, 2, and 7
- C. 2 and 6
- D. 4 or 5

146

During the crisis, the assistant is monitoring Mr. Jones' vital signs. His blood pressure suddenly drops to 60/45. To combat this situation, what should be administered?

- A. Atropine sulfate
- B. Epinephrine
- C. Wyamine or vasoxyll
- D. spirits of ammonia

147-148

Use the following information to answer questions 147-148.

Ms. McDonald has a negative history response to cardiac disease. After she is seated, she complains of having rushed to the office from an exercise session. She is experiencing a vague, radiating pain in her chest and left arm. Her blood pressure is 110/70 and her pulse is 55. The assistant reassures her and allows her to rest, during which time the pain subsides.

147

Based on this information, what has happened to this patient?

- A. She has had an angina attack.
- B. She has had a heart attack.
- C. She has had an attack of indigestion.
- D. She has had a neurogenic shock.

148

If Ms. McDonald's pain had not decreased, she should have been given:

- A. spirits of ammonia
- B. epinephrine 1:1000 IM
- C. nitroglycerin tablets
- D. wyamine

149

A forty-year-old male dental patient is extremely anxious about his planned alveolectomy that day. He complains about feeling faint, having a lump in his throat, and feeling as though his heart is pounding. His respiratory rate is 29 per minute and he remains conscious. He is most likely:

- A. bleeding internally
- B. having a convulsive seizure
- C. hyperventilating
- D. suffering an asthmatic attack

150

On an unconscious patient, where should pulse rate be measured?

- A. At the brachial artery
- B. At the carotid artery
- C. At the femoral artery
- D. At the radial artery

151

When taking blood pressure, the manometer is read for diastolic pressure:

- A. just before the first sound is heard
- B. when the first sound is heard
- C. when a definite change in sound is heard
- D. when no sound is heard

152

Before administering CPR chest compressions, what must be established?

- A. That the victim's airway is open
- B. That the victim has no pulse
- C. That the victim is not breathing
- D. The reason for victim's collapse

153

How should the breathing of an unconscious patient be assessed?

1. Feel the carotid artery.
2. Listen at the mouth and nose.
3. Look for movement of the chest and abdomen.
4. Place your ear near the mouth and nose.
5. Watch for flickering eyelids.

Arrange the steps in the proper order.

- A. 1, 3, 5
- B. 2, 3, 4
- C. 4, 3, 1
- D. 1, 2, 3, 5, 4

DENTAL ASSISTANT WRITTEN TEST
Form B

FLORIDA VOCATIONAL ACHIEVEMENT TEST

007

Premed
which c

1. Apt
2. Hea
3. Glo w
4. Rhe
5. Sca

- A. 1 a
- B. 1 and
- C. 2, 3
- D. 2, 4

008

Which
patien

1. Fin
2. De
3. Ma r
4. Me
5. Na

- A. 2 c
- B. 2 and
- C. 1,
- D. 1 t

009

What
patier
appoi

- A. Ask
pr
- B. Ci
nc
- C. C
at
- D. In fo

Directions to the Student

1. Before starting the examination, use a soft lead pencil to enter your name and the other data required on side 1 of the answer sheet. The evaluator will go over specific directions with you.
2. The answer sheet has space for 200 responses. Use only as many as are called for in this test.
3. Use a soft lead pencil to blacken the letter grid of each correct answer.
4. If you want to change an answer, erase the original mark completely; then blacken the grid for the answer you think is correct. You must erase your first mark completely; failure to do so may result in a wrong reading by the scanner.
5. Mark only one answer for each item. Items marked in more than one space are automatically scored incorrect. You should answer all the questions to the best of your ability.
6. Do not fold your answer sheet nor make any stray marks on it.
7. If you have any doubts about the answer to a question, make a light check mark in the margin. Return to that question when all the other questions have been answered.
8. When you finish the test, look back over your answer sheet and darken any marks that are not black and shiny. Erase any stray marks.
9. The time limit for completing this written test will be announced by the evaluator.

013

Your office uses a running inventory system for supplies. Listed below are supplies, amount on hand, and the average rate of use.

<u>Supply</u>	<u>On Hand</u>	<u>Rate of Use</u>
Tooth brushes	24	50 per week
Mouth mirrors	18	2 per week
Explorers	10	2 per week
Saliva ejectors	500	500 per week

What items would you have to order to have a four-week supply on hand?

1. Toothbrushes
2. Mouth mirrors
3. Explorers
4. Saliva ejectors

- A. 1 only
- B. 1 and 4 only
- C. 2 and 3 only
- D. 1, 2, and 4

014

A patient has a previous balance of \$125. The fee for today's service is \$35, and the patient pays \$60. The new balance will be:

- A. \$25
- B. \$65
- C. \$100
- D. \$160

015

After completing the outstanding accounts receivable, the total is \$6,790. The total in the ledgers is \$6,815. Which of the following could be the source of the error?

- A. A charge of \$25 was not entered on the day sheet.
- B. A charge of \$25 was not entered on the ledger.
- C. A patient has paid \$25 and it has not been deducted from the ledger.
- D. A payment of \$25 was not entered on the day sheet.

016

Information contained on a completed pegboard daily journal page includes:

1. a grand total of fees charged out that day
2. the total amount of money collected
3. a list of professional services provided that day
4. a total of the accounts receivable for the patients seen on that day

- A. 1 and 2 only
- B. 3 only
- C. 1, 2, and 3 only
- D. 1, 2, 3, and 4

017

The total fees charged out for June 10 were \$480; \$35 were given in discounts and \$225 received in payments. The previous balance total was \$835. Using pegboard proof of posting, the current balance total would be:

- A. \$220
- B. \$615
- C. \$700
- D. \$1,055

018

A patient offers the check shown below to pay for services.

Mary Q. Johnson 152 Your Street Anytown, FL 35442	March 16 1984 3834
Pay to the Order of	\$ 35.24
<i>Thirty five and 24/100</i>	Dollars
Anytown State National Bank Anytown, FL 35410	<i>Mary Q. Johnson</i>
for <i>dental services</i>	

Should this check be accepted?

- A. Yes, it is OK.
- B. No, the signature is not proper.
- C. No, the amounts don't match.
- D. No, the payee is not filled in.

019

A firm payment plan should be established with a patient:

- A. at the patient's convenience
- B. during the last treatment appointment
- C. prior to services being performed
- D. upon completion of treatment

020

An assistant receiving and storing dental supplies should:

- A. keep any unordered supplies
- B. place the new supplies behind the old ones
- C. reorder items that are back ordered
- D. check supplies ordered against the inventory

021

A dental assistant has checked in a shipment of supplies which included a box of impression material not ordered. The best course of action is to:

- A. keep the impression material and use it
- B. return the impression materials and request a credit slip from the supplier
- C. trade the impression material with another dentist
- D. store it on a back shelf since the cost of returning it would be too high

022

When exposing radiographs, the use of an open-ended cone will:

- A. increase exposure time of the patient
- B. increase radiation received by the patient
- C. enlarge the size of the central beam
- D. reduce secondary radiation received by the patient

023

Radiation exposure of the patient is minimized by which of the following procedures?

1. Using the bisecting (short-cone) technique
2. Inspecting the X-ray machines
3. Using a lead-lined apron drape
4. Using the instant processor

- A. 1 and 2 only
- B. 2 and 3 only
- C. 2, 3, and 4 only
- D. 1, 2, 3, and 4

024

What is the most critical time for a pregnant patient to be exposed to x-radiation?

- A. During the 1st trimester
- B. During the 2nd trimester
- C. During the 3rd trimester
- D. All trimesters are equally critical

025

An assistant taking a full-mouth radiograph series on a young child finds that the child's mouth is too small to use a film-holding device. What should be done?

- A. The assistant should ask the dentist or hygienist to hold the film packet.
- B. The assistant should hold the film packet.
- C. The child should hold the film packet.
- D. The procedure should be done without the radiograph.

026

An assistant working daily with radiation should be limited to a whole body dose of:

- A. 50 rems/year
- B. 5 rems/year
- C. 5 rems/week
- D. 0.5 rem/week

027

A classic symptom of chronic overexposure to ionizing radiation is:

- A. loss of hair
- B. low-grade fever
- C. painful joints
- D. peeling of skin

028

How should the patient be positioned when you take radiographs of the left maxillary quadrant using the bisecting (short-cone) technique?

- A. The sagittal plane of the maxillary arch should be parallel to the floor.
- B. The occlusal plane of the mandibular arch should be parallel to the floor
- C. The occlusal plane of the maxillary arch should be perpendicular to the floor
- D. The occlusal plane of the maxillary arch should be parallel to the floor.

029

To obtain a long-scale, low-contrast radiograph, you would:

- A. increase the exposure time
- B. increase the kilovoltage
- C. increase the miliamperage
- D. decrease the target-film distance

030

Periapical radiographs are taken to view:

1. clinical crowns
2. root surfaces
3. supporting structures

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2, and 3

031

When using the paralleling (long-cone) technique, the central ray is aligned so it is:

- A. at right angles to the long axis of the tooth
- B. parallel to the film pack
- C. parallel to the imaginary line dividing the angle between the film pack and the long axis of the tooth
- D. perpendicular to the imaginary line dividing the angle between the film pack and the long axis of the tooth

032

What happens to the time required to develop a radiograph as the temperature of the developing solution changes?

- A. The time decreases with decreasing temperature.
- B. The time increases with increasing temperature.
- C. The time increases with decreasing temperature.
- D. The time is not affected by the temperature of the developer.

033

Why is agitation of the loaded radiographic film rack in the developer recommended?

- A. To stir the processing solutions
- B. To distribute the silver bromide crystals
- C. To remove any air trapped on the film
- D. To speed up processing

034

The purposes of the fixing solution in the film development process are to:

- 1. reharden the emulsion
- 2. remove developer
- 3. remove unexposed silver bromide
- 4. soften the emulsion

- A. 1 and 2
- B. 1 and 3
- C. 2 and 4
- D. 3 and 4

035

Which of the following would result in a very dark radiograph?

- A. Failure to center the beam on the film
- B. Not fixing the film long enough
- C. Underdeveloping during processing
- D. Too long an exposure time

036

Why might a patient's radiographs be duplicated?

- 1. To document diagnoses for insurance claims
- 2. To document fees charged
- 3. To provide accurate data for malpractice litigation
- 4. To prevent unnecessary radiation exposure

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1, 2, and 4 only
- D. 1, 2, 3, and 4

037

An anatomical landmark one uses to identify the mandibular premolar film is the:

- A. Coronoid process
- B. descending ramus
- C. lingual foramen
- D. mental foramen

038

With manual processing, fresh developer must be mixed when the film:

- A. becomes fogged
- B. count reaches 25 sets
- C. gets too dark
- D. gets too light

039

Positioning a patient for dental work on the maxillary arch requires that:

- A. the chair be at a 45 degree angle to the floor
- B. the patient be level with the dentist's knees
- C. the patient's back be at a 35 to 45 degree angle to the floor
- D. the patient's feet be at the same level as the mouth

040

Teeth that normally have bifurcated roots are the:

- 1. maxillary first premolars
- 2. maxillary second premolars
- 3. maxillary molars
- 4. mandibular molars
- 5. mandibular first premolars

- A. 1 and 3 only
- B. 1 and 4 only
- C. 2, 3, and 4 only
- D. 4 and 5 only

041

Which of the following drawings depicts a lingual view of the maxillary left cuspid?



042

Using the Palmer method of charting, what tooth is represented by $\overline{87}$?

- A. Mandibular right first molar
- B. Mandibular right cuspid
- C. Maxillary left first molar
- D. Maxillary left first premolar

043

A vasoconstrictor is added to a local anesthetic solution to:

- A. Decrease the risk of an adverse reaction
- B. Increase the rate of absorption
- C. Prolong the effect of the anesthetic
- D. Shorten the side effects of the anesthetic

044

Which of the following is a commonly used local anesthetic?

- A. Demerol
- B. Novocaine
- C. Seconal
- D. Xylocaine

045

The correct selection of anesthetic for a patient with a history of heart problems and on medication would be one with:

- A. no vasoconstrictor
- B. a vasoconstrictor ratio of 1:20,000
- C. a vasoconstrictor ratio of 1:50,000
- D. a vasoconstrictor ratio of 1:100,000

046

During administration of local anesthetic, why is an aspirating syringe used?

- A. To decrease bleeding in the area
- B. To determine if a blood vessel is perforated
- C. To lengthen the effects of the anesthetic
- D. To prevent bruising the facial surface of the cheek

047

The needle normally used for a maxillary anterior infiltration injection would be:

- A. short
- B. long
- C. either short or long
- D. standard

048

An anesthetic carpule requires the following care or concern before and during use.

1. The carpule must be autoclaved prior to the surgical procedure.
2. Extruded rubber plugs may indicate leakage into the carpule.
3. Several days' supply should be prepared by immersing the carpules in 70% alcohol.
4. Small bubbles are harmless and the carpule may be used.
5. The fixed plug should be wiped with 70% alcohol before placing it into the aspirating syringe.

- A. 1, 2, and 5 only
- B. 2, 4, and 5 only
- C. 1, 2, 3, and 5 only
- D. 1 through 5

049

Topical anesthetics are used because they:

1. also act as an antiseptic
2. block major nerve trunks
3. inhibit the gag reflex on some patients
4. reduce the discomfort of scaling

- A. 1 and 2 only
- B. 3 and 4 only
- C. 1, 2, and 4 only
- D. 2, 3, and 4 only

050

What are reasons for using a rubber dam in operative dentistry?

1. To create a more sanitary field
2. To expedite the performance of the dental team
3. To keep a clear field of vision
4. To protect the patient from debris in the throat
5. To provide visual contrast

- A. 2 and 4 only
- B. 1, 3, and 4 only
- C. 1, 2, 3, and 5 only
- D. 1 through 5

051

Softened impression compound may be used in the rubber dam procedure to:

- A. act as a mouth prop to protect the clamp
- B. close too large a hole
- C. ligate the material opposite the clamp
- D. stabilize the clamp

052

Which of the following patients may be given nitrous oxide?

1. An elderly man who has had a myocardial infarction
2. A person with emphysema
3. A person with a fear of needles
4. A young woman in her first trimester of pregnancy

- A. 1 and 2 only
- B. 1 and 3 only
- C. 3 and 4 only
- D. 1, 2, and 3 only

053

The dental assistant should continuously monitor patients being administered nitrous oxide for which of the following?

1. Ability to communicate
2. Blood pressure
3. Eye movements
4. Relaxation

- A. 1 and 4 only
- B. 2 and 3 only
- C. 2, 3, and 4 only
- D. 1, 2, 3, and 4

054

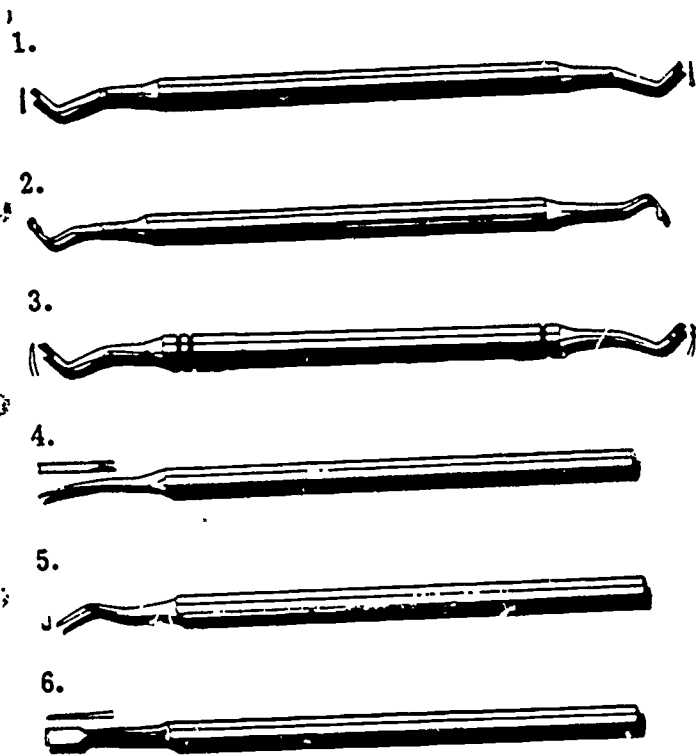
How can diffusion hypoxia be prevented while monitoring a patient under nitrous oxide sedation?

- A. Allow the patient to breathe pure oxygen for five minutes before the end of the treatment.
- B. Allow the patient to remove the nasal mask and then turn the system off.
- C. Slowly increase the percentage of nitrous oxide as the treatment progresses.
- D. Turn the system off before the patient removes the nasal mask.

055
 A disto-occlusal cavity preparation is a class _____, while a preparation which involves the buccal pit of the mandibular molar is a class _____.

- A. I, II
- B. II, I
- C. III, I
- D. III, IV

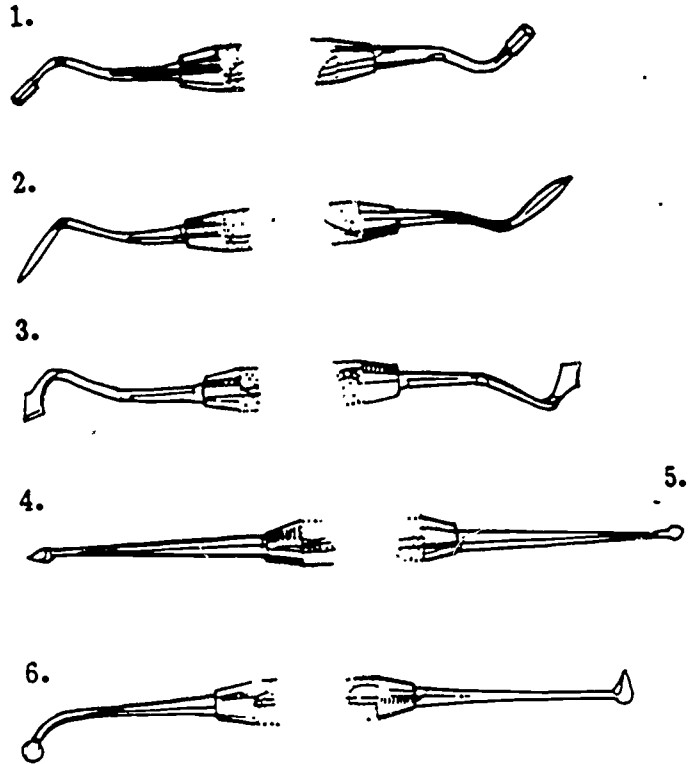
056
 Look at the six instruments pictured below.



Identify the gingival margin trimmer, the binangle chisel, and the hatchet.

- A. 1, 5, 3
- B. 3, 4, 5
- C. 3, 5, 1
- D. 5, 3, 1

057
 Look at the six instruments pictured below.



Identify the condenser, the Frahm carver, and the cleoid.

- A. 1, 3, 5
- B. 1, 4, 3
- C. 2, 3, 4
- D. 6, 2, 1

058
 Chisels are used primarily during a cavity preparation to:

- A. excavate the floor of the preparation
- B. remove carious dentin
- C. remove undermined enamel or dentin
- D. round the walls of the preparation

059

For a composite restoration, which one of the following instruments must be included on the tray?

- A. A condenser with a plain face
- B. A condenser with a serrated face
- C. A plastic carrier
- D. A plastic filling instrument

060

During a composite restoration, the first material the dentist normally places in a cavity preparation is:

- A. the base
- B. the composite
- C. the liner
- D. the varnish

061

A base is used in a cavity restoration to:

- A. decrease setting time
- B. lute the amalgam
- C. protect the pulp
- D. reduce microleakage

062

Which of the following are types of bases?

- 1. Calcium hydroxide
- 2. Copalite
- 3. ZOE
- 4. Zinc phosphate

- A. 1 and 2 only
- B. 1 and 3 only
- C. 3 and 4 only
- D. 1, 3, and 4

063

Match each of the following burs to the number with which the bur is associated.

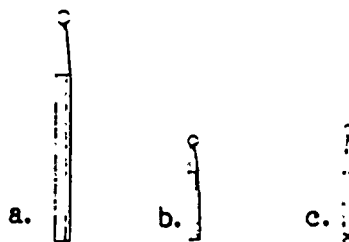
<u>Bur</u>	<u>Number</u>
1. Inverted cone	a. 2
2. Round	b. 39
3. Straight fissure crosscut	c. 170
4. Tapered fissure plain	d. 556
	e. 957

- A. 1-b, 2-c, 3-e, 4-d
- B. 1-a, 2-b, 3-d, 4-c
- C. 1-b, 2-a, 3-c, 4-d
- D. 1-b, 2-a, 3-d, 4-c

064

Match the handpiece listed with the shanks illustrated below.

- 1. Low speed handpiece with contra-angle attachment
- 2. Laboratory handpiece
- 3. Ultraspeed handpiece



- A. 1-a, 2-c, 3-b
- B. 1-b, 2-a, 3-c
- C. 1-c, 2-b, 3-a
- D. 1-c, 2-a, 3-b

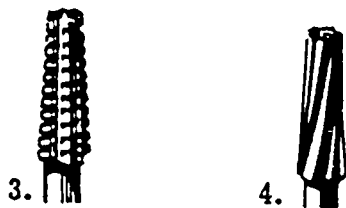
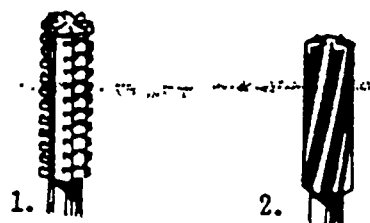
065

The dentist needs a handpiece and bur to remove some very deep decay under an old restoration just removed. The assistant should prepare a:

- A. ultraspeed handpiece with an inverted cone bur
- B. ultraspeed handpiece with a round bur
- C. low speed handpiece with a fissure bur
- D. low speed handpiece with a round bur

066

Look at the following numbered illustrations.



Identify the inverted cone, the tapered fissure crosscut, and the straight fissure plain burs.

- A. 3, 5, 2
- B. 5, 3, 4
- C. 6, 3, 2
- D. 6, 4, 3

067

A major purpose of high speed oral evacuation is to:

- A. decrease aerosols that the patient and dentist are exposed to
- B. decrease the patient's need to rinse and expectorate
- C. prevent aspiration of material by the dentist
- D. prevent contamination of the tooth surfaces

068

When working in the anterior part of the mouth, the high speed evacuator tip is placed:

- A. as far away from the tooth being worked on as possible
- B. in the near-throat area
- C. on the side opposite from the tooth preparation area
- D. on the same side as the tooth preparation area

069

When exchanging explorers with the dentist, the handles should be in what position?

- A. At a 45 degree angle
- B. At a right angle
- C. Parallel
- D. Slightly below the dentist's hand

70 Identify a band that could be used for a class II cavity preparation with a deep proximal box extending well below the gingival line.



071 How should spilled mercury be cleaned up?

- A. Sprinkle talcum powder over the spill and then vacuum it up.
- B. Wipe it up with a dry absorbent towel.
- C. Use a suction device to trap the mercury under water.
- D. Use the oral evacuator to suction the area clean.

072 Jotton forceps are used to pick up the amalgam mix in order to:

- A. absorb any mercury spills
- B. check the consistency of the amalgam
- C. place the amalgam into the cavity
- D. prevent contamination of the amalgam

073 Matrix retainers may be placed on the:

- A. facial side of the tooth only
- B. lingual side of the tooth only
- C. facial or lingual sides of the tooth
- D. occlusal one-third of the tooth

074 The purpose of wedging a band on a Class II cavity preparation is to prevent:

- A. the amalgam from being dislodged
- B. gingival margin overhang
- C. movement of the tooth during condensation
- D. a ditched interproximal margin

075 One reason for placing sealant on a molar with deep pits and fissures is to:

- A. prevent interproximal decay
- B. reduce carious lesions on the occlusal surface
- C. reduce plaque accumulation
- D. retard attrition wear

076 A contraindication for applying pit and fissure sealant on a tooth is if:

- A. the tooth is deciduous
- B. the tooth is newly erupted
- C. the tooth is a third molar
- D. the tooth has active decay at the base of the pit

077

Why should the assistant use short interrupted pulses of air when drying a tooth preparation?

- A. To prevent getting in the dentist's way
- B. To prevent pulpal damage
- C. To prevent spreading of aerosols
- D. To prevent tiring of fingers

078

Select the sequence of bases which would be used in a very deep cavity preparation.

- A. calcium hydroxide, zinc oxide-eugenol, zinc phosphate
- B. calcium hydroxide, zinc phosphate, zinc oxide-eugenol
- C. varnish, calcium hydroxide, zinc phosphate
- D. zinc phosphate, zinc oxide-eugenol

079

The base that is used to promote reparative dentin is:

- A. calcium hydroxide
- B. silicate
- C. zinc oxide-eugenol
- D. zinc phosphate

080

The consistency of zinc phosphate when used as a base in a deep preparation should be:

- A. fluid-like, with a shiny appearance
- B. tacky, sticking easily to the spatula
- C. thick, with a dull appearance
- D. thin, flowing easily

081

Which of the following should be true for a properly-fitting temporary crown?

- 1. The crown fits the mesial-distal spaces.
- 2. The crown margin is slightly above the gingival preparation margin.
- 3. The facial contour is in the same plane as the adjacent teeth.

- A. 1 only
- B. 2 only
- C. 1 and 3 only
- D. 1, 2, and 3

082

A dental assistant may legally remove excess cement from restorations and appliances using:

- A. any instrument as directed by the dentist
- B. hand instruments only
- C. rotary instruments only
- D. either hand or rotary instruments at any time

083

If the occlusion is not checked on a large Class II restoration, what may occur?

- A. Abrasion of the tooth surface
- B. Ditched margins from fracturing
- C. High spots on the amalgam restoration
- D. Low spots with incorrect anatomy

084

The recommended life of a ZOE restoration is about:

- A. One month
- B. Three months
- C. One year
- D. Three years

085

If a temporary restoration cannot be dislodged with hand instruments, the assistant should:

- A. reschedule the patient
- B. tell the dentist
- C. use a bur
- D. use a tooth separator

086

Place the following steps into the proper order to describe polishing an amalgam restoration.

- 1. Use finishing burs and greenstones.
- 2. Use tin oxide.
- 3. Use abrasive pumice.
- 4. Use cuttle disks for proximal surfaces.

- A. 1, 2, 3, 4
- B. 1, 3, 4, 2
- C. 1, 3, 2, 4
- D. 1, 4, 3, 2

087

What is the primary reason for polishing amalgam restorations?

- A. To improve luster
- B. To increase esthetics
- C. To increase durability
- D. To prevent fracture

088

When an explorer is run across an amalgam restoration that has been properly polished:

- A. there should be a smooth transition at the margins
- B. there should be a slight catch at the margins
- C. there should be a slight depression at the margins
- D. there should be a slight bump at the margins

089

A patient has just had an occlusal amalgam done on tooth #30. What post-operative instructions should be given?

- 1. Do not eat or chew any thing hard or sticky for 24 hours.
- 2. Do not grind the teeth if the filling feels high.
- 3. Do not floss the area for 24 hours.

- A. 1 only
- B. 3 only
- C. 1 and 2 only
- D. 1, 2, and 3

090

Which of the following are contraindications for performing an oral prophylaxis?

- 1. Asthma
- 2. Heart pacemaker (unpremedicated)
- 3. Herpetic lesions
- 4. Periodontitis
- 5. Same-day apicoectomy

- A. 1, 2, and 4 only
- B. 2, 3, and 5 only
- C. 2, 3, 4, and 5 only
- D. 1 through 5

091

Identify purposes for performing an oral prophylaxis

- 1. To prepare the teeth for application of fluoride
- 2. To help prevent endodontic problems
- 3. To remove irritants to the gingiva
- 4. To smooth and polish the tooth surfaces

- A. 1 and 4 only
- B. 2 and 3 only
- C. 1, 3, and 4 only
- D. 1, 2, 3, and 4

092

What must the dental assistant know before giving a fluoride treatment to a patient?

1. The age and sex of the patient
2. If the patient has allergies to flavorings
3. If the patient uses fluoride toothpaste
4. If fluoride has ever made the patient sick

- A. 1 and 3 only
- B. 2 and 4 only
- C. 1, 3, and 4 only
- D. 1, 2, 3, and 4

093

Identify the major purposes of fluoride treatment.

1. To prevent tooth loss
2. To prevent periodontal disease
3. To reduce dental caries
4. To whiten teeth

- A. 1 and 3 only
- B. 2 and 4 only
- C. 1, 3, and 4 only
- D. 1, 2, 3, and 4

094

Identify the common method for applying 10% stannous fluoride solution

- A. Brushing with a toothbrush
- B. Isolating and using a cotton swab
- C. Swishing in the patient's mouth
- D. Using a disposable tray

095

When giving a patient an acidulated phosphate fluoride treatment in gel form, for how long should the gel contact the teeth?

- A. No more than 30 seconds
- B. One minute
- C. Two minutes
- D. Four minutes

096

After giving a fluoride treatment, what post-operative instructions should the dental assistant give the patient?

- A. Eat only soft foods for 1 hour.
- B. Do not chew anything for one-half hour
- C. Do not eat or drink for thirty minutes.
- D. Do not drink anything for three hours.

097

When flossing a patient's teeth, it is important to:

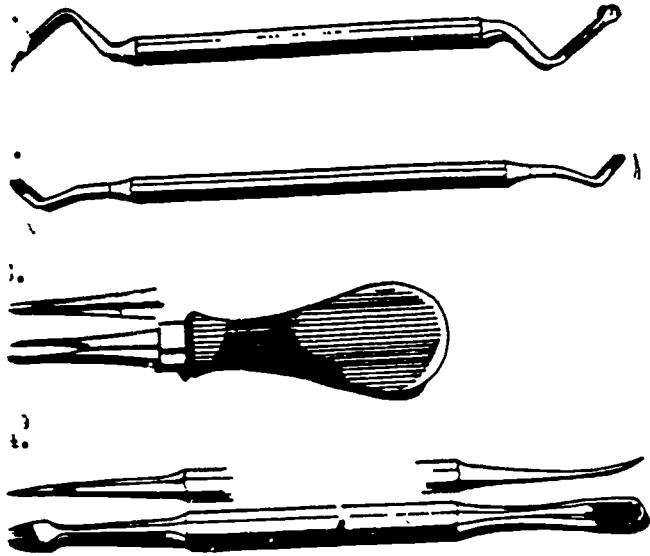
- A. slide the floss subgingivally until resistance is met
- B. stabilize the floss firmly using the thumbs
- C. use a snapping motion when inserting the floss between the teeth
- D. forcefully saw to cleanse the teeth subgingivally

098

A sterile forceps should not be allowed to contact the bracket table because:

- A. microorganisms are transferred by air currents
- B. microorganisms may be transferred from one surface to another
- C. microorganisms move rapidly along a dry surface
- D. microorganisms multiply quickly under the unit light

39 Look at the illustrations below.



Identify the following oral surgery instruments:

- a. periosteal elevator
- b. surgical curette

- A. a-1, b-4
- B. a-2, b-3
- C. a-3, b-2
- D. a-4, b-1

100

During oral surgery, the curette is used to:

- A. loosen the periosteum
- B. perform osteoplasty
- C. remove excess diseased tissue
- D. surgically cut bone

101

Arrange the following five steps into the proper order to show the procedure for extracting an abscessed tooth.

- 1. Curette the area.
- 2. Elevate the tooth.
- 3. Loosen the surrounding periosteum.
- 4. Perform osteoplasty.
- 5. Remove the tooth with forceps.

- A. 1, 3, 2, 4, 5
- B. 2, 3, 1, 4, 5
- C. 3, 2, 1, 5, 4
- D. 3, 2, 5, 1, 4

102

One advantage for using gut rather than silk sutures during oral surgery is that:

- A. healing is enhanced
- B. infection is less likely
- C. they can be used externally
- D. they won't have to be removed

103

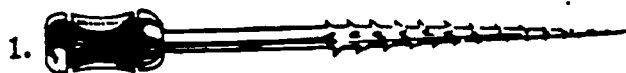
How should interrupted sutures be removed?

- A. Cut the knots and loops and pull through the tissue.
- B. Cut one side near the knot and pull the knotted end.
- C. Cut both sides of the knot and remove the pieces gently.
- D. Cut near the knot and then pull the free end.

104
What type of instrument transfer would be used with surgical forceps?

- A. Palm grasp
- B. Palm thumb grasp
- C. Pick-up and delivery
- D. Two-handed transfer

105
Look at the numbered illustrations below.



Identify the reamer and the Hedstrom file.

- A. 1, 2
- B. 2, 3
- C. 3, 2
- D. 3, 1

106
Which instruments can be used for cleaning and enlarging root canals?

- 1. Barbed broaches
- 2. Files
- 3. Reamers

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2, and 3

107
Sodium hypochlorite or hydrogen peroxide is commonly used in endodontic therapy to:

- A. medicate the canals
- B. irrigate the canals
- C. remove gingival tissue
- D. disinfect the paper points

108
The distance from the instrument stop to the point of the instrument in the illustration below corresponds to the:



- A. length of absorbent paper required
- B. length of the file required
- C. size of the root of the tooth
- D. length of the tooth

109

In endodontic therapy, a preoperative radiograph is taken in order to:

- A. determine the vitality of the pulp
- B. identify the restorative material to be used
- C. measure the length of the tooth
- D. estimate the mobility of the tooth

110

How many measurements for periodontal probing are recorded for a cuspid?

- A. One
- B. Two
- C. Four
- D. Six

111

During a scaling and curettage, a scaler may be used to:

- A. locate gingival pockets
- B. place a periodontal pack
- C. remove calculus
- D. roughen root surfaces

112

Before a periodontal incision is made, the dentist will:

- A. mark any gingival pockets
- B. place a periodontal dressing
- C. resection the gingiva
- D. suture as needed

113

After an extraction, the patient should be told that prolonged bleeding can be controlled by:

- A. applying indirect pressure on the surgical site with a finger
- B. biting on sterile gauze placed on the surgical site
- C. placing a gauze pad on the surgical site
- D. placing an ice pack on the surgical site

114

When mixing alginate impression material, heating the water results in a:

- A. faster setting time
- B. slower setting time
- C. softer impression
- D. weaker material

115

The reason a can of alginate is shaken prior to use is to:

- A. activate the potassium alginate
- B. insure accurate measurement when mixing
- C. mix the ingredients with the fillers
- D. settle the powder in the bottom of the can

116

For which of the following would alginate be the preferred impression material?

- A. A study model impression
- B. A maxillary denture impression
- C. A single crown impression
- D. A three-unit bridge

117

Contraindications for taking a set of alginate impressions on a patient include:

1. necrotizing ulcerative gingivitis
2. periodontal abscesses
3. removable partials
4. slight mobility of teeth

- A. 1 only
- B. 1 and 2 only
- C. 1, 2, and 3 only
- D. 1, 2, and 4 only

118

What is the purpose of wetting a filled alginate impression tray just prior to inserting it into the patient's mouth?

- A. To increase expansion
- B. To prevent imbibition
- C. To reduce surface tension
- D. To reduce syneresis

119

Rubber-base impression materials should be mixed:

- A. in the impression tray
- B. in a mixing bowl
- C. on a glass slab
- D. on a paper pad

120

What is the reason for applying an adhesive inside a tray for a rubber base impression?

- A. So the tray can be cleaned easier
- B. So the material will not adhere to the tray
- C. So the material is retained in the tray upon removal
- D. So the material will not set up too quickly

121

When making a custom tray, what is the purpose of painting a thin layer of foil substitute on the exposed plaster cast?

- A. To speed up the curing of the resin material
- B. To ensure separation of the tray
- C. To allow for an even thickness of impression material
- D. To aid in trimming excess material from the tray

122

In fabricating a custom tray, a handle is prepared and attached:

- A. before the baseplate wax is trimmed
- B. before the tray is separated from the cast
- C. after the tray is trimmed
- D. after the preliminary cast is prepared

123

Study models made from preliminary impressions are used:

1. as references in treatment planning
2. to construct custom trays
3. to construct permanent crowns
4. to demonstrate the alignment and shape of the teeth
5. to select restorative materials

- A. 1 and 5 only
- B. 1, 2, and 4 only
- C. 2, 3, 4, and 5 only
- D. 1 through 5

124
With what consistency should the second mix for a base on which to invert an impression be mixed?

- A. About the same consistency as the impression
- B. Slightly thinner to allow the impression to settle into the base
- C. Thicker to be able to support the impression
- D. To the manufacturer's suggestions for taking the original impression

125
When pouring an alginate impression of the maxillary arch, one should begin by placing plaster on the:

- A. labial surfaces
- B. anterior portion
- C. posterior palatal portion
- D. buccal portions

126
The best way to ensure a flat plane on a maxillary base before trimming a stone model is to:

- A. inscribe a line parallel to the plane of the occlusion
- B. measure each side and mark the correct height with a ruler
- C. draw the lateral borders to intersect with the anterior line angles
- D. rough trim the base and then measure each side

127

In order to prevent air bubbles when pouring up an alginate impression, the assistant should:

- A. decrease the spatulation time
- B. increase the water-to-powder ratio
- C. sift a thin layer of powder over the impression
- D. use a mechanical vibrator and small increments of stone

128

Which kinds of laboratory instruments require the use of a disinfectant solution?

- 1. Those that will be placed in the autoclave.
- 2. Those that are used in the handpiece.
- 3. Those that are used on appliances used in a patient's mouth.

- A. 1 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2, and 3

129

Which of the following are classified as non-cutting hand instruments?

- 1. Carvers
- 2. Excavators
- 3. Condensers
- 4. Margin trimmers

- A. 1 only
- B. 1 and 3 only
- C. 2 and 4 only
- D. 1, 2, and 4 only

130

Which of the following are autoclavable?

1. Cotton roll holders
2. Explorers
3. Periodontal probes
4. Rubber cups
5. Plastic (or disposable) saliva ejectors
6. Film holders

- A. 1, 2, and 3 only
- B. 1, 3, and 5 only
- C. 2, 5, and 6 only
- D. 3, 4, and 5 only

131

When cleaning dental operatory instruments, the assistant should wear rubber gloves in order to:

1. keep hands soft
2. prevent cross-contamination
3. prevent damage to instruments
4. prevent injury
5. save time

- A. 1 and 2 only
- B. 2 and 4 only
- C. 3, 4, and 5 only
- D. 1, 3, and 5 only

132

For which of the following should the ultrasonic cleaner be used?

- A. Cotton rolls
- B. Diamond instruments
- C. Fluoride trays
- D. Saliva ejectors

133

Following cleaning in an ultrasonic cleaner, nonautoclavable dental instruments should be:

- A. dried thoroughly and put away
- B. placed in a disinfectant solution
- C. stored in the appropriate locations
- D. wrapped in a sterile pack

134

Before dry sterilizing clean operatory instruments, what should the assistant do?

1. Package the instruments in paper bags.
2. Place the instruments loosely in covered metal trays.
3. Wrap the instruments in foil.

- A. 1 only
- B. 2 only
- C. either 2 or 3
- D. either 1, 2, or 3

135

How much time is required to attain sterilization under optimum pressure and temperature in an autoclave?

- A. 10 minutes
- B. 20 minutes
- C. 30 minutes
- D. 40 minutes

136

Instruments used on a patient with a history of hepatitis should be:

- A. autoclaved a second time before use
- B. cultured to make sure no disease organisms are present
- C. discarded
- D. autoclaved an extra ten minutes

137

The major advantage of dry heat sterilization is that dry heat:

- A. speeds up the process
- B. eliminates corrosion
- C. kills microorganism spores
- D. reduces the temperature needed

138

The recommended temperature and time for operating the dry heat sterilizer is:

- A. 100 degrees C for 20 minutes
- B. 121 degrees C for 35 minutes
- C. 130 degrees C for 1 hour
- D. 160 degrees C for 1 hour

139

One advantage of using a gaseous (or ethylene oxide) sterilizer is that:

- A. the vapor will sterilize nonwetable materials
- B. the unit takes up less space in the operatory than an autoclave
- C. the unit has a larger capacity than an autoclave
- D. instruments don't have to be cleaned before being sterilized

140

The glass bead sterilizer is used mainly for sterilizing:

- A. glass beads
- B. oral surgery instruments
- C. periodontal instruments
- D. endodontic instruments

141

Which of the following operatory equipment would be disinfected last?

- A. Air and water syringe
- B. Bracket table
- C. Cuspidor
- D. Paper cup holder

142

How often should the air and water syringe be disinfected?

- A. After every patient
- B. Daily
- C. Weekly
- D. Monthly

143

Look at the data below.

<u>Patient</u>	<u>Blood Pressure</u>	<u>Pulse Rate</u>	<u>Respiration Rate</u>
1	80/50	50	14
2	120/80	64	16
3	170/100	80	18

Which of the patients has normal vital signs?

- A. 1 only
- B. 2 only
- C. 1 and 2 only
- D. 2 and 3 only

144-146

Use the following information to answer questions 144-146.

Your dentist has just given a mandibular block injection to Mr. Day. The patient suddenly grabs his throat, saying that he is having trouble breathing. A rash spreads across his face and he breaks out into a sweat. He then collapses and becomes unconscious.

144

The diagnosis is most likely:

- A. anaphylactic shock
- B. angina attack
- C. myocardial infarction
- D. vasovagal syncope

145

Select the sequence of steps that should follow in dealing with Mr. Day's crisis.

1. Monitor vital signs.
2. Provide oxygen.
3. Recline him in a head-down position.
4. Administer ammonia.
5. Administer epinephrine 1:1000 IM.
6. Administer nitroglycerin.
7. Administer a narcotic.
8. Summon medical help.

- A. 1, 2, and 4
- B. 1, 2, 5, and 8
- C. 1, 2, and 6
- D. 1, 2, 6, 7, and 8

146

While his vital signs are being monitored, Mr. Day suddenly goes into respiratory arrest. The assistant immediately checks his pulse and cannot detect a heartbeat. What should be done?

- A. Begin cardiopulmonary resuscitation.
- B. Phone for medical help.
- C. Give Mr. Day wyamine.
- D. Administer epinephrine.

147-148

Use the following information to answer questions 147-148.

Ms. Strawgate has a history of frequent angina attacks in the dental office. When she arrives for her 10:00 appointment, she complains of having had indigestion upon arising that morning. She took soda and water to relieve the gas and nausea caused by the indigestion several hours ago. The assistant observes that she is sweating and looking rather cyanotic.

147

What is happening to this patient?

- A. She is having an angina attack.
- B. She is having an appendicitis attack.
- C. She is having a cerebro-vascular accident.
- D. She is having a myocardial infarction.

148

What should be done to care for Ms. Strawgate?

1. Make her comfortable and take her vital signs.
2. Place nitroglycerin tablets under her tongue.
3. Give her an analgesic.
4. Call an ambulance.
5. Begin CPR.

- A. 1 and 2 only
- B. 1 and 2, then 3, then 4
- C. 1 and 4 only
- D. 1 and 4, then 5

149

A diabetic patient comes to the dental office just before lunch. He informs the assistant that he has taken his required dosage of insulin one hour earlier. During the dental treatment, he begins to complain of weakness and nausea. He is pale and has a pulse of 110. The most likely diagnosis is:

- A. diabetic coma
- B. insulin shock
- C. low blood sugar
- D. vasovagal syncope

150

Where should pulse rate be measured if it cannot be found at the wrist?

- A. At the radial artery
- B. At the femoral artery
- C. At the carotid artery
- D. At the brachial artery

151

When taking blood pressure, the manometer is read for systolic pressure:

- A. just before the first sound is heard
- B. when the first sound is heard
- C. when a definite change in sound is heard
- D. when no sound is heard

152

What must first be established before administering CPR rescue breathing?

- A. That the victim's airway is open
- B. That the victim has no pulse
- C. That the victim's pupils are dilated
- D. The reason for the victim's collapse

153

In order to open the airway of an unconscious patient, what must be done?

1. Administer abdominal thrust.
2. Blow forcefully into the patient's mouth.
3. If necessary, get the patient out of the dental chair.
4. Roll the patient onto his or her back.
5. Tilt the patient's head back with chin up.

Arrange the necessary steps in the proper order.

- A. 2, 1, 3
- B. 3, 4, 5
- C. 5, 1, 2
- D. 3, 4, 5, 2

APPENDIX G

Dental Assistant Performance Test

Administration Manual

DENTAL ASSISTANT PERFORMANCE TEST

Administration Manual



State of Florida
Ralph D. Turlington, Commissioner of Education
Tallahassee, Florida
Affirmative action/equal opportunity employer

Division of Vocational, Adult, and Community Education

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FLORIDA VOCATIONAL ACHIEVEMENT TEST
DENTAL ASSISTANT
PERFORMANCE EVALUATION

Administering the Exam

Your job is to administer the test. This includes arranging the participation of qualified evaluators, scheduling students, setting up the stations at which the tasks will be performed, and making sure each station has the required materials, equipment, and supplies. The evaluators will evaluate student performance and record his or her ratings on individual student Performance Evaluation Guidesheets.

You should meet with the evaluators before the day of the test. It is important to become familiar with each task in terms of (a) the process steps and product criteria and (b) the required materials, equipment, and supplies.

This guide contains all the information required to become familiar with each task. In addition, Appendix A is a copy of the Evaluator's Guide, which includes evaluator's instructions and copies of the Performance Evaluation Guidesheets. Appendix B is a copy of the Student Performance Test.

The following six sections correspond to the six tasks. Each section contains your instructions and a list of the required materials, equipment, and supplies for the task.

TASK 1: Charting Oral Conditions from Dictation

Instructions

You must decide whether you will set up one or more charting test stations or whether you will administer the test to all of your students at once. In any case, plan to have at least a two-hour lapse between students' preparing the charts and their answering the 14 questions.

Students will chart the oral conditions while listening to the cassette tape (see Appendix A for a copy of the script). The evaluator will then collect the charts. At least two hours later, the evaluator will return the charts and distribute their Performance Evaluation Guidesheets for Task 1 to the students. Students will then answer the 14 charting questions by circling one of the choices under each question. After the student finishes answering the questions the evaluator will collect the Performance Evaluation Guidesheets and rate the student's performance by checking the "YES" or "NO" column. Note that this is the only instance in which students actually handle a Performance Evaluation Guidesheet.

Materials, equipment, and supplies

Cassette tape of the oral conditions script

Cassette tape player, with headphones if it is to be used by individual students

#2 lead pencil for each student

2 red pencils for each student

2 blue pencils for each student

blank dental charts, one for each student

Task 1 Performance Evaluation Guidesheet, 1 per student

TASK 2: Assisting with Amalgam Restoration

Instructions

Provide a fully operational dental operatory with a chair-mounted manikin having a Class II cavity preparation on tooth #19. Change the tooth after each procedure. Have sufficient rubber dam, anesthesia, and amalgam supplies available.

Materials, equipment, and supplies

Task 2 Performance Evaluation Guidesheets, 1 per student
dental operatory, familiar to student
dental manikin mounted on dental chair, with a Class II cavity preparation on tooth #19
aspirating syringes
carpules
needles, long and short
6" swabs
2 x 2 gauze
topical anesthetic
patient napkins and neck chain
instrument trays
instruments for basic tray setup
cavity preparation instruments
cavity restoration instruments
necessary supplies to do amalgam restoration
necessary materials to place a rubber dam

TASK 3: Preparing Composite, Cement, Dressing, and Temporary Restoration

Instructions

1. Provide an area in an operatory or lab with a mounted manikin suitable for placing a periodontal dressing and a temporary restoration.
2. Have a supply of prepared maxillary right (#3) and maxillary left (#14) molars for the temporary restoration. Change these after the two teeth are filled.
3. Provide a selection of cements, glass slabs, pads, and spatulas for the student to select from. Also provide a work area or counter to mix on and water for clean-up.
4. Prepare periodontal dressing procedure trays and have them ready at the workstation for the appropriate number of students.

Materials, equipment, and supplies

Task 3 Performance Evaluation Guidesheet, 1 per student

mounted manikin

two-part composite resin restorative kit

zinc phosphate powder and liquid

glass slab and cement spatula

timer

periodontal liquid and powder or paste or mix dressing

flexible metal spatula

pretreated paper mixing pads

gauze sponges

alcohol

petroleum jelly

finger cots or rubber gloves

plastic instrument

carvers

zinc oxide powder

eugenol liquid

IRM material

articulation paper

retainer and matrix bands

TASK 4: Mixing Alginate, Taking and Pouring Impressions, and Applying Sealant

Instructions

1. Provide an area in an operatory or the lab with a mounted manikin suitable for taking alginate impressions. Also make available an assortment of impression tray materials and all necessary supplies.
2. Make available a lab area for pouring and trimming models. This could be the same area specified above.
3. Each student is to provide two teeth (preferably a molar and a bicuspid) mounted in plaster, upon which to apply sealants. Inform the students enough time in advance so that the mounted teeth can be prepared.
4. Have sufficient material available for the sealants.

Materials, equipment, and supplies

Task 4 Performance Evaluation Guidesheet, 1 per student

Alginate

maxillary and mandibular impression trays, various sizes
alginate impression material and necessary measuring devices
rubber bowls
spatulas
paper cups
wax bite material
utility wax
mounted manikin

Pouring and trimming

plaster or stone
model trimmer
scales
water measure
paper cups
inscribing pencils
lab knives
base formers
mm-inch ruler

Sealants

explorer
sealant kit (applicator and straw, catalyst, base, etch, plastic
mixing instruments, dispensing tray)
molar and bicuspid mounted in plaster (supplied by the student)

TASK 5: Exposing, Mounting, and Labeling a Half-Mouth Radiograph Series

Instructions:

1. Set up appropriate armamentarium trays at the workstation in the clinic containing varieties of film, film-holding devices, envelopes, pencils, cotton rolls, and film mounts.
2. Provide students with a list of materials to bring for examination.
3. Set up a chair-mounted DXXTR manikin in each radiography operatory to be used.
4. Post instructions for the machine settings students are to use.
5. If possible, post schedule of students and times allotted for each operatory. Assign numbers to students.
6. Assign two people to processing duty (senior students or others not involved with testing). Processors will develop film in numerical order, using whatever method is available.
7. Assign the patient's and dentist's name to each station used.

Materials, equipment, and supplies

Task 5 Performance Evaluation Guidesheet, 1 per student
appropriate paralleling devices
envelopes
film mounts
cotton rolls
pencils
film
chair-mounted manikin (DXXTR)
necessary processing equipment

TASK 6: Polishing Clinical Crowns

Instructions

1. Designate an operator for this task. Students should polish clinical crowns while waiting for their radiographs from Task 5 to be developed.
2. Prepare tray set-up for the evaluator to use for checking the students' work.
3. Identify the "patient" in advance and assign "patients" to students parallel to their work in Task 5.

Materials, equipment, and supplies

Task 6 Performance Evaluation Guidesheet, 1 per student

tray

polishing agent

unwaxed dental floss

rubber cup

bristle brush

mirror

handpiece

explorer

prophylaxis angle

bracket table cover

patient bib

napkin chain

saliva ejector

disclosing solution

cotton tip applicators (2)

dappen dishes (2)

paper cups

Appendix A: Evaluator's Materials

General Instructions for the Evaluator

1. Your job, as the evaluator, is to evaluate the performance of the students. The instructor's role is to administer the test. In so doing, the instructor will organize the test administration and will provide all the materials, equipment, and supplies required at each testing station.
2. The maximum time for this test is four hours. In addition, each task of the six tasks has a time limit, from 10 to 70 minutes, printed at the top of the task.
3. If the student has not completed the task in the allotted time, the student should be told to clean up the testing area and return to the staging area for assignment to another task. Steps the student did not complete should be marked "NO" and a comment to that effect written.
4. Students completing the task in the allotted time should return the testing area to its pretest condition and then return to the staging area for assignment to another task.
5. The evaluator should make all ratings on individual student "Performance Evaluation Guidesheets" as the work progresses. Rating information should not be shared with the student. Upon completion of the task, each student's guidesheets should be returned to the student's folder.
6. A complete set of guidesheets is enclosed in this guide. You should review the task(s) you will be rating. There are also separate sets of guidesheets, one for each station, that are for recording the performance of the students.

Note: The next six sections in this guide correspond to the six tasks. Included in each section are your instructions and a copy of each task's Performance Evaluation Guidesheet.

TASK 1: Charting Oral Conditions from Dictation

Evaluator's Instructions

The instructor decides whether Task 1 will be conducted individually or as a group. He or she has a cassette tape deck available, with headphones if to be used by individual students.

The following items should also be available:

- the cassette tape of the dictation script
- blank dental charts, 1 per student
- sets of Evaluation Guidesheets, 1 set per student
- the required type and number of pencils

Note: The instructor has arranged that the student will chart oral conditions first; then, at least 2 hours later, answer the charting questions. So after charting is complete, collect the charts for redistribution. Students will answer the charting questions by circling their answers on their Evaluation Guidesheets for Task 1. This is the only instance when students actually handle an Evaluation Guidesheet. When the students finish answering the charting questions, collect the Evaluation Guidesheets for Task 1 and the charts.

What follows is the script from the cassette tape. Following that is a copy of the Evaluation Guidesheet for Task 1 and an answer key for the charting questions.

Script for Task 1

Use the dental chart you have been given to chart the following conditions. Each condition will be repeated once. You are not to write or use abbreviations on your chart--use symbols only. You will be given two minutes after the end of this tape to check your work. You will use your chart to answer a series of questions later.

If you have any questions, stop the tape and ask the evaluator now. Then get your pencils ready.

(Pause for 10 seconds.)

Tooth

- 1 The maxillary right third molar is impacted. (Repeat.)
- 2 The maxillary right second molar has buccal Class V caries. (Repeat.)
- 3 The maxillary right first molar has mesio-occlusal amalgam restoration. (Repeat.)
- 4 The maxillary right first molar has a mesial faulty margin. (Repeat.)
- 5 The maxillary right first premolar is intruded. (Repeat.)
- 6 The maxillary right cuspid has a periapical abcess. (Repeat.)
- 7 The maxillary right lateral incisor has a distal Class III composite restoration. (Repeat.)
- 8 The maxillary right central incisor has a mesial Class IV composite restoration. (Repeat.)
- 9 The maxillary left central incisor is missing. (Repeat.)
- 10 The maxillary left lateral incisor has a mesial-incisal fracture. There are open contacts between the maxillary left lateral incisor (#10) and the maxillary left cuspid (#11). (Repeat.)

- 11 The maxillary left cuspid has a labial Class V composite restoration. (Repeat.)
- 12 The maxillary left first premolar is missing. (Repeat.)
- 13 The maxillary second premolar has a root canal, an occlusal amalgam restoration and an apicoectomy. (Repeat.)
- 14 The maxillary left first molar is missing. (Repeat.)
- 15 The maxillary left second molar has disto-occlusal caries. (Repeat.)
- 16 The maxillary left third molar is to be extracted. (Repeat.)
- (9,12,
14) There is a maxillary removable partial replacing the missing teeth. (Repeat.)
- 17 The mandibular left third molar is drifting to the mesial. (Repeat.)
- 18 The mandibular left second molar is missing. (Repeat.)
- 19 The mandibular left first molar has a full gold crown. (Repeat.)
- 20 The mandibular left second premolar is rotated to the distal. (Repeat.)
- 21 The mandibular left first premolar is rotated to the mesial. (Repeat.)
- 20-21 The mandibular left first and second premolars have poor contacts on the mesial and distal surfaces of both teeth. (Repeat.)
- 23-26 The mandibular left and right centrals and laterals are missing. (Repeat.)
- 24 The mandibular left central has a retained root tip. (Repeat.)
- 22 and
27 A six-unit full crown bridge, porcelain fused to gold, replaces the missing centrals and laterals. The mandibular left cuspid and mandibular right cuspid are abutments for the bridge. (Repeat.)
- 28 The mandibular right first premolar is extruded and has mesial and distal marginal ridge discrepancy. (Repeat.)
- 29 The mandibular right second premolar has a three-quarter gold crown on the lingual. (Repeat.)
- 30 The mandibular right first molar has a mesio-occlusal-distal-facial-lingual amalgam restoration. (Repeat.)
- 31 The mandibular right second molar has a disto-occlusal-lingual amalgam replacing the distolingual cusp. (Repeat.)

- 32 The mandibular right third molar has mesio-occlusal-distal-facial caries involving the mesial buccal cusp and it is to be extracted. (Repeat.)

Chart the following periodontal conditions:

- 30 The mandibular right first molar has Class II mobility. (Repeat.)
- 6-8 The maxillary right cuspid, lateral and central, has facial recession of 3mm. (Repeat.)
- 3 The maxillary right first molar has Class III mobility and has the following periodontal pocketing: distal-facial, 5mm; facial, 4mm; mesio-facial, 6mm. (Repeat.)

You will now be given 2 minutes to check your work.

(Pause for 2 minutes.)

Turn in your chart to the evaluator now and rewind the tape.

FLORIDA VOCATIONAL ACHIEVEMENT TEST

Student's Name _____ Date _____

DENTAL ASSISTANT

PERFORMANCE EVALUATION GUIDESHEET

TASK 1: CHARTING ORAL CONDITIONS FROM DICTATION

CHARTING QUESTIONS		Item No.	Correct? () <u>YES</u> <u>NO</u>
<p><u>Directions:</u> Write your name and the date in the proper places above. Refer to the chart you made to answer the following questions. You will have 10 minutes. CIRCLE THE LETTER OF EACH CHOICE. DO NOT MARK ON YOUR CHART.</p>			
001. How many amalgam restorations does the patient have?		001	_____
A. 2			
B. 4			
C. 7			
D. 10			
002. How many teeth have carious lesions?		002	_____
A. 3			
B. 5			
C. 6			
D. 8			
003. What is the total number of missing teeth?		003	_____
A. 3			
B. 4			
C. 8			
D. 9			
004. Why is the mandibular left third molar drifting?		004	_____
A. The opposing tooth occludes cusp to cusp.			
B. The opposing tooth does not occlude with it.			
C. The tooth mesial to it is missing.			
D. The tooth mesial to it is rotating to distal.			

TASK 1: CHARTING ORAL CONDITIONS FROM DICTATION (CONTINUED)

CHARTING QUESTIONS	Item No.	Correct? ()	
		YES	NO
005. Why are there poor contacts between the left mandibular first and second premolars? A. marginal ridge discrepancy B. faulty margin C. drifting D. rotation	005	_____	_____
006. The removable partial replaces which teeth? 1. Maxillary left central 2. Maxillary right first premolar 3. Maxillary left first premolar 4. Mandibular centrals and laterals 5. Mandibular left first molar 6. Maxillary left first molar A. 1, 2, and 3 only B. 1, 3, and 6 only C. 3 and 5 only D. 4 only	006	_____	_____
007. What type of restoration exists on the mandibular left first molar? A. A mesial-occlusal-distal amalgam B. A three-quarter gold crown C. A full gold crown D. A porcelain crown	007	_____	_____
008. What is the condition of the mandibular left central incisor? A. rotated with poor contacts B. missing with a retained root tip C. extruded (supererupted) D. missing, replaced on a partial	008	_____	_____
009. What is the number of units of bridgework? A. 1 B. 3 C. 6 D. 10	009	_____	_____

TASK 1: CHARTING ORAL CONDITIONS FROM DICTATION (CONTINUED)

CHARTING QUESTIONS	Item No.	Correct? ()	
		YES	NO
010. Which tooth has a faulty margin and of what surface? A. The maxillary right first molar--mesial surface B. The maxillary right first molar--distal surface C. The maxillary left lateral incisor--mesial surface D. The maxillary left cuspid--labial surface	010	_____	_____
011. What tooth has Class III mobility? A. Mandibular right first molar B. Maxillary right first premolar C. Maxillary right first molar D. Maxillary left first molar	011	_____	_____
012. What is the condition of the maxillary left lateral incisor? A. Extruded (supererupted) B. Fractured C. Has caries D. Intruded (submerged)	012	_____	_____
013. How many composite restorations are there on the maxillary arch? A. 1 B. 2 C. 3 D. 5	013	_____	_____
014. Why is the mandibular right third molar marked for extraction? 1. It is drifting to the mesial. 2. It has large caries. 3. It has extruded (supererupted). 4. The opposing tooth is impacted. 5. It has a periapical abscess. A. 1 and 2 only B. 2 and 3 only C. 2 and 4 only D. 5 only	014	_____	_____

When you have completed answering these questions, return this form and your chart to the evaluator.

TASK 1: CHARTING ORAL CONDITIONS FROM DICTATION (CONTINUED)

CHARTING QUESTIONS	Item No.	Done? ()	
		YES	NO
015. The dental chart was recorded using appropriate symbols, with no abbreviations or writing.	015	_____	_____
016. All conditions were correctly charted.	016	_____	_____

Evaluator's Comments:

Signature

Date

Answers to Charting Questions in Task 1

1. B
2. A
3. C
4. C
5. D
6. B
7. C
8. B
9. C
10. A
11. C
12. B
13. C
14. C

TASK 2: Assisting with Amalgam Restoration

Evaluator's Instructions

1. When the student is ready to begin, go with the student to the designated operatory and observe the preparation process.
2. When the student has prepared for anesthesia, assume the operator's position and simulate administering topical and local anesthesia to the "patient."
3. Step away from the chair to allow the student to assume the operator's position, if desired, for placing the rubber dam. Observe all steps in the preparation and placement of the dam. You may assist with flossing the dam, if the student so requests.
4. When the rubber dam is in place, simulate preparing the cavity. The student will evacuate, rinse, and dry the preparation.
5. Indicate to the student when you are ready to restore the tooth.
6. When you have completed the initial carving, have the student remove the dam and then assist you with checking the occlusion and final carving.
7. Observe that the student takes the napkin off the "patient" and cleans the operatory as necessary.
8. Sign the guidesheet when the performance is completed, then dismiss the student

FLORIDA VOCATIONAL ACHIEVEMENT TEST

Student's Name _____ Date _____

DENTAL ASSISTANT

PERFORMANCE EVALUATION GUIDESHEET

TASK 2: ASSISTING WITH AMALGAM RESTORATION

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
A. Assemble and arrange instruments and materials.			
001. Washed hands.	001	_____	_____
002. Selected amalgam tray.	002	_____	_____
003. Selected anesthesia materials.	003	_____	_____
004. Selected rubber dam materials.	004	_____	_____
005. Arranged the instruments in an orderly manner; those used together were grouped together.	005	_____	_____
006. All necessary supplies and equipment were present.	006	_____	_____
B. Prepare the operatory and the patient.			
007. Positioned the chair and light.	007	_____	_____
008. Prepared evacuation equipment.	008	_____	_____
009. Placed napkin on the "patient."	009	_____	_____
C. Prepare for anesthesia.			
010. Inspected the aspirating syringe and mounted the correct needle.	010	_____	_____
011. Inspected a carpule, inserted it in a syringe, and engaged the harpoon.	011	_____	_____
012. Removed the protective shield, tested the operability of the syringe, and replaced the syringe.	012	_____	_____
013. Placed the syringe on the tray and covered it with a sterile drape.	013	_____	_____
D. Assist with topical anesthesia.			
014. Passed, retrieved, and discarded the gauze sponge.	014	_____	_____
015. Applied topical anesthetic to a swab; passed the swab.	015	_____	_____

TASK 2: ASSISTING WITH AMALGAM RESTORATION (CONTINUED)

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
E. Assist with local anesthetic.			
016. Passed and received the syringe, removed and replaced the protective shield.	016	_____	_____
017. Guarded against sudden patient movement.	017	_____	_____
018. Rinsed and evacuated the patient's mouth.	018	_____	_____
F. Place rubber dam.			
019. Determined the operating field for placement.	019	_____	_____
020. Selected a clamp for the anchor tooth and ligated it with dental floss.	020	_____	_____
021. Punched holes in a rubber dam square (stamp template or freehand).	021	_____	_____
022. The rubber dam holes were centered and were the correct size and number.	022	_____	_____
023. Lubricated the patient's lips and tissue side of dam.	023	_____	_____
024. Engaged a wingless clamp in forceps. (or) Placed winged clamp in a rubber dam square, attached it to a frame, and engaged forceps in the clamp.	024	_____	_____
025. Placed the clamp on the tooth correctly.	025	_____	_____
026. Released forceps; checked the position and stability of the clamp; anchored it if necessary.	026	_____	_____
027. Ligated or anchored the dam at an acceptable point from the anchor tooth.	027	_____	_____
028. Adjusted the frame as necessary.	028	_____	_____
029. Inverted the rubber dam with an instrument or applied air, as necessary.	029	_____	_____
G. Assist with cavity preparation (may be simulated).			
030. Evacuated as necessary.	030	_____	_____
031. Rinsed as necessary.	031	_____	_____
032. Dried as necessary.	032	_____	_____
H. Prepare and deliver matrix and wedge(s) (may follow base and liner).			
033. Assembled the matrix retainer and band.	033	_____	_____
034. Passed the matrix retainer.	034	_____	_____
035. Passed the wedge(s) to the operator.	035	_____	_____

TASK 2: ASSISTING WITH AMALGAM RESTORATION (CONTINUED)

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
I. Prepare and deliver base.			
036. Dispensed appropriate amounts.	036	_____	_____
037. Mixed to a uniform consistency.	037	_____	_____
038. Passed the applicator to the operator.	038	_____	_____
039. Held mix in the transfer zone.	039	_____	_____
J. Prepare and deliver varnish.			
040. Obtained the correct size cotton pellet.	040	_____	_____
041. Wet the pellet with varnish.	041	_____	_____
042. Replaced the cap on the varnish.	042	_____	_____
K. Prepare and deliver amalgam.			
043. Dispensed correct amounts of alloy and mercury, or obtained the correct capsule.	043	_____	_____
044. Triturated for the correct length of time.	044	_____	_____
045. Dispensed amalgam mix into the well, removing the pestle with cotton forceps.	045	_____	_____
046. The mix was of proper consistency and form.	046	_____	_____
047. Loaded the amalgam carrier and passed it to the operator.	047	_____	_____
048. Delivered an appropriate-size condenser and received the carrier.	048	_____	_____
049. Continued the exchange until the preparation was full.	049	_____	_____
L. Perform an instrument exchange.			
050. Anticipated the operator's needs.	050	_____	_____
051. Used the proper instrument exchange in the correct transfer zone.	051	_____	_____
M. Assist with carving and finishing.			
052. Passed the explorer to free the amalgam from the band.	052	_____	_____
053. Received the explorer and passed and received carvers as requested.	053	_____	_____
054. Assisted with the removal of the matrix band and retainer.	054	_____	_____
055. Passed and received burnishers or carvers as necessary.	055	_____	_____

TASK 2: ASSISTING WITH AMALGAM RESTORATION (CONTINUED)

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
N. Remove rubber dam.			
056. Engaged the clamp with the forceps and removed it without trauma.	056	_____	_____
057. Stretched the rubber dam and cut interseptal rubber cleanly while protecting tissue with a finger.	057	_____	_____
058. Released the ligated end of the dam.	058	_____	_____
059. Removed the rubber dam square and frame.	059	_____	_____
060. Wiped lubricant from the patient as necessary.	060	_____	_____
061. Checked the rubber dam for missing interseptal rubber and removed rubber in contacts, as necessary.	061	_____	_____
062. Massaged the patient's gingival tissue.	062	_____	_____
O. Assist with final carving and finishing.			
063. Passed articulating paper in holder; wiped teeth if requested.	063	_____	_____
064. Passed carvers as necessary.	064	_____	_____
065. Rinsed and evacuated the patient's mouth.	065	_____	_____
P. Practice cleanliness in overall performance.			
066. Avoided wasted time and motion.	066	_____	_____
067. Used appropriate aseptic techniques.	067	_____	_____
068. Caused no unnecessary discomfort to the patient or trauma to the oral environment.	068	_____	_____
069. Wore safety glasses.	069	_____	_____

Evaluator's Comments:

Signature

Date

TASK 3: Preparing Composite, Cement,
Dressing, and Temporary Restoration

Evaluator's Instructions

1. Evaluate each procedure using the guidesheet, checking that each mix is acceptable.
2. Evaluate the clinical acceptability of the placement of the dressing and temporary restoration.
3. Sign the guidesheet when the performance is completed, then dismiss the student.

FLORIDA VOCATIONAL ACHIEVEMENT TEST

Student's Name _____ Date _____

DENTAL ASSISTANT

PERFORMANCE EVALUATION GUIDESHEET

TASK 3: PREPARING COMPOSITE, CEMENT, DRESSING, AND TEMPORARY RESTORATION

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
A. Mix composite resin.			
001. Assembled materials, instruments, and equipment.	001	_____	_____
002. Dispensed a correct amount of base on the pad.	002	_____	_____
003. Changed the end of the spatula and dispensed the correct amount of catalyst.	003	_____	_____
004. Mixed the base and catalyst; completed in 20-30 seconds or per manufacturer's instructions.	004	_____	_____
005. Composite mix was plastic, homogeneous, clean, and ready for delivery.	005	_____	_____
B. Mix zinc phosphate cement.			
006. Selected a glass slab and cement spatula.	006	_____	_____
007. Dispensed the required amount of powder on one end of the slab; then replaced the stopper on the bottle.	007	_____	_____
008. Agitated the liquid and placed the required amount opposite the powder; replaced stopper.	008	_____	_____
009. Used the spatula to form and then divide the powder into increments.	009	_____	_____
010. Incorporated the correct amount of powder into the liquid; then spatulated properly, spreading the mix on the slab.	010	_____	_____
011. When mix was homogeneous, added additional portion(s) of powder, spatulating properly.	011	_____	_____
012. Final mix was acceptable: creamy, followed the spatula before breaking into thread, fell from the spatula into a gummy drop, held its form for a moment, then spread slightly.	012	_____	_____

TASK 3: PREPARING COMPOSITE, CEMENT, DRESSING, AND TEMPORARY RESTORATION
(CONTINUED)

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
C. Mix and place periodontal dressing.			
013. Selected appropriate materials, instruments, and equipment.	013	—	—
014. Dispensed correct amounts of materials (powder and liquid or paste to paste) onto a paper pad.	014	—	—
015. Divided and mixed sections of powder into liquid, or mixed the paste material using the metal spatula.	015	—	—
016. Mixed until putty-like, homogeneous consistency.	016	—	—
017. Using lubrication on fingers, rolled to appropriate lengths.	017	—	—
018. Placed dressing buccally and lingually, adapting to the contour of cervical areas; pressed material into interproximal areas.	018	—	—
019. Removed excess material that extended beyond cervical areas.	019	—	—
020. Checked occlusion.	020	—	—
021. The dressing was smooth and properly contoured; not bulky.	021	—	—
022. The dressing did not interfere with occlusion nor extended into the muco-buccal fold or lingual area.	022	—	—
D. Mix and place a temporary restoration.			
023. Placed a matrix and wedge on the tooth.	023	—	—
024. Dispensed enough liquid and powder onto the pad.	024	—	—
025. Mixed powder into liquid until its consistency was thick and putty-like.	025	—	—
026. Placed the mixture into the cavity preparation at its deepest area; used the tip of the plastic instrument, to condense the preparation firmly into place.	026	—	—
027. Overfilled the preparation slightly.	027	—	—
028. Carved anatomy into the occlusal surface while the mixture was workable.	028	—	—
029. Removed the matrix and wedge.	029	—	—
030. Checked the occlusion with articulating paper; adjusted as necessary.	030	—	—
031. The temporary restoration was smooth and firm in appearance.	031	—	—

TASK 3: PREPARING COMPOSITE, CEMENT, DRESSING, AND TEMPORARY RESTORATION
(CONTINUED)

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
032. The temporary restoration was properly contoured.	032	—	—
033. The occlusion is not impaired.	033	—	—
E. Practice cleanliness in overall performance.			
034. For all procedures, the student cleaned the work area appropriately.	034	—	—
035. Proper aseptic techniques were used.	035	—	—

Evaluator's Comments:

Signature

Date

TASK 4: Mixing Alginate, Taking and Pouring Impressions, and Applying Sealant

Evaluator's Instructions

1. Observe that the student assembles the necessary supplies and follows the sequence of performance.
2. The student must have taken an acceptable set of alginate impressions in order to pour them.
3. The student must supply two teeth mounted in plaster for the sealants.
4. Sign the guidesheet when the performance is completed, then dismiss the student.

FLORIDA VOCATIONAL ACHIEVEMENT TEST

Student's Name _____ Date _____

DENTAL ASSISTANT

PERFORMANCE EVALUATION GUIDESHEET

TASK 4: MIXING ALGINATE, TAKING AND POURING IMPRESSIONS, AND APPLYING SEALANT

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
A. Mix alginate and take impressions.			
001. Prepared the manikin; selected tray and tried in mouth.	001	_____	_____
002. Prepared alginate material: used cool water, fluffed and measured powder, added powder to water, and mixed until smooth.	002	_____	_____
003. Filled the mandibular tray and smoothed with a wet finger.	003	_____	_____
004. Inserted and seated the mandibular tray properly.	004	_____	_____
005. Stabilized the tray while alginate was setting.	005	_____	_____
006. Checked for set of material.	006	_____	_____
007. Broke the seal and removed the tray with a sudden snap.	007	_____	_____
008. Inspected the impression for accuracy; wrapped it in wet paper towels.	008	_____	_____
009. Repeated Steps 123-128 for the maxillary arch.	009	_____	_____
010. Inserted and seated the maxillary tray, standing behind the manikin.	010	_____	_____
011. Took a wax bite registration.	011	_____	_____
012. Each impression showed all the teeth and the vestibule.	012	_____	_____
013. The anatomy of each impression was accurate.	013	_____	_____
014. The alginate in the tray was smooth and free of voids and errors.	014	_____	_____
B. Pour models.			
015. Selected the necessary materials and supplies.	015	_____	_____
016. Made an acceptable mix for pouring impressions.	016	_____	_____
017. Filled the impression trays.	017	_____	_____
018. Inverted the impressions onto bases, shaped and joined them with the original pour, and set them aside.	018	_____	_____
019. Tray was parallel to the table top.	019	_____	_____

TASK 4: MIXING ALGINATE, TAKING AND POURING IMPRESSIONS, AND APPLYING SEALANT
(CONTINUED)

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
C. Apply sealants.			
020. Obtained the necessary materials and equipment; dispensed needed quantities.	020	_____	_____
021. Wore safety glasses.	021	_____	_____
022. Applied an etching solution for 60 seconds.	022	_____	_____
023. Rinsed and dried teeth for 30 seconds; checked for proper etching.	023	_____	_____
024. Mixed sealant following manufacturer's directions.	024	_____	_____
025. Applied sealant properly.	025	_____	_____
026. Timed the polymerization or applied light for the required amount of time.	026	_____	_____
027. Checked margins with an explorer.	027	_____	_____
028. The sealant had no overflow extensions, yet had complete coverage and was free of bubbles.	028	_____	_____
029. The sealant didn't pop off when the margins were checked by the evaluator.	029	_____	_____
D. Trim models.			
030. After the final set, separated models from impressions.	030	_____	_____
031. The model was free of bubbles and had no broken teeth; proportional bases and the mandibular tongue area were cleared and flat.	031	_____	_____
032. Wore safety glasses while trimming.	032	_____	_____
033. Trimmed maxillary model.	033	_____	_____
034. Trimmed mandibular model using a wax bite registration.	034	_____	_____
035. Completed hand trimming.	035	_____	_____
036. Identified the models.	036	_____	_____
037. The models were in proper occlusion.	037	_____	_____
038. Sharp, symmetrical angles were maintained.	038	_____	_____
039. There was no damage to teeth.	039	_____	_____
040. The vestibule was maintained.	040	_____	_____
041. The models were identified correctly.	041	_____	_____

Evaluator's Comments:.

Signature Date

TASK 5: Exposing, Mounting, and Labeling
a Half-Mouth Radiograph Series

Evaluator's Instructions

1. Evaluate the student's performance using the evaluation guidesheet.
2. Sign the guidesheet when the performance is completed, then dismiss the student.

FLORIDA VOCATIONAL ACHIEVEMENT TEST

Student's Name _____ Date _____

DENTAL ASSISTANT

PERFORMANCE EVALUATION GUIDESHEET

TASK 5: EXPOSING, MOUNTING, AND LABELING A HALF-MOUTH RADIOGRAPH SERIES

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
A. Complete preliminary steps.			
001. Selected the appropriate-size film for specific exposures.	001	_____	_____
002. Turned the machine on and checked the machine for accurate KVP, MA, and time settings.	002	_____	_____
003. Placed a lead apron on the manikin.	003	_____	_____
B. Use the paralleling technique.			
004. Used an appropriate tube head.	004	_____	_____
005. Inserted film into film-holding devices.	005	_____	_____
006. Placed film in the mouth and exposed it.	006	_____	_____
C. Use the bisecting technique.			
007. Positioned the manikin properly for specific exposures and technique.	007	_____	_____
008. Inserted film into film-holding devices.	008	_____	_____
009. Placed film in the mouth and exposed it.	009	_____	_____
D. Complete concluding steps.			
010. Secured the exposed film in its proper receptacle.	010	_____	_____
011. Secured the tube head against the wall.	011	_____	_____
012. Removed the lead apron from the manikin and positioned the manikin for dismissal.	012	_____	_____
013. Left the operatory clean.	013	_____	_____
014. Turned off the machine.	014	_____	_____

(Student used an automatic processor or had film processed.)

TASK 5: EXPOSING, MOUNTING, AND LABELING A HALF-MOUTH RADIOGRAPH SERIES
(CONTINUED)

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
E. Produce acceptable product criteria.			
015. Diagnostically acceptable; show proper definition and degree of density and contrast; all structures can be delineated easily.	015	_____	_____
016. The radiographs were mounted accurately.	016	_____	_____
017. There were raised dots toward the occlusal/ incisal surfaces.	017	_____	_____
018. The mount was labeled with the patient's name and the date.	018	_____	_____
019. The radiographs were free of bends, artifacts, etc.	019	_____	_____
020. The film was properly placed for each area of exposure.	020	_____	_____
021. The vertical angulation was correct.	021	_____	_____
022. The interproximal surfaces were seen without overlapping.	022	_____	_____
023. The X-ray beam was centered so no cone-cutting was evident.	023	_____	_____

Evaluator's Comments:

Signature Date

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TASK 6: Polishing Clinical Crowns

Evaluator's Instructions

1. Evaluate the "patient" clinically to determine if there are any contraindications for performing the polishing procedure; reject if Class II patient.
2. Confirm the selected quadrant for evaluation and tell the student to begin the procedure.
3. Evaluate the procedure when completed by using disclosing solution to detect any remaining plaque.
4. Sign the guidesheet when the performance is completed, then dismiss the student and "patient."

FLORIDA VOCATIONAL ACHIEVEMENT TEST

Student's Name _____ Date _____

DENTAL ASSISTANT

PERFORMANCE EVALUATION GUIDESHEET

TASK 6: POLISHING CLINICAL CROWNS

PROCESS STEPS OR PRODUCT CRITERIA	Item No.	Done? ()	
		YES	NO
001. Assembled the armamentarium.	001	_____	_____
002. Washed hands.	002	_____	_____
003. Selected the appropriate quadrant.	003	_____	_____
004. Used the proper intraoral fulcrum on hard tissue.	004	_____	_____
005. Placed a small amount of polishing agent on the rubber cup.	005	_____	_____
006. Began by flexing the rubber cup along the gingival third of the teeth.	006	_____	_____
007. Operated rheostat at slow to moderate speed.	007	_____	_____
008. Used intermittent pressure.	008	_____	_____
009. Moved the rubber cup from the gingival to the middle to the upper third of the teeth.	009	_____	_____
010. Used systematic procedure to ensure that all surfaces were polished.	010	_____	_____
011. Used a saliva ejector and water syringe.	011	_____	_____
012. Used unwaxed dental floss for interproximal surfaces.	012	_____	_____
013. There was no unnecessary discomfort to the patient.	013	_____	_____
014. There was no indication of tissue laceration or trauma.	014	_____	_____
015. There were no remaining plaque deposits, stains, MA, or debris in the selected quadrant.	015	_____	_____
016. Proper asepsis was maintained.	016	_____	_____

Evaluator's Comments:

Signature _____

Date _____

Appendix B: Student Materials

General Instructions for the Student

1. This test consists of six performance tasks.
2. For each task you will be rated on (a) your ability to perform the skills required of a dental assistant, (b) the methods used to complete the tasks, and (c) your attention to safety and asepsis.
3. The maximum time allowed for this test is four hours. Each performance task, therefore should take no longer than the time specified on the task information sheet. You should plan your work accordingly. Notify your evaluator as soon as you complete each job.
4. When you complete each task, return the testing area to its pretest condition.
5. This Student Performance Test booklet, all scrap worksheets, paper, etc., must be turned in to the evaluator before you will be allowed to leave the testing area.
6. An instructor will set up the stations at which you will be tested. At each station, there will be an evaluator who will evaluate your performance.

Specific Instructions for the Student

Task 1: Charting Oral Conditions from Dictation

(Time: 10 min. Station _____ Location _____)

On the dental chart given you by the evaluator, you are to chart the conditions recorded on the audiotape accompanying this task. Each condition will be repeated once. You will be given two minutes to check your work after the tape is over. Do not write or abbreviate on the chart; use dental symbols only. At a later time you will use your chart to answer a series of questions. Be sure to write your name at the top of the chart.

Task 2: Assisting with Amalgam Restoration

(Time: 50 min. Station _____ Location _____)

For this performance, you are to go to the designated operatory where you will find all the necessary materials to prepare for and assist with a Class II amalgam restoration on the mandibular arch. The "patient" is a chair-mounted manikin and should be treated as if it were a human patient. The sequence of procedures is as follows:

Prepare for the procedure

1. Select an amalgam tray and arrange the instruments properly.
2. Assemble the materials to place a rubber dam.
3. Assemble the materials to administer topical and local anesthesia.
4. Prepare the operatory and "patient."

Assist with the procedure

5. Prepare and assist with topical and local anesthesia.
6. Place the rubber dam.

7. Assist with the Class II cavity preparation to include actual evacuation, rinsing, and drying. (Note: The preparation may be simulated.)
8. Assist with cavity restoration to include preparing base, varnish, and amalgam, and performing instrument exchange.
9. Remove the rubber dam.
10. Assist with checking the occlusion and final carving.
11. Dismiss the "patient."
12. Clean the operatory; mix up the instruments on the amalgam tray.

The evaluator will act as the operator and will observe you throughout the entire procedure. The evaluator will assist you in flossing the rubber dam if you request. Notify the evaluator when you are ready to begin.

Task 3: Preparing Composite, Cement, Dressing,
and Temporary Restoration

(Time: 50 min. Station _____ Location _____)

Go to the area designated for Task 3. You will find all the necessary supplies and materials to perform the following:

1. Prepare a mix of composite resin restorative material suitable for a Class III restoration.
2. Prepare a mix of zinc phosphate cement suitable for cementing two full crowns.
3. Mix and place a periodontal dressing on one lower quadrant of a manikin.
4. Mix and place a temporary restoration in one Class II prepared tooth on a manikin.
5. Clean the work area after each preparation.

The evaluator will tell you where to begin.

Task 4: Mixing Alginate, Taking and Pouring Impressions,
and Applying Sealant

(Time: 70 min. Station _____ Location _____)

Go to the area designed for Task 4. You will assemble the necessary supplies and materials to complete the following sequence of performances.

1. Mix alginate impression material, then take the mandibular and maxillary impression and a wax bite registration on a manikin. You will be allowed one impression retake.
2. Pour the above alginate impressions in plaster or stone using the single-pour method and allow them to set.
3. While waiting for your models to set, apply sealant to two teeth mounted in plaster. Identify them with your name.
4. When the models are ready, trim the models and identify them with your name.

The evaluator will observe you throughout the entire sequence. You are to show the evaluator the impressions, which must be clinically acceptable, before you pour them. Show the evaluator the sealed teeth and the completed models. Clean up each work area as you complete each part of the task.

Task 5: Exposing, Mounting, and Labeling a Half-Mouth
Radiograph Series

(Time: 40 min. Station _____ Location _____)

Go to the operatory designated for Task 5. You will find all the necessary supplies and equipment to perform the following. Treat the manikin as if it were a human patient.

1. Obtain the appropriate armamentarium containing film, film-holding devices, cotton rolls, film mount, and envelope (if needed).

2. Select an upper or lower quadrant of the manikin, then expose periapical radiographs using the paralleling technique.
3. Expose the opposite quadrant on the opposite arch using the bisecting technique.
4. Expose a right premolar bitewing and a left molar bitewing.
5. Process your film using an automatic processor, or have the film processed for you.
6. When the processing is complete, mount the film in the film mount.
7. Label the film mount properly. Write your name in the upper right corner of the mount.
8. Inform the evaluator when the mounted film is ready for evaluation.

Task 6: Polishing Clinical Crowns

(Time: 20 min. Station _____ Location _____)

Go to the operatory designated for Task 6. You will find the necessary supplies and equipment to polish the clinical crowns of the upper right quadrant (from the central incisor to the 2nd or 3rd molar, if present) of a patient (a classmate) without calculus deposits.

1. Prepare an armamentarium tray, then seat and prepare the patient for the procedure.
2. Notify the evaluator when you are ready for patient check-in and confirmation of the selected quadrant.
3. Polish the clinical crowns of the selected quadrant. You may not use disclosing solution during the procedure, but you may use dental floss.
4. Notify the evaluator when the polishing procedure is completed. The evaluator will use disclosing solution to check your work.