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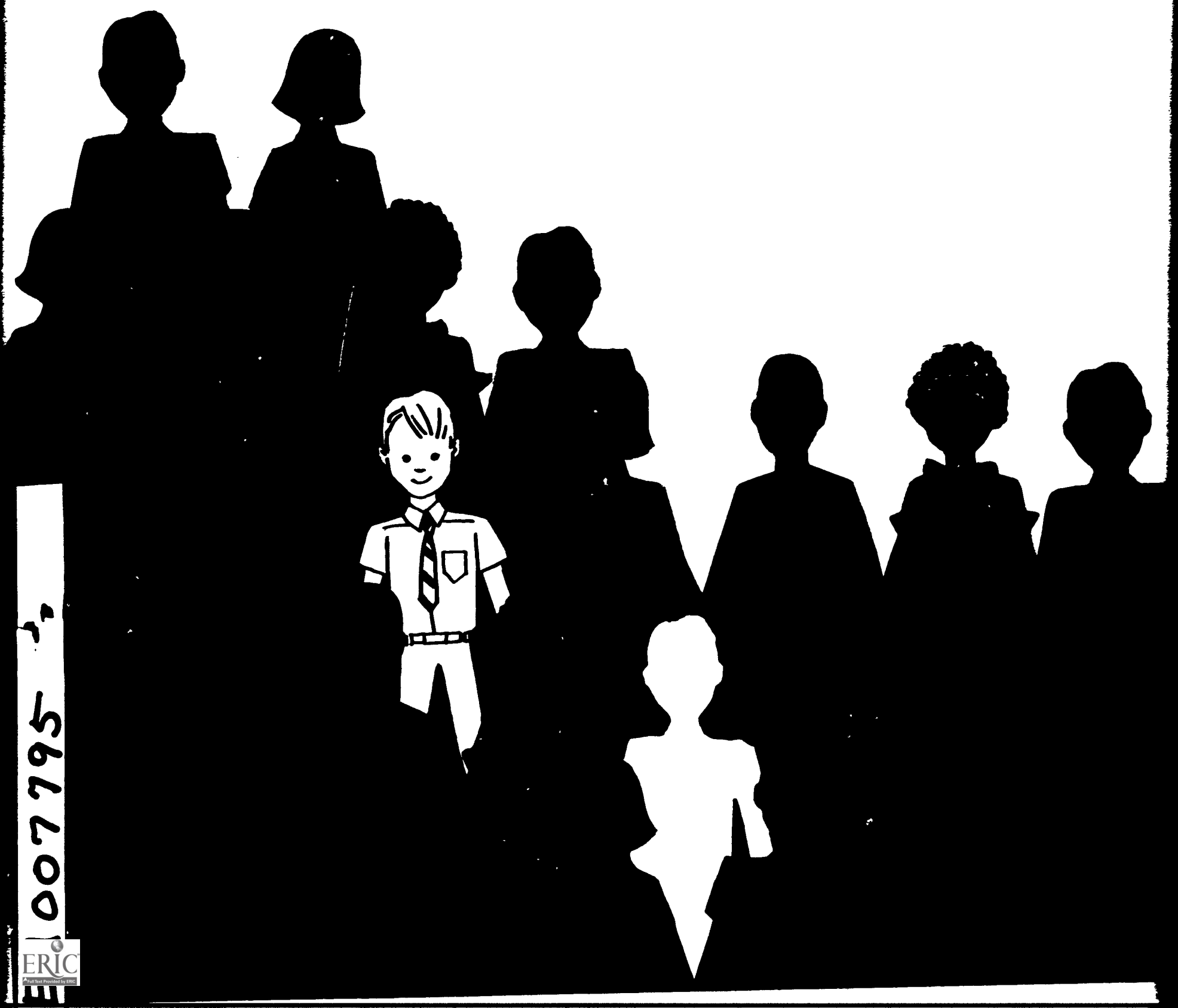
ABSTRACT

THE OBJECTIVES OF THIS MANUAL ARE TO PROVIDE GENERAL INFORMATION ABOUT INDIVIDUALIZED INSTRUCTION AND THE INDIVIDUALLY PRESCRIBED INSTRUCTION (IPI) MATHEMATICS PROGRAM, TO FAMILIARIZE THE USER WITH THE MATERIALS USED IN IPI MATHEMATICS, TO PROVIDE A CHANCE TO PRACTICE NECESSARY SKILLS, AND TO GIVE SUGGESTIONS FOR MAKING THE JOB OF THE IPI AIDE EASIER. THE USE OF THE IPI PLACEMENT TESTS, PRETESTS, CURRICULUM-EMBEDDED TESTS, POSTTESTS, AND STANDARD TEACHING SEQUENCE BOOKLET IS COVERED IN SOME DETAIL. EXAMPLES OF COMPLETED FORMS ILLUSTRATE THE TEXT. (JY)

AIDING IPI

A Manual for Aides in IPI Mathematics



AIDING IPI

ERRATA

p.38 Add: 12.b

p.40 No. 4 - "Jim Bowen" should be changed to "Lillian Ching".

p.79 Prescription Sheet after p.4, instructional code should be 08, "Seeing Fractions".

p.80 No.6 Change "Skill 1" to "Skill 4". Answer should be "2 and 10".

AIDING IPI

A MANUAL FOR TEACHER AIDES IN IPI MATHEMATICS

by

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TABLE OF CONTENTS

OBJECTIVES OF THE AIDE'S MANUAL

This manual is designed to help you as an aide in IPI schools to become familiar with as many aspects of your job as possible before actually going to work.

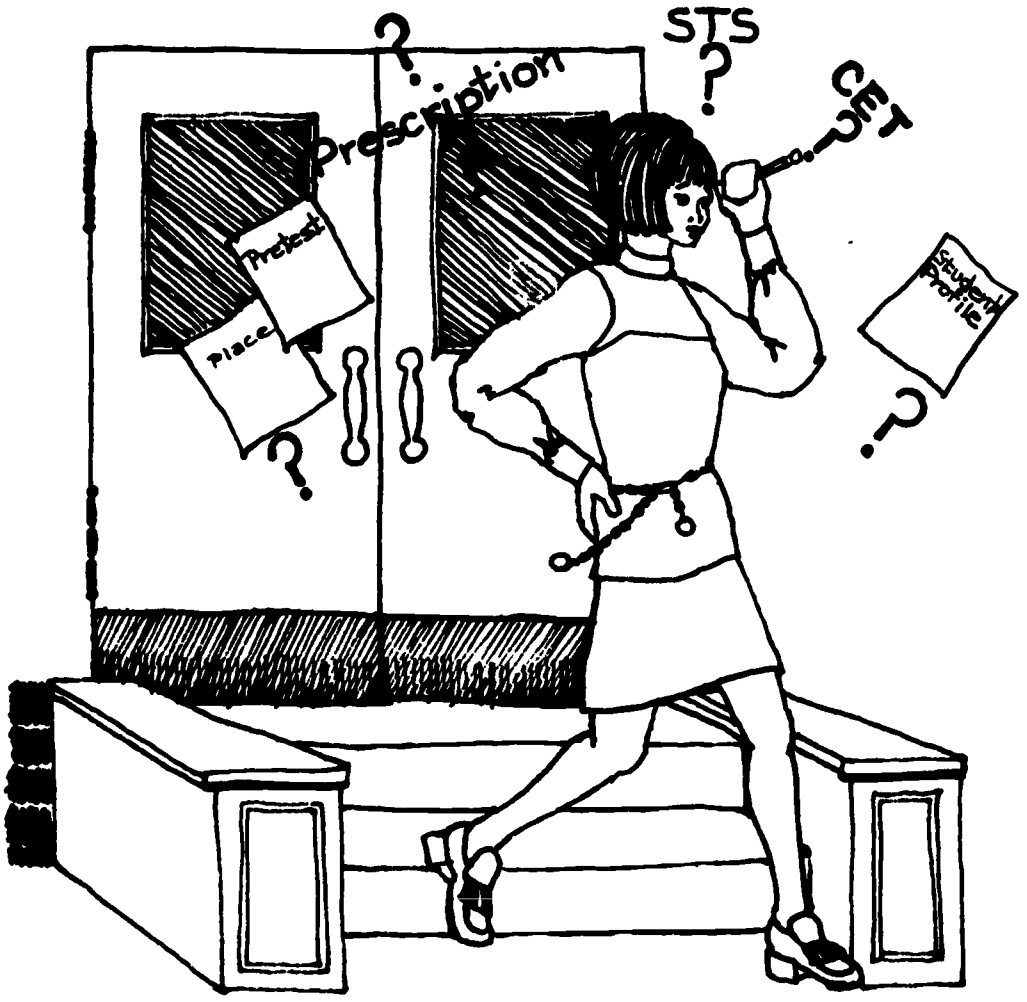
The manual will:

1. Give you some general information about individualized instruction and the IPI mathematics program.

2. Familiarize you with the material which is used in IPI Mathematics.

3. Give you practice in the kinds of tasks you will perform when using the IPI record sheets.

4. Give you some suggestions for making your job easier.



HOW TO USE THIS MANUAL

Since this book has been written to teach you the skills needed in working as an IPI aide, it has been set up as a small course. Certain things have been included which, it is hoped, will help you to check yourself on how well you are learning the material.

Each section will be introduced with a set of guide questions (see p.3). They are usually rather broad questions which you should be able to answer when you finish working through the manual.

At the end of each section there is a posttest (see p.18) which is a test that comes after material has been taught. The results can tell you what areas you may be unsure about so you can go back and review if necessary. If you find you can answer all the questions you are ready to move on to the next section.

Remember, all of the tests are for <u>your own use</u>. You need not even answer questions in the exact word given, as long as the idea is the same. After taking each test, use your own judgment as to how you use the results.

The manual will be most useful to you if you can gather a packet of IPI math materials to use as you work through each section. You should include one of each type of test and an STS booklet. All should relate to the same unit. For example: Level C Placement Test, C-Addition Pretest, C-Addition, Skill I, STS, C-Addition Posttest, Mathematics Placement Profile, Mathematics Student Profile and Mathematics Prescription Sheet.

If school is in session at the time when you are using the manual it may be possible for you to work with materials children are actually using after you have gone through each section. For example: When you finish the section on Pretests, spend some time scoring student's Pretests, and so on.

This volume is concerned with <u>IPI Mathematics.</u> Other manuals will help you with the materials used in other IPI subject areas.

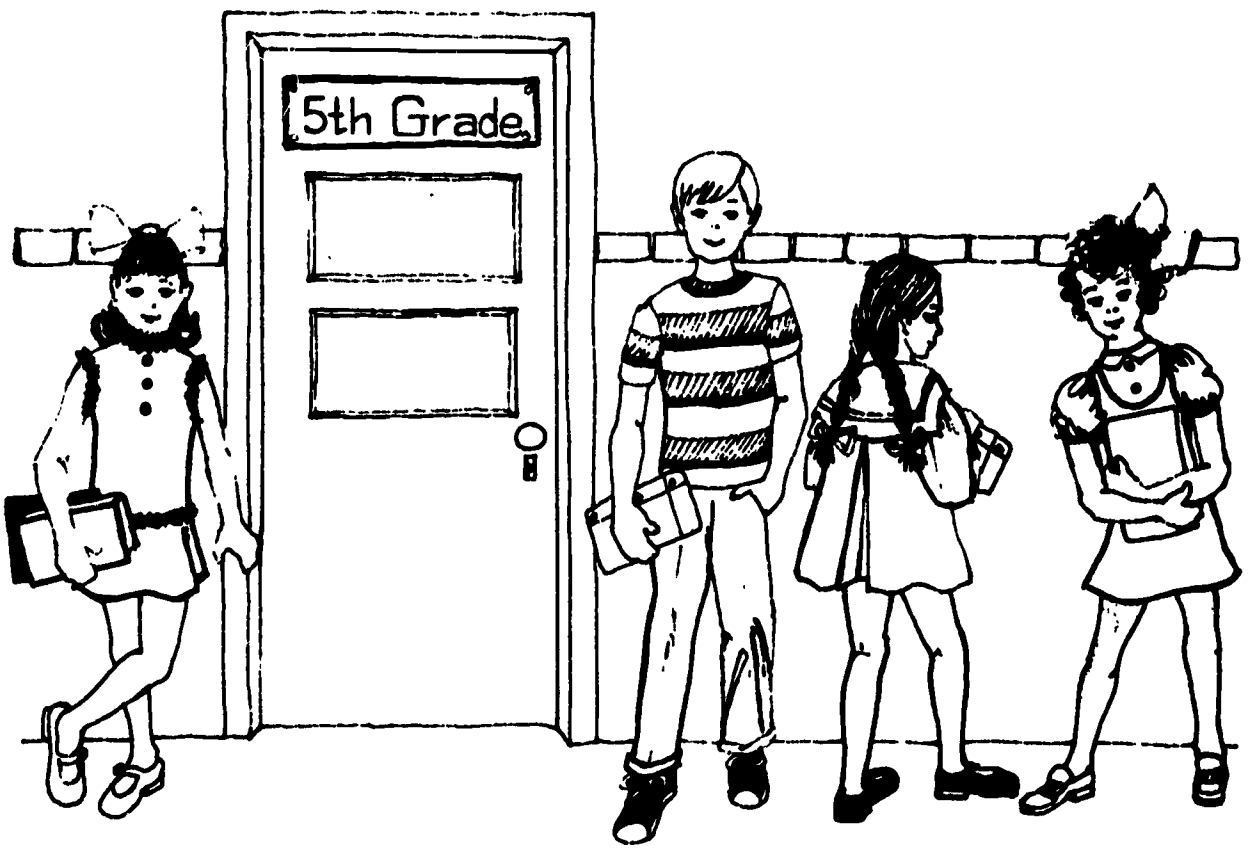
INTRODUCTION

In order to understand the aide's role in an IPI school it may be helpful to have some background information. This section will answer the following questions:

What is individualized instruction?
What is IPI?
What do some of the IPI terms mean?
What is the role of the aide in IPI?
What is the role of the teacher in IPI?
What are the steps in Individually Prescribed Instruction?
How is the IPI Mathematics continuum organized?

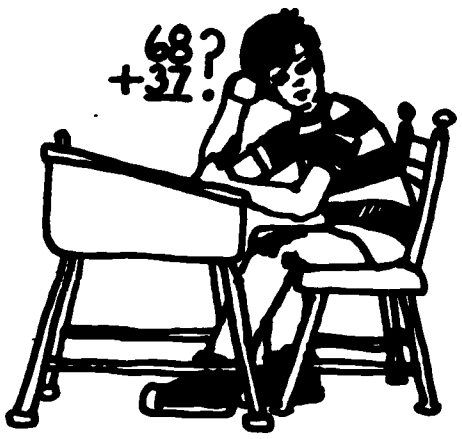
WHAT IS INDIVIDUALIZED INSTRUCTION?

When you look at a group of ten-year olds or a class of fifth graders, you can immediately see that not all children grow at the same rate of speed. We also know that a child who is the shortest at one age may grow up to be as tall as any of this classmates.



It is also true that all students of the same age or grade level do not <u>learn</u> at the same rate.

In addition, a particular child may be able to learn very rapidly in one subject, such as reading, and yet have a great deal of difficulty in another, perhaps math.



Over the years, teachers have tried to find ways to take care of the differences between children so that they will be able to learn to the best of their ability. Usually they have used various kinds of groupings, providing individual work only for very fast or very slow students who do not fit into other groups. Neither of these has made it possible for <u>every</u> child in a class to work as <u>he</u> needs to work.

Individualized instruction is a way of teaching that makes it possible for each <u>individual</u> student, rather than the group, to be the starting point for all decisions about teaching. The teacher starts with a particular student in mind and builds a learning program for him. . Each student's program will differ from the others according to each student's individual needs. It is not intended for very slow or very fast students only, but for <u>every child</u> in the class.

WHAT IS IPI?

Individually Prescribed Instruction (IPI) is a specific system of individualization. It differs from other individualized programs in that it has a series of definite steps through which a student moves in order to increase his skill and knowledge of a subject.

These steps include:

Testing the student before he begins work (Placement Tests and Pretests);

Prescribing work for the student by the teacher from prepared materials (Standard Teaching Sequence) and supplementary materials on which he can work at his own pace (Prescription);

Testing from time to time while working on his prescription (Curriculum Embedded Tests);

Testing when he completes work in a unit (Posttests);

The use of tests throughout IPI makes it possible for each student to work only on the skills which he needs. The tests are a way of diagnosing his learning needs so that he may be given the work which will fit those needs in the best way possible.

WHAT DO SOME OF THE IPI TERMS MEAN?

You will be reading a number of words and phrases in IPI which may be unfamiliar to you. Some of these are listed below with their definitions. You will find that the meanings of the words will become clearer to you as you become familiar with IPI materials.

1. Continuum	The entire IPI math program. It is arranged so that a student can continue working at his own pace from beginning to end.
2. Level	The way IPI math materials are arranged from easy to difficult. (ex: A, B, C --- H)
3. Mathematics Area	The sections of the IPI math continuum (ex: addition, subtraction, division). There are 13 areas.
4. Unit	The divisions of IPI math by level and area. (ex: D-Addition)
5. Skill	The operation a student must learn. Each IPI math unit contains several skills (ex: Counting from 1-100 without visual clues).
6. Objective	The "goal" which a student works to reach. Each math unit has several objectives.
7. Prescription	The plan for a student's work; it specifies the materials to use and how to use them.

8. Diagnostic tests	Tests to find out a student's strengths and weaknesses in a skill, unit, or area so that work can be prescribed only where needed. IPI has Placement, Pretests, CETs and Posttests.
9. STS	The booklet of student materials (skillsheets) for each skill in every unit.
10. Manipulative devices	Materials which can be handled by children so that they can understand math better-- (ex: counting discs, fractional parts, rods, or abacuses.)
11. Mastery	The point at which a student demonstrates on a test that he has learned the math skill; usually set at 85% but can be based on the teacher's decision.

WHAT IS THE ROLE OF THE AIDE IN IPI?

The IPI aide plays an important part in the smooth functioning of the program. This section will answer the following questions about your role:

Why is an aide necessary in an IPI School?
What is it like to be an aide in an IPI School?
What are an aide's responsibilities in an IPI School?

Why is an aide necessary in an IPI School?

One of the strengths of IPI is that is makes it possible for a teacher to know exactly where a student is in his progress through his assigned work. It is the aide who keeps the records of this progress.

You will note from the brief description of IPI on page 5, that there are a number of different kinds of written materials in the program. No two students go through these materials in exactly the same way, so it is vital that accurate records be kept.

What is it like to be an aide in an IPI school?

An aide's day can involve many kinds of work. The filmstrip Aiding IPI gives you a picture of what an aide's day is like in two IPI schools. You should view the filmstrip now, if you have not already done so.

What are the aide's responsibilities in an IPI school?

During IPI Classes:

Score and record student skillsheets and tests that are not scored or recorded by the student.

Assist student in obtaining materials in the materials center when necessary.

Cooperate with the teacher, upon request, in facilitating classroom management.

Outside IPI Classes:

Keep student folders current by completing the scoring and recording student work by completing record forms in the folder.

Pull and file completed student prescriptions and tests as indicated by the teacher.

Keep an up-to-date file of permanent student IPI records.

Prepare any materials needed by the faculty for planning sessions (Class Flowchart, etc.)

Keep a current set of scoring keys for use by aides, teachers and students.

Organize, inventory, and order IPI instructional materials.

WHAT IS THE ROLE OF THE TEACHER IN IPI?

It is the teacher's job in IPI to prescribe the exact work which a student needs. The IPI teacher does more than mechanically assigning tests and skillsheets to students. Through her background in subject matter, knowledge of how children learn, and knowledge of each child in her class,the IPI teacher is able to make choices about how each child should work in IPI. To help her to make these decisions she uses the information gained from a child's work on IPI tests and skillsheets. Other sources of information are the school records and classroom observation.

Once the decisions are made concerning which skillsheets or supplementary materials to assign and what method of instruction should be used, the teacher writes the prescription for the student's work on the Prescription Sheet. This sheet becomes an important two-way communication link between the student and the teacher. The teacher communicates to the student the choices made by listing: the unit and unit skills that have been assigned to the student; specific tests to be taken; particular skillsheets to be completed; and the Instructional Techniques to be used to bring about mastery of the skills. In return, information about student progress is communicated back to the teacher in the form of skillsheet scores and test results.

The student is able to read his prescription and move ahead on his own. The aide helps the student and the teacher by helping him obtain the prescribed materials and by scoring and recording his work.

Individually Prescribed Instruction(IPI), then, is a framework within which a teacher can individualize instruction. IPI is also the prepared materials to help in the task. The teacher's job entails using many resources in order to make the most effective use of IPI as a way of teaching.

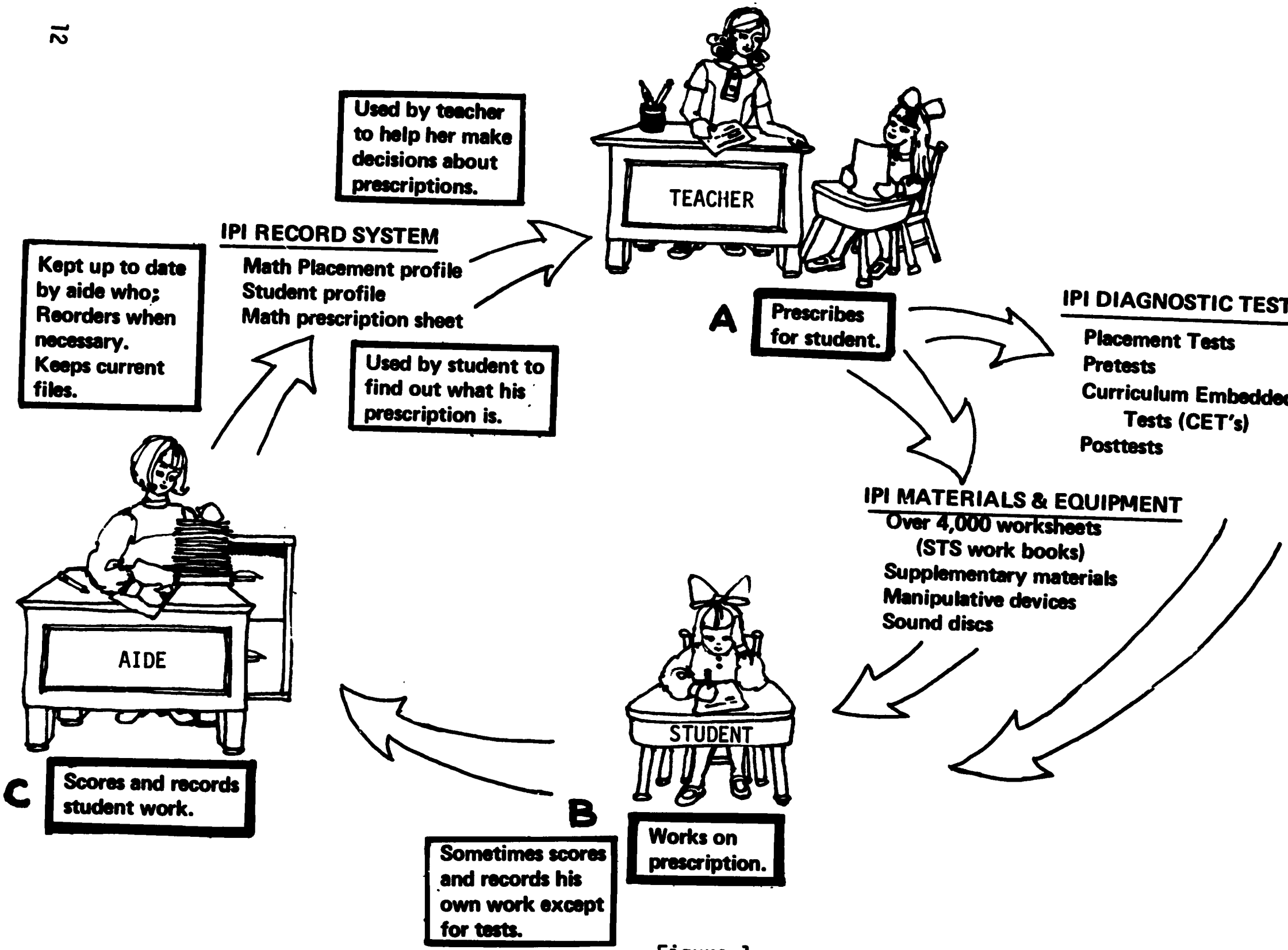

Used by teacher to help her make decisions about prescriptions.
IPI RECORD SYSTEM
Math Placement profile
Student profile
Math prescription sheet
Kept up to date by aide who; Reorders when necessary. Keeps current files.
Used by student to find out what his prescription is.
TEACHER
A
Prescribes for student.
IPI DIAGNOSTIC TESTS
Placement Tests
Pretests
Curriculum Embedded Tests (CET's)
Posttests
IPI MATERIALS & EQUIPMENT
Over 4,000 worksheets (STS work books)
Supplementary materials
Manipulative devices
Sound discs
AIDE
C
Scores and records student work.
STUDENT
B
Works on prescription.
Sometimes scores and records his own work except for tests.

Figure 1

WHAT ARE THE STEPS IN INDIVIDUALLY PRESCRIBED INSTRUCTION?

Complete the following sentences using Fig.1 to find the answers. Cover the area below the dotted line with a card or a piece of paper. Figure out the answer. Then, uncover to see if you have answered correctly.

1. The teacher_____for the student, that is, assigns the exact work that he needs, choosing from IPI_____ and IPI_____.

.....

Prescribes work; Diagnostic tests; Materials and equipment.

2. The four types of IPI diagnostic tests which the teacher uses are:

a._____ b._____

c._____ d._____

.....

a. Placement Tests b. Pretests

c. Curriculum Embedded Tests (CET's) d. Posttests

3. The IPI material which the student uses most is_____ _____.

.....

Over 4,000 skillsheets (STS skillbooks)

4. The student then_____, that is, he completes the work assigned by the teacher. This may take part of the class period or several periods.

.....

Works on his prescription

5. The aide_____when the student has completed part or all of his prescription.

.....

Scores and records the student's work

6. The record system for each student maintained by the aide consists of

a._____

b._____and

c._____

.....

a. Mathematics Placement Profiles: b. Mathematics Prescription Sheets: c. Student Profiles

7. The purpose of the record system is to

a._____and

b._____.

.....

a. Help the teacher make decisions about prescriptions and

b. Help the student to find out about his prescription.

8. The student sometimes scores and records his own work except for his_____.

.....

Tests

HOW IS THE IPI MATHEMATICS CONTINUUM ORGANIZED?

Figure 2 represents the IPI mathematics continuum. The left hand column lists all of the mathematics <u>areas</u> in which students work.

Across the top are the <u>levels</u> of difficulty from A through H.

Each box represents a <u>unit</u> of work.

The unit circled would be referred to as "D-Division".

MATHEMATICS AREA	A	B	C	D	E	F	G	H
NUMERATION (01)	12	10	7	5	8	3	8	6
PLACE VALUE (02)		3	5	9	7	5	2	1
ADDITION (03)	3	10	5	8	6	2	3	3
SUBTRACTION (04)			4	5	3	1	3	1
MULTIPLICATION (05)				8	11	10	6	3
DIVISION (06)				7	7	8	5	5
COMBINATION OF PROCESSES (07)			6	5	7	4	5	5
FRACTIONS (08)	3	2	4	5	6	14	5	1
MONEY (09)		4	4	6	3	2		
TIME (10)		3	2	10	9	5	3	
SYSTEMS OF MEASUREMENT (11)		4	3	5	7	3	2	
GEOMETRY (12)		2	2	3	9	10	7	9
SPECIAL TOPICS (13)			1	3	3	5	4	3

Figure 2

The numerals in each box represent the number of skills in each unit (see example, p.15). There is a Standard Teaching Sequence (STS) booklet for each skill except for a very few which are done orally. A student does not work in every skill in every unit -- only those which he needs.

Shaded areas indicate units for which there are no skill sheets. Notice that at Level A, for example, a student works only in Numeration, Addition and Subtraction, and Fractions.

Theoretically every student would begin work in the first area (Numeration), at the lowest level (A). He would then move through every unit in the continuum (down each column until he reached the highest level in the last area (H-Spec. Top.).

However, the diagnostic tests make it possible for a student to begin work at whatever level he is ready for and to move through the continuum at his own pace. He can sometimes "master" a unit or skill by passing a test even through he has not actually worked in the IPI materials for that unit or skill. It is rare, then, that a student begins at the very beginning and works through every unit to the end.

In the box below are listed the seven skills which make up the unit, D-Division. There is an STS skill booklet for each of these. It is these skills that are represented by the box which is circled in Figure 2 on page 13.

Level D

DIVISION

1. Divides a set into subsets of equal number to solve simple grouping (division) problems.

2. Uses known multiplication facts to solve division problems related to products to 5 x 10, including 0 and 1.

3. Uses the terms "dividend","divisor", and "quotient" to label parts of a division problem. Selects division as the proper operation.

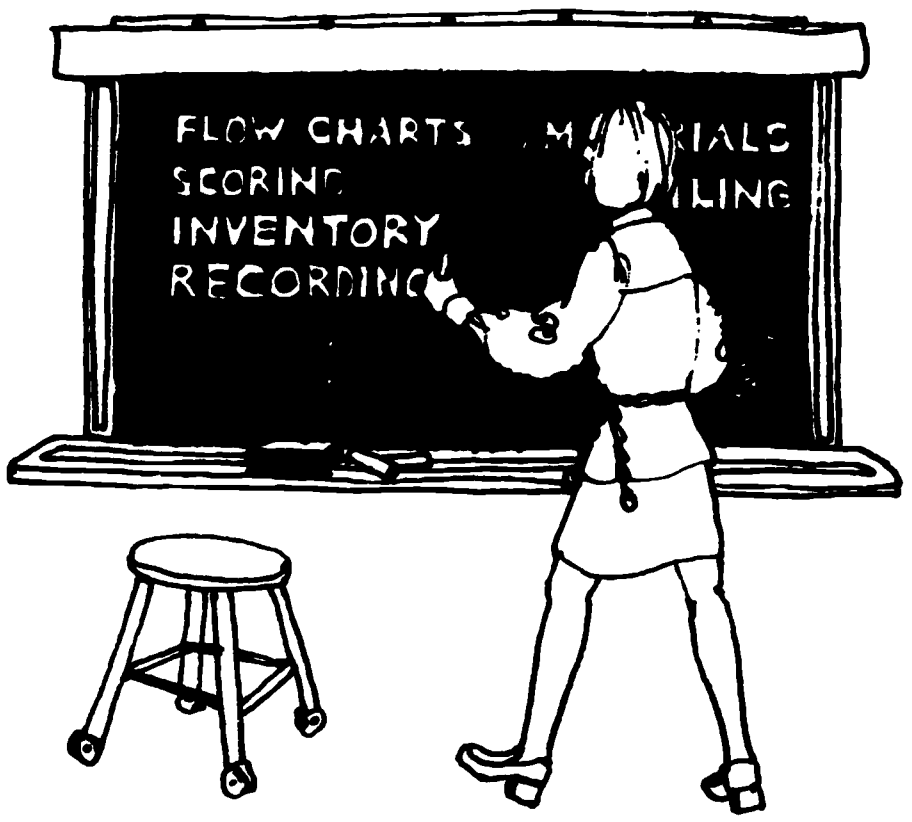
4. Solves division problems through combinations of 50 ÷ 5 to demonstrate oral and written mastery (no pictures).

5. Divides 2,3, 4 and 5 by 1 and into 0 and divides a number by itself.

6. Fills in frames for missing quotients. Divisors to 5, dividends to 50, also divisors to 9 when quotients are 5 or less.

7. Solves one-step work problem requiring division facts through 5 x 10.

Figure 3: Sample Unit from IPI Mathematics Continuum



Now that you have read through this material, how much do you remember? On the next page is your first IPI posttest. Think of it only as a way to help you to become aware of how much you remember about the important points in this section.

If you are uncertain about some items, refer to the page numbers beside each question for a review of the information. When you are satisfied that you understand the material, go on to the next section.

POSTTEST ON INDIVIDUALIZATION AND IPI

Part I - Match the terms with the definitions.

1. Continuum_____	a.	The sections of the IPI math continuum (ex: addition, subtraction, division). There are 13.
2. Level_____	b.	The entire IPI math program. It is arranged so that a student can continue working at his own pace from beginning to end.
3. Mathematics Area_____	c.	The divisions of IPI math by level and area. (Ex: D-Addition)
4. Unit_____	d.	The way IPI math materials are arranged from easy to difficult. (ex: A,B, C----H)
5. Skill_____	e.	The plan for a student's work; it specifies the materials to use and how to use them.
6. Objective_____	f.	The booklet of student materials (skillsheets) for each skill in every unit.
7. Prescription_____	g.	The "goal" which a student works to reach. Each math unit has several.
8. Diagnostic tests_____	h.	Materials which can be handled by children so that they can understand math better. (ex: counting discs, fractional parts, rods, or abacuses)
9. STS_____	i.	The operation a student must learn. Each IPI math unit contains several. (ex: Counting from 1-100 without visual clues).
10. Manipulative devices_____	j.	The point at which a student demonstrates on a test that he has learned the math skill; usually set at 85% but can be based on the teacher's decision.
11. Mastery_____	k.	Tests to find out a student's strengths and weaknesses in a skill, unit, or area so that work can be prescribed only where needed. IPI has Placement, Pretests, CET's and Posttests.

Note: If you are unsure about the answers to Part I of this Posttest, return to it when you have finished working through the entire manual. At that time you should have a thorough understanding of each of these terms.

Part II - Answer True or False

Choose the best answers. Refer back to the page numbers when you need more information about any item.

1. Individualized instruction is designed mainly for the few students in a class whose learning needs are so different that they demand special attention. (p.4) 1._____

2. Individualized instruction is based on the idea that children learn at different rates of speed. (p.4) 2._____

3. In an individualized classroom each student may be working at a different level. (p.4) 3._____

4. IPI is different from other types of individualized instruction. (p.5) 4._____

5. A Student in IPI must complete math prescription at the end of each math class. (p.13) 5._____

6. An IPI aide's only job is to score and record student work. (p.9) 6._____

7. The IPI aide's responsibilities include: 7.

   a. helping students obtain materials. a._____
   b. teaching children. (p.9) b._____
   c. keeping files. (p.9) c._____
   d. keeping track of materials and ordering when needed. (p.9) d._____
   e. prescribing work for students. (p.10) e._____

8. A teacher needs to look only at a student's IPI tests and skillsheets to have enough information to write a prescription. (p.10) 8._____

9. A student is not allowed to score his own STS skillsheets. (p.12) 9._____

10. The Mathematics Prescription Sheet is a communication link between teacher, student and aide. (p.10) 10._____

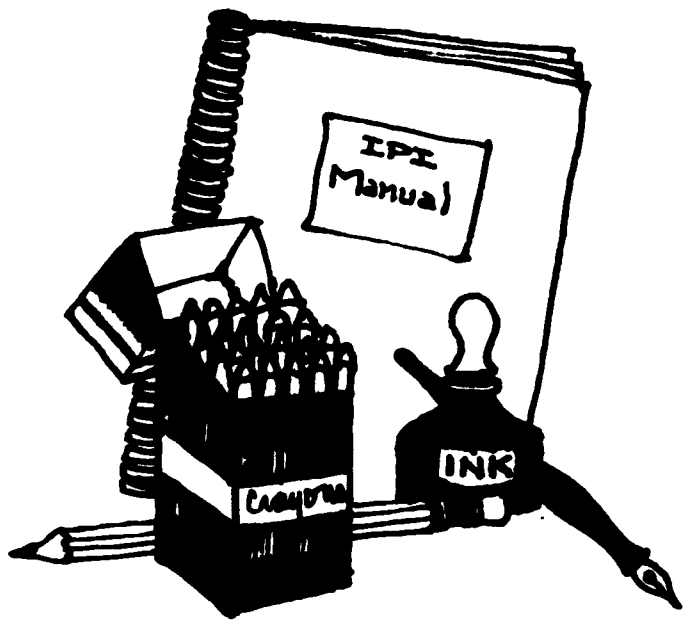
11. The units contain different numbers of skills. (p.15) 11._____

12. A student must work in every skill in the continuum. (p.15) 12._____

13. A student beginning in C Numeration would be expected to have mastered all units in levels A and B. (p.15) 13._____

Answers to Posttest: Part I

1.	b	6.	g
2.	d	7.	e
3.	a	8.	k
4.	c	9.	f
5.	i	10.	h
		11.	j



Answers to Posttest: Part II

1.	False	7a.	True	9.	False
2.	True	b.	False	10.	True
3.	True	c.	True	11.	True
4.	True	d.	True	12.	False
5.	False	e.	False	13.	True
6.	False	8.	False		

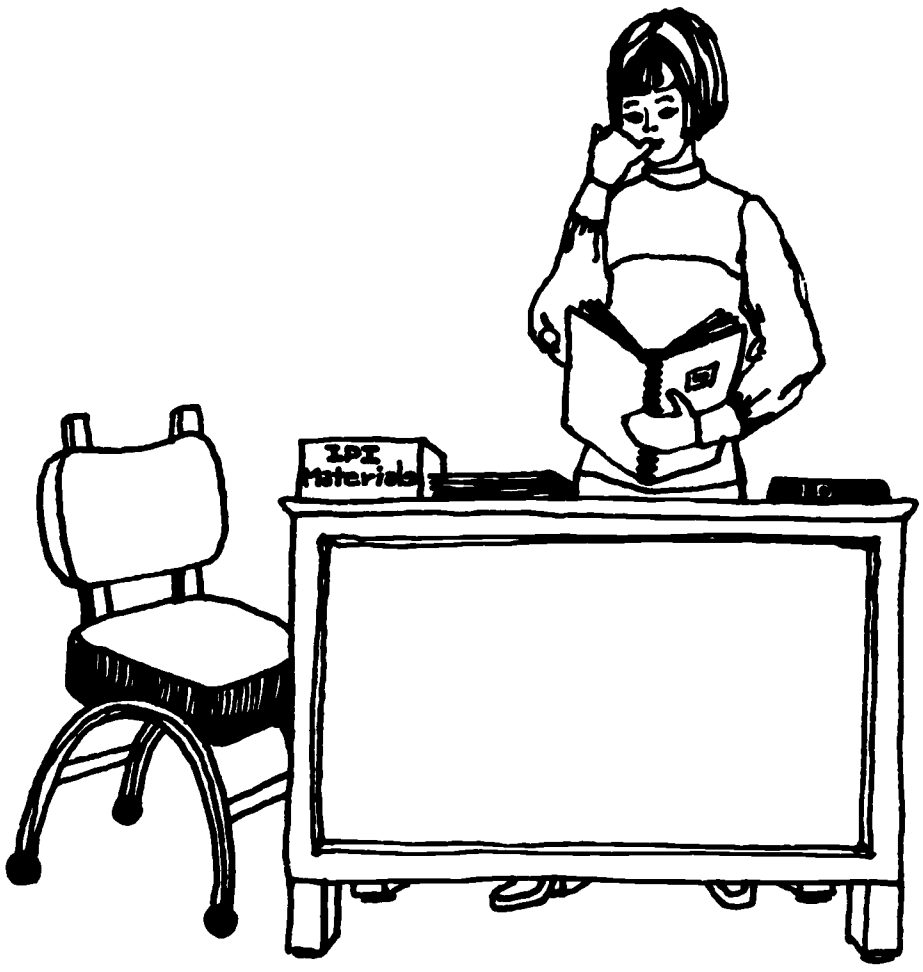
Before looking at the sections that follow, make sure you have your packet of sample materials. Look through each test and the Standard Teaching Sequence (STS) booklet.

As you examine the materials

—Note the labels to see whether they refer to areas, levels, or skills.

—Note that the Curriculum Embedded Tests (CET's) are found in the STS booklet.

—Note the order in which the materials are used.



Most of the remainder of this volume is designed to help you become familiar with th e IPI mathematics materials with which you will be working.

You will learn separately about each of the four kinds of tests and the Standard Teaching Sequence. You will also learn about each of the record sheets that are used in IPI math.

IPI. PLACEMENT TESTS

Placement testing is an important first step in starting a child's instruction "where he is".

This section will answer the following questions about IPI Placement Tests:

What are IPI Placement Tests used for?
How many IPI Placements are there for the Mathematics Continuum?
What does an IPI Placement Tests consist of?
What is the Mathematics Placement Profile used for?
How are IPI Placement Tests recorded?
What is the Student Profile used for?

WHAT ARE IPI PLACEMENT TESTS USED FOR?

A Placement test does just what the name implies: it places a student at the levels (A through H) at which he is ready to work. The test gives only a general, not a detailed, picture of the student's achievement level. It is usually given only at the beginning of the school year. A student must receive a score of between 20% and 80% in each area in order to be placed. He continues being tested until he is placed in each area.

HOW MANY PLACEMENT TESTS ARE THERE FOR THE IPI MATHEMATICS CONTINUUM?

There are six Placement Tests in IPI Mathematics. There is one Placement Test for each of Levels B through G inclusive, but none for the lowest or the highest levels of the continuum. Each test has one page for each of the areas which is included at that level.

WHAT DOES AN IPI PLACEMENT TEST CONSIST OF?

Use the two sample tests on pages 25 and 27 to complete the following sentences:
Cover the area below the dotted line with a card or piece of paper. When you have the answer, move the card to see if you have answered correctly.

1. Both the sample pages are from the Level_____placement test.
The areas tested are_____and_____.

.....

Level C; Fractions and Numeration

2. The name, class, date and student number filled in by_____.

.....

The aide or student

LEVEL AREA AND CODE NO. FOR AREA

Level C
Fractions (08)

lpi MATHEMATICS PLACEMENT TEST

Name Jim Bowen Date 9/17

Class 3 - 107 Number 0812

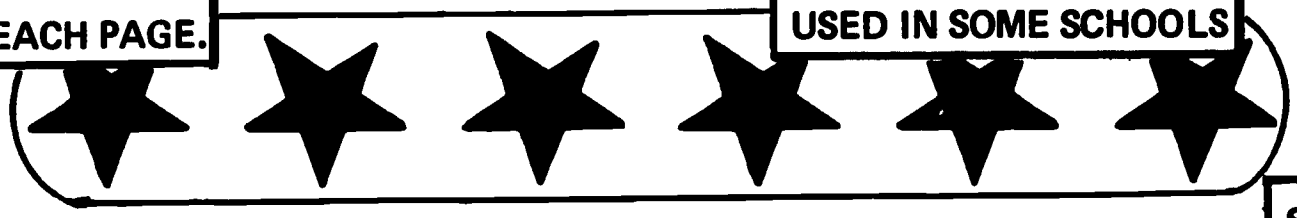
AIDE FILLS IN ON EACH PAGE.

STUDENT NUMBER USED IN SOME SCHOOLS

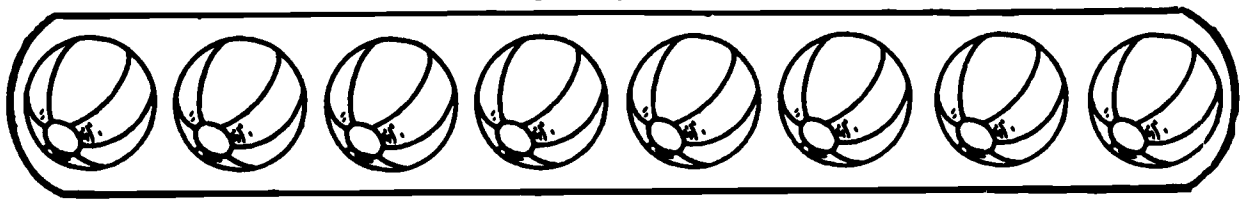
TL. PTS.	
6	100%
NO. OF PTS.	%
5	75
4	50
3	25

SCORE BOX

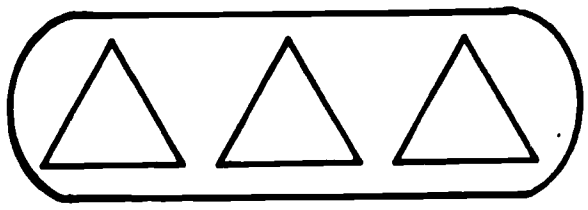
e the set into thirds.



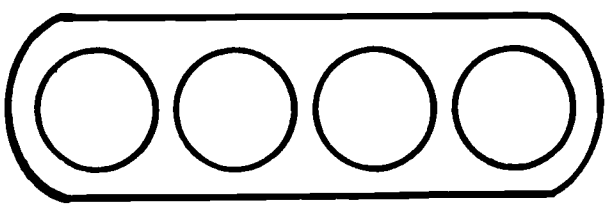
Divide the set into fourths.



Ring $\frac{1}{3}$ of the set.



Ring $\frac{1}{4}$ of the set.



LEVEL , AREA AND CODE NO.

C FRAC (08)

3. According to the answer key in the margin on page 27 each row counts _____even though there are_____or_____items to be filled in for each row. Watch answer keys carefully for special cases such as this when scoring IPI material.

.....

one point; three or four items

4. The _____and_____correct are circled and then recorded on the Mathematics Placement Profile.

.....

Number of points and percentage

5. Only_____answers should be marked. This saves time and makes it easier for the teacher to see what a child needs help with.

.....

.....

wrong answers

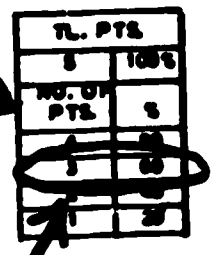
MATHEMATICS PLACEMENT TEST

Level C
Numeration (01)

Name Jim Bowen Date 9/17

Class 3 - 107

BE SURE TO CIRCLE NUMBER OF POINTS SCORED AND PERCENTAGE



Count by tens.

127	137	138	139	140	141

157,167 (1 pt.)

TRANSFER THESE NUMBERS TO MATH PLACEMENT PROFILE

Count by fives.

140	145	150	155	160	165

150,155,160,165 (1 pt.)

Count by twos.

95	97	99	100	102	104

99,101,103,105 (1 pt.)

MARK ONLY WRONG ANSWERS

NOTE DIRECTIONS FOR SCORING

Write the missing numbers.

95	100	105	110	115

105,110,115 (1 pt.)

106	108	110	112	114

110,112,114 (1 pt.)

C NUM (01)

AIDE'S INITIALS

WHAT IS THE MATHEMATICS PLACEMENT PROFILE USED FOR?

The Mathematics Placement Profile sheet is a summary of one student's performance on Placement Tests. When placement testing is completed the profile will show:

a. The date testing began
b. The scores on each test taken
c. The levels at which the student is placed in each area.

It is kept in the student's folder until all placement testing is finished. Then it goes into the student's permanent file.

The profile does not list Special Topics because there are no Placement Tests for this area.

HOW ARE IPI PLACEMENT TESTS RECORDED?

Use the three sample Profile sheets on pages 29,31 and 32 to complete the following sentences:
Cover the area below the dotted line with a card or piece of paper. When you have the answer, move the card to see if you have answered correctly.

Page 29

1. The aide fills in all sections of the sheet except the column labeled _____which is filled in by the teacher.

.....

Placed at level

2. When a student finishes a Placement Test for each._____, the aide transfers the scores from the the _____ to the Placement Profile.

.....

level; score box of the Placement Test

3. There are no units in Multiplication at Levels_____. as indicated by_____.

.....

B and C; shaded areas

IPI MATHEMATICS PLACEMENT PROFILE

STUDENT NAME Mark Steinberg STUDENT NUMBER 5960

SCHOOL STAMP GRADE 2 ROOM 33

AIDE FILLS IN

MATHEMATICS AREA	DATE OF TEST		PLACEMENT LEVELS B–H							PLACED AT LEVEL
			B	C	D	E	F	G	H	
NUMERATION (01)	9/17	MAX. PTS.	10							
		SCORE	9							
		%	90							
PLACE VALUE (02)		MAX. PTS.	5							
		SCORE	1							
		%	20							
ADDITION (03)		MAX. PTS.								
		SCORE								
		%								
SUBTRACTION (04)		MAX. PTS.								
		SCORE								
		%								
ADDITION/ SUBTRACTION (34)		MAX. PTS.	10							
		SCORE	8							
		%	80							
MULTIPLICATION (05)		MAX. PTS.								
		SCORE								
		%								
DIVISION (06)		MAX. PTS.								
		SCORE								
		%								
MULTIPLICATION/ DIVISION (56)		MAX. PTS.								
		SCORE								
		%								
COMBINATION OF PROCESSES (07)		MAX. PTS.								
		SCORE								
		%								
FRACTIONS (08)		MAX. PTS.	5							
		SCORE	2							
		%	40							
MONEY (09)		MAX. PTS.	10							
		SCORE	3							
		%	30							
TIME (10)		MAX. PTS.	3							
		SCORE	2							
		%	67							
SYSTEMS OF MEASUREMENT (11)		MAX. PTS.	5							
		SCORE	3							
		%	60							
GEOMETRY (12)		MAX. PTS.	10							
		SCORE	0							
		%	0							

TRANSFERRED BY AIDE FROM SCORE BOX ON TEST WHEN ONE LEVEL OF TESTING IS COMPLETED.

TEACHER FILLS IN AS STUDENT COMPLETES TESTING AT EACH LEVEL.

SHADED AREAS INDICATE NO UNITS AT THIS LEVEL.

4. On_____the teacher began Joseph Howard's testing by giving him the Level_____Placement Test.

.....

September 21st; Level D

5. The aide scored the Placement Test and filled in the_____, _____, and_____on the Mathematics Placement Profile. "Score" refers to the number of_____items.

.....

Maximum points, score, percentage; correct

6. Joseph was then placed at Level D in_____,_____, and_____because his score was above_____% and below _____% in these areas.

.....

Place Value, Combination of Processes, and Fractions; above 20% and below 80%

7. The_____fills in the appropriate box (see p.29) and decides what further testing is necessary.

.....

the teacher

ipi MATHEMATICS PLACEMENT PROFILE

STUDENT NAME Joseph Howard STUDENT NUMBER 9314

SCHOOL STAMP _____ GRADE 5 ROOM 7

TESTING BEGUN AT THIS LEVEL BECAUSE OF STUDENT'S AGE AND ACHIEVEMENT LEVEL.

DATE TESTING BEGAN.

STUDENT IS TESTED AT ONLY ONE LEVEL AT A TIME

NUMBER OF CORRECT ITEMS

PLACED AT THIS LEVEL BECAUSE SCORE WAS BETWEEN 20% and 80%

MATHEMATICS AREA	DATE OF TEST		PLACEMENT LEVELS B–H							PLACED AT LEVEL
			B	C	D	E	F	G	H	
NUMERATION (01)	9/21	MAX. PTS.			5					D
		SCORE			4					
		%			80					
PLACE VALUE (02)		MAX. PTS.			5					
		SCORE			2					
		%			40					
ADDITION (03)		MAX. PTS.			5					D
		SCORE			4					
		%			80					
SUBTRACTION (04)		MAX. PTS.			5					
		SCORE			5					
		%			100					
ADDITION/ SUBTRACTION (34)		MAX. PTS.								
MULTIPLICATION (05)					10					
					10					
		%			100					
DIVISION (06)		MAX. PTS.			10					
		SCORE			8					
		%			80					
MULTIPLICATION/ DIVISION (56)		MAX. PTS.								
		SCORE								
		%								
COMBINATION OF PROCESSES (07)		MAX. PTS.			5					D
		SCORE			2					
		%			40					
FRACTIONS (08)		MAX. PTS.			5					D
		SCORE			3					
		%			60					
MONEY (09)		MAX. PTS.			5					
		SCORE			4					
		%			80					
TIME (10)		MAX. PTS.			6					
		SCORE			6					
		%			100					
SYSTEMS OF MEASUREMENT (11)		MAX. PTS.			5					
		SCORE			1					
		%			20					
GEOMETRY (12)		MAX. PTS.			4					31
		SCORE			0					
		%			0					

Page 33

The Profile on p. 33 shows Joseph's placement after he has completed all placement testing.

8. Joseph was tested on 3 levels (D,E, and F) in _____, _____and _____because he scored at Levels D and E, that is, he "mastered" these levels.

.....

Addition, Subtraction and Time. 80% or better.

9. A student is given one complete Placement Test at first. He then is given only the pages in which he has not already placed. For example, on page 31, we see that Joseph needed to be tested at Level C in_____ and _____. The aide should then tear out the tests for only those two areas and fill in the student information at the top. This prevents children from mistakenly taking tests which they do not need, and in addition, keeps down waste of materials.

.....

Geometry and Systems of Measurement

10. In Multiplication and Division the student was placed at Level E because_____.

.....

He scored between 20% and 80%

IPI MATHEMATICS PLACEMENT PROFILE

STUDENT NAME Joseph Howard STUDENT NUMBER 9314

SCHOOL STAMP _____ GRADE 5 ROOM 7

MATHEMATICS AREA	DATE OF TEST		B	C	D	E	F	G	H	PLACED AT LEVEL
NUMERATION (01)	9/2	MAX. PTS.			5	5				E
		SCORE			4	0				
		%			80	0				
PLACE VALUE (02)		MAX. PTS.			5					D
		SCORE			2					
		%			40					
ADDITION (03)		MAX. PTS.			5	5	5			F
		SCORE			4	5	3			
		%			80	100	60			
SUBTRACTION (04)		MAX. PTS.			5	5	5			F
		SCORE			5	4	3			
		%			100	80	60			
ADDITION/ SUBTRACTION (34)		MAX. PTS.								-
		SCORE								
		%								
MULTIPLICATION (05)		MAX. PTS.			10	5				E
		SCORE			10	3				
		%			100	60				
DIVISION (06)		MAX. PTS.			10	5				E
		SCORE			8	3				
		%			80	60				
MULTIPLICATION/ DIVISION (56)		MAX. PTS.								-
		SCORE								
		%								
COMBINATION OF PROCESSES (07)		MAX. PTS.			5					D
		SCORE			2					
		%			40					
FRACTIONS (08)		MAX. PTS.			5					D
		SCORE			3					
		%			60					
MONEY (09)		MAX. PTS.			5	5				F
		SCORE			4	4				
		%			80	80				
TIME (10)		MAX. PTS.			6	5	5			F
		SCORE			6	4	1			
		%			100	80	20			
SYSTEMS OF MEASUREMENT (11)		MAX. PTS.		5	5					D
		SCORE		4	1					
		%		80	20					
GEOMETRY (12)		MAX. PTS.		4	4					C
		SCORE		3	0					
		%		75	0					

TESTING WAS BEGUN AT LEVEL D

TESTING CONTINUED AT HIGHER LEVELS WHERE STUDENT SCORED 80% or BETTER.

TESTING CONTINUED AT LOWER LEVELS WHERE STUDENT SCORED 20% or LESS.

WHAT IS THE STUDENT PROFILE USED FOR?

The form on the opposite page is the Student Profile which is used to summarize the results of each student's placement tests after he has been placed in all areas, and to indicate at what level he should begin work in each area.

This form is filled out by the aide from the information on the Placement Profile merely by marking off all units in which Joseph no longer needs work. The Student Profile is kept in the student's folder and filled in with an X and the date each time the student masters a unit. (see p. 107)

ipi STUDENT PROFILE

Name Joseph Howard Grade 5 Room 7

THIS INFORMATION HAS BEEN TAKEN FROM JOSEPH'S PLACEMENT PROFILE BY THE AIDE.

STUDENT WILL PROBABLY BEGIN WORK HERE, AS IT IS THE LOWEST UNIT NOT YET MASTERED.

X'S DENOTE MASTERY. X OUT UNITS UP TO THE ONE ON WHICH THE STUDENT WILL BEGIN.

	MATHEMATICS AREA	NUMERATION (01)	PLACE VALUE (02)	ADDITIO	SUBTRAC	ADDITIO SUBTRAC	MULTIPL	DIVISION (06)	MULTIPLICATION/ DIVISION (56)	COMBINATION OF PROCESSES (07)	FRACTIONS (08)	MONEY (09)	TIME (10)	SYSTEMS OF MEASUREMENT (11)	GEOMETRY (12)	SPECIAL TOPICS (13)
H																
G																
F																
E				X	X							X	X			
D		X		X	X		X	X				X	X			
C		X	X	X	X					X	X	X	X	X		
B		X	X			X					X	X	X	X	X	
A		X									X					

Check (X) the box to indicate mastery of unit.

POSTTEST ON PLACEMENT TESTS

Choose the best answers. Refer back to the page numbers when you need more information about an item.

1. Placement tests are usually given (p.24)
   a. when needed throughout the school year
   b. only at the beginning of the school year 1._____

2. There are no placement tests for (p.24)
   a. Level A
   b. Level H
   c. Both A and H 2._____

3. IPI Placement tests give a_____picture of a student's achievement (p.23)
   a. thorough and detailed
   b. general 3._____

4. Which of the following is <u>not</u> done by the aide on a Placement Test? (pp,25,27,30)
   a. Filling in student information in the blanks at the top of each page that is to be used by the student.
   b. Marking correct answers
   c. Circling number correct and percentage for transfer to Placement Profile. 4._____

5. While Placement testing is taking place the student's scores and placement level are recorded on (pp.28-32)_____.
   a. Student Profile
   b. Math Prescription Sheet
   c. Math Placement Profile 5._____

6. After Placement testing is completed his placement level is recorded on (p.34)_____.
   a. Student Profile
   b. Math Prescription Sheet
   c. Math Placement Profile 6._____

7. A student is usually given the next lower placement test if he obtains (p.32)
   a. 79% or lower
   b. 20% or lower

7._____

8. A student is usually given the hext higher placement test if he obtains (p.32)
   a. 80% or above
   b. 21% or above

8._____

9. The <u>teacher</u> is <u>not</u> responsible for (p.29-31)
   a. Deciding which level to begin Placement testing.
   b. Filling in all information on Placement Profile
   c. Making decisions about the units in which a student needs further testing.
   d. Filling in <u>Placed at Level</u> information on the Placement Profile.

9._____

10. When a student needs further testing at a higher or lower level, he (p.30-32)
   a. Must take the entire test
   b. Takes only the pages of the test which cover the areas he needs at that level.

10._____

11. The_____is kept in the student's folder throughout the year and added to as he masters each unit. (p.34)
   a. Student Profile
   b. Placement Profile

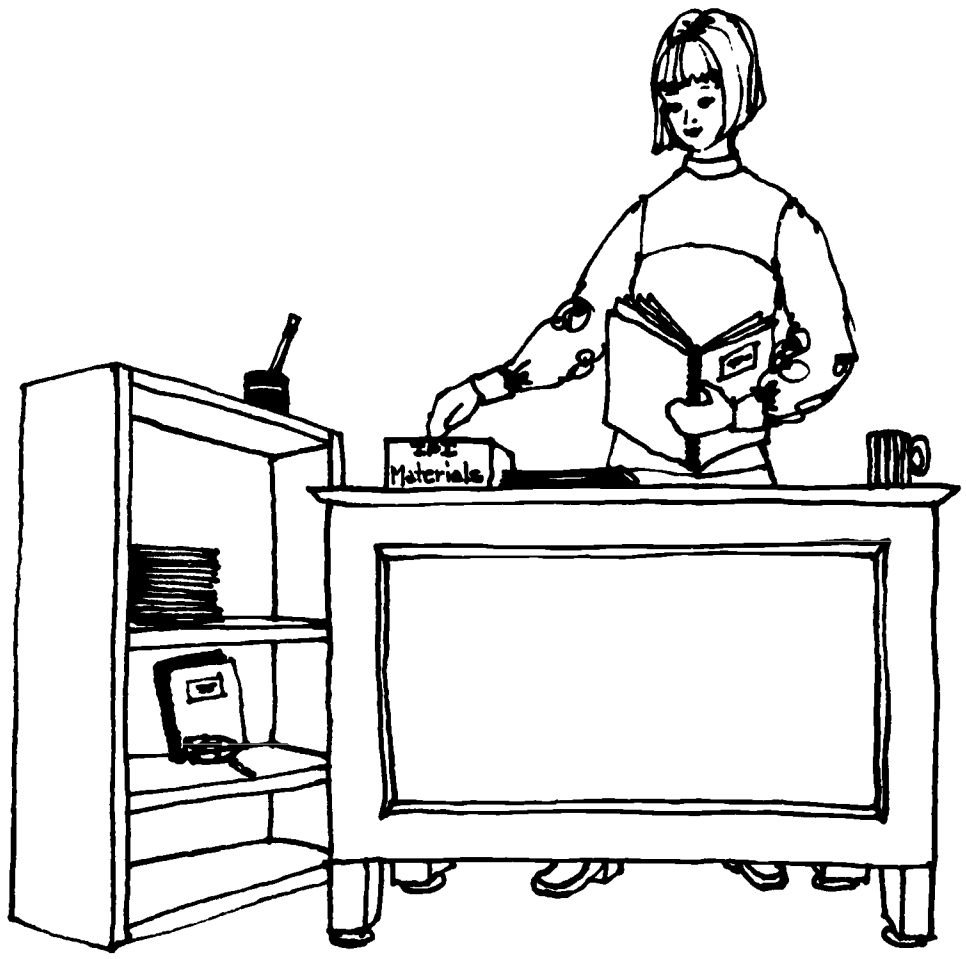
11._____

12. The usual point of Mastery for Placement Tests <u>only</u> is (p.32)
   a. 85% or above
   b. 80% or above

12._____

ANSWERS TO POSTTEST

1. b	5. c	9. b
2. c	6. a	10. b
3. b	7. b	11. a
4. b	8. a	



Now go back to your packet of IPI materials. Take the Placement Test for one complete level (for example Level D). Score the test and record the scores on the Mathematics Placement Profile.

A note of caution: Remember that mathematics has changed a great deal in the last few years, so don't be discouraged if there are some items to which you do not know the answers.

IPI PRETESTS

IPI Pretests are the second step in making sure a student will work only on the skills which he needs to learn.
This section will answer the following questions about IPI Pretests:

What are IPI Pretests used for?
How many IPI Pretests are there for the IPI Mathematics Continuum?
What does an IPI Pretest consist of?
What does the Pretest answer key consist of?
What is the Mathematics Prescription Sheet used for?
How are IPI Pretests recorded?

WHAT ARE IPI PRETESTS USED FOR?

A pretest is one which comes before material has been taught. It serves both as a preview of what is coming and also as a way of finding out what a student already knows. The student is not expected to know the answers to the questions, but occasionally he does know some of the information.

IPI Pretests are used to measure the mastery of <u>all the skills</u> in one particular unit of the Continuum. A Pretest for a single unit is taken by the student after placement testing when he is ready to <u>enter the unit</u>. The scores tell the teacher which skill(s) the student has yet to learn within the unit.

HOW MANY IPI PRETESTS ARE THERE FOR THE MATHEMATICS CONTINUUM?

There is a Pretest for every unit in the Continuum except for Level A (Numeration, Addition, Fractions)

WHAT DOES AN IPI PRETEST CONSIST OF?

Use the sample Pretest on pages 41-46 and the answer keys on pages 47-49 to complete the following sentences:
Cover the area below the dotted line with a card or piece of paper. When you have the answer, move the card to see if you have answered correctly.

1. The Pretest on the following pages is for the unit_____.

.....

C-Numeration

2. Remember that each unit in the continuum covers a different number of skills (see P.15, fig.2). There is a section in every pretest for each skill in a unit. This unit contains_____skills.

.....

8 skills

3. In the C-Numeration Pretsts skill 1 has a possible score___points. Skill 2 has a possible score of____points.

.....

9 points; 4 points.

4. Jim Bowen had____items correct in skill 8; therefore his score was ____points and____%.

.....

3 items; 3 points; 60%

5. "C.D." stands for_____when written by the student next to an item not filled in.

.....

Can't do

6. When students are asked to write out answers the aide should_____ _____in deciding how to score incorrect spelling. (p.46)

.....

Consult with the teacher

7. The covers of the Pretest answer keys (p.47) are labeled according to the _____. The black squares indicate the_____ which are included at that level.

.....

Level; Units (or areas)

ipi MATHEMATICS PRE-TEST

Name Lillian Ching Date 9/26/6972

Class 2

LEVEL C, NUMERATION (01)

SKILL 1

TL. PTS.	
9	100%
NO. OF PTS.	%
8	89
7	78
6	67
5	56
4	44
3	33
2	22
1	11

Numeration: Directs the student to read, write, count, UNIT LABEL to sequence numbers to 200; and to skip count by 2's, 5's, and 10's to 200 from any starting point.

SKILL NUMBER

Fill in the empty boxes. Count down in each column.

NOTE THAT THE STUDENT IS ASKED TO COUNT DOWN EACH COLUMN. A COLUMN IS VERTICAL. A ROW IS HORIZONTAL.

129	137	145	153	161	169	177	185	193
130	138	146	154	162	170	178	186	194
131	139	147	155	163	171	179	187	195
132	140	148	156	164	172	180	188	196
133	141	149	157	165	173	181	189	197
134	142	150	158	166	174	182	190	198
135	143	151	159	167	175	183	191	199
136	144	152	160	168	176	184	192	200

IT IS USEFUL FOR AIDES TO INITIAL ALL WORK.

SKILL 2

TL PTS.	
5	100%
NO OF PTS.	
4	80
3	60
2	40
1	20

In each row, fill in the numbers.

10	11	12	13	14
122	123	124	125	126
97	98	99	9X	9X
179	180	181	182	183
195	196	197	198	199

STUDENTS ARE OFTEN TOLD TO WRITE C.D. FOR "CAN'T DO", SO TEACHER WILL KNOW IT HAS NOT BEEN SKIPPED BY MISTAKE.

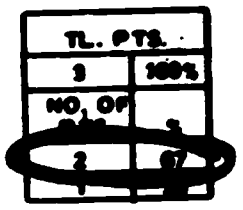
SKILL 3

TL. PTS.	
9	100%
NO. OF PTS.	%
8	89
7	78
6	67
5	56
4	44
3	33
2	22
1	11

Fill in the blanks to show wha
just after, just before, or bet

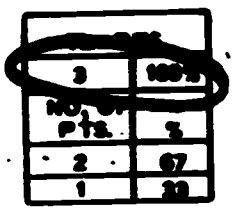
Just after	Just before	Between
47, 48	X C.D. ., 27	56, 57 , 58
118, 119	X , 124	109, X19 , 111
193, 194	X , 140	163, 164 , 165

SKILL 4



THERE IS A TEST FOR EACH SKILL IN EACH UNIT.

SKILL 5



. In each row, count by 10's.

80	90	91	~~92~~	93
152	162	172	182	192
109	119	129	139	149

In each row, count by 5's.

125	130	135	140	145
85	90	95	100	105
160	165	170	175	180

SKILL 6

TL. PTS.	
6	100%
NO. OF PTS.	%
4	67
2	33
1	17

In each row, count by 2's.

64	66	68	70	72
97	99	100	102	104
140	142	144	146	148

SCORES TRANSFERRED FROM HERE TO THE PRESCRIPTION SHEET

Ring the odd numbers.

3	101	142	100
2	139	200	186

TL. PTS.	
S	100%
NO. OF PTS.	%
4	80
3	60
2	40
1	20

Fill in the numbers in the row. Then, in the circle, write the number you counted by.

140	145	150	155	160	's
96	98	100	102	104	's
80	90	100	101	102	's
0	5	10	15	20	's
102	104	108	110	112	's

SKILL 8

TL. PTS.	
5	100%
NO. OF PTS.	%
4	80
3	60
2	40
1	20

Write the word names for the numbers.

INCORRECT SPELLING COUNTED WRONG BECAUSE THAT IS THE OBJECTIVE IN THIS SKILL.

0 zor

2 to X

INCORRECT SPELLING NOT ALWAYS WRONG. CHECK WITH TEACHER.

4 for X

7 sven X

9 nine

ipi MATHEMATICS

ANSWER KEYS

LEVEL C

THIS KEY CONTAINS ANSWERS FOR ALL PRETESTS AT THIS LEVEL.

01
02
03
04
07
08
09
10
11
12
13

Pre-Tests

REVISED DEVELOPMENTAL EDITION

- *based upon materials developed by the*

IPI Project Staff

LEARNING RESEARCH AND DEVELOPMENT

University of Pittsburgh

THERE ARE NO UNITS FOR MULTIPLICATION OR DIVISION AT LEVEL C

- *distributed by*

RESEARCH FOR BETTER SCHOOLS, INC.

Pre-Test, Level C, Numeration (01)

lpi MATHEMATICS PRE-TEST

Name _____ Date _____

Class _____ Number _____

LEVEL C, NUMERATION (01)

Numeration: Directs the student to read, write, count, and put into sequence numbers to 200; and to skip count by 2's, 5's, and 10's to 200 from any starting point.

SKILL 1

Fill in the empty boxes. Count down in each column.

129	137	145	153	161	169	177	185	193
130	138	146	154	162	170	178	186	194
131	139	147	155	163	171	179	187	195
132	140	148	156	164	172	180		
133	141	149	157	165	173	181		
134	142	150	158	166	174	182	190	198
135	143	151	159	167	175	183	191	199
136	144	152	160	168	176	184	192	200

(1 pt. per column)

C NUMERATION (01) PRE-TEST

SKILL 2

In each row, fill in the numbers.

10	11	12	13	14
122	123	124	125	126
97	98	99	100	101
179	180	181	182	183
195	196	197	198	199

(1 pt. per row)

SKILL 3

Fill in the blanks to show what numbers come just before, or between.

	Just before	Between
47, 48	26 , 27	56, 57 , 58
118, 119	123 , 124	109, 110 , 111
193, 194	139 , 140	163, 164 , 165

A COLUMN IS VERTICAL.
A ROW IS HORIZONTAL.

EACH ITEM IS SCORED HERE.

C NUMERATION (01) PR

SKILL 4

In each row, count by 10's.

80	90	100	110	120
152	162	172	182	192
109	119	129	139	149

(1 pt. per row)

NOTE SPECIAL DIRECTIONS

SKILL 5

In each row, count by 5's.

125	130	135	140	145
85	90	95	100	105
160	165	170	175	180

(1 pt. per row)

C NUMERATION (01) PRE-TEST

SKILL 6

In each row, count by 2's.

64	66	68	70	72
97	99	101	103	105
140	142	144	146	148

(1 pt. per row)

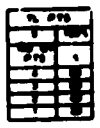
Ring the odd numbers.

(3)	(101)	142	100
2	(139)	200	186

Pre-Test, Level C, Numeration (01)

C NUMERATION (01) PRE-TEST

SKILL 7



Fill in the numbers in the row. Then, in the circle, write the number you counted by.

140	145	150	155	160	5's
96	98	100	102	104	2's
80	90	100	110	120	10's
0	5	10	15	20	5's
102	104	106	108	110	2's

C NUMERATION (01) PRE-TEST

SKILL 8

Write the word names for the numbers.

0 zero

2 two

4 four

7 seven

9 nine

WHAT IS THE MATHEMATICS PRESCRIPTION SHEET USED FOR?

The Mathematics Prescription Sheet is used more than any other record sheet in IPI, and is somewhat more complicated than the others. It is used to record everything a student does after Placement testing is completed.

Each student receives a new Prescription Sheet for <u>each unit</u> on which he works. Since he takes a Pretest at the beginning of each unit, his Pretest scores are the first thing to be recorded.

The blank Prescription Sheet at right has been divided into four sections to show you the important parts which you will be concerned with.

Section 1 is used to record Pretest and Posttest scores (see p.53) (p.103). <u>The aide</u> records these scores.

Section 2 is used to record the student's daily work in the STS booklets.

Section 2A is filled in by the teacher as she prescribes work for the student (see p.59). The aide must be aware of what the teacher has prescribed for the student in order to record correctly and to make sure the student is doing the work which has been assigned. Therefore, the aide will be concerned with Section 2A, even though she does not write in that section.

Section 2B is filled in by the aide (or students who correct their own work) to record scores from skill sheets. (see p.80)

Section 3 is used by the aide to record scores from Curriculum Embedded Tests (CET's) (see p.92)

ipi MATHEMATICS PRESCRIPTION SHEET

MATHEMATICS

STUDENT NAME ______________________ STUDENT NUMBER ______________

SCHOOL STAMP ____________

GRADE ________ ROOM ________ UNIT ______________________

UNIT DATES	
UNIT BEGAN	
UNIT ENDED	
DAYS WORKED	

SKILL BOOKLETS								CURRICULUM TEST			
								PART 1		PART 2	
DATE PRES.	PRES. INIT.	SKILL NO.	PAGE NO.	INST. TECH CODES	INSTRUCTIONAL NOTES	TOTAL POINTS	NUMBER CORRECT	NO. OF POINTS	%	NO. OF POINTS	%
					2				3		
←			A		→	← B	→				

INSTRUCTIONAL TECHNIQUES	
CODE	SETTING
01	Teacher Tutor
02	Peer Tutor
03	Small Group
04	Large Group
05	Seminar
07	Independent Study
11	Tutor of Others
MATERIALS	
06	Curr. Texts
08	Film Strips
09	Records/Tapes
10	Research
12	Manipulative Devices

PRE AND POST TEST SCORES										
SKILL NUMBER	MAX POINTS PER SKILL	PRE SCORE	%	POST SCORE	%	POST SCORE	%	POST SCORE	%
				1					
DATES									

P1 – 1968

HOW ARE PRETESTS RECORDED?

On the sample page opposite, certain parts of the Prescription Sheet have been isolated so they can be read more easily. Use this page to complete the following sentences:

1. This Mathematics Prescription Sheet was filled out by the aide when Jim Bowen was beginning work in the unit_____.

.....

Level C - Fractions

2. The skill numbers must be written in each time by the aide because units have different numbers of skills. This unit contains_____ skills.

.....

4 skills

3. The teacher will prescribe work for Jim in skills_____ because he scored below_____ in those skills.

.....

1, 3, and 4; 85%

4. We say that Jim has_____skill 2 because he scored_____ _____. He will probably not have work prescribed for him in this skill.

.....

Mastered; 85% or above

2

ipi MATHEMATICS PRESCRIPTION SHEET

STUDENT NAME Jim Bowen STUDENT NUMBER 0812

SCHOOL STAMP _____

GRADE 3 ROOM 107 UNIT C-Frac.

UNIT DATES	
UNIT BEGAN	
UNIT ENDED	
DAYS WORKED	

AIDE FILLS IN THIS INFORMATION AFTER SCORING JIM'S PRETEST IN LEVEL C-FRACTIONS.

AIDE OR TEACHER WILL CIRCLE SKILLS IN WHICH JIM NEEDS WORK.

PRE AND POST TEST SCORES									
SKILL NUMBER	MAX POINTS PER SKILL	PRE SCORE	%	POST SCORE	%	POST SCORE	%	POST SCORE	%
(1)	4	1	25						
2	7	6	85						
(3)	5	3	60						
(4)	5	2	40						
DATES		7/26							

MASTERY ON PRETESTS IS 85% OR MORE

POSTTEST ON PRETESTS

Choose the best answers. Refer back to the page numbers when you need more information about any item.

1. IPI Pretests are used to find out (p.38)
   a. a student's general level of achievement
   b. a student's mastery of specific skills in one unit. 1._____

2. There is a Pretest for (p.38)
   a. every unit in the IPI continuum
   b. every level in the IPI continuum 2._____

3. Each unit covers _____ number of skills. (p.39)
   a. the same
   b. a different 3._____

4. Pretest scores are recorded on (pp.50,52)
   a. Student Profile
   b. Mathematics Placement Profile
   c. Mathematics Prescription Sheet 4._____

5. According to the way the Prescription on page 51 has been divided, the aide does not write in (pp.50,51)
   a. Section 1, Pre and Posttest scores
   b. Section 2A, Skill booklets
   c. Section 2B, Skill booklets
   d. Section 3, Curriculum Test 5._____

6. The section which is referred to above is not written in by the aide because (Choose the incorrect answer) (p.50)

   a. No scores are recorded in that section.
   b. It is used for prescriptions and the aide does not prescribe work.
   c. The aide is not concerned with skill booklets. 6._____

A new Prescription sheet is used (p.50)

   a. only when one sheet is filled up.
   b. each time a student begins a new unit. 7._____

Jennifer Lubec took the Pretest for D-Money which is recorded at right. Using the information given, fill in the blanks of the following sentences:

PRE AND PC

SKILL NUMBER	MAX POINTS PER SKILL	PRE SCORE	%
1	4	4	100
2	6	4	67
3	5	1	20
4	8	7	88
5	5	0	0
6	5	2	40

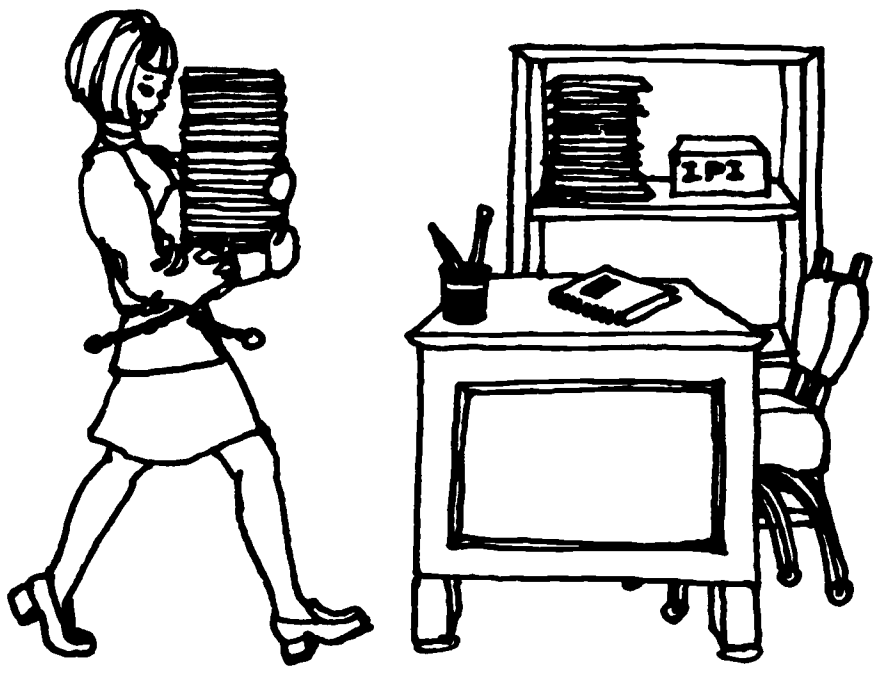
8. Jennifer has mastered skill number (s)_____ as indicated by score (s) of_____ on (p.52,53)

9. The teacher or the aide would circle skill number (s)_____ because the score (s)_____(p.52,53)

10. The teacher will probably not prescribe work for Jennifer in skill(s) _____. (p.50,51)

ANSWERS TO POSTTEST

1. b
2. a
3. b
4. c
5. c
6. c
7. b
8. 1 and 4; 85% or above
9. 2, 3, 5 and 6; are below 85%
10. 1 and 4



Now go back to your packet of IPI materials. Take the pretest, score it and record the scores on the Prescription form.

STANDARD TEACHING SEQUENCE

The Standard Teaching Sequence (STS) booklets are the main teaching tool of IPI. This section will answer the following questions:

- What are the Standard Teaching Sequence Booklets used for?
- How many STS booklets are there for the IPI Mathematics Continuum?
- How is work prescribed for an STS booklet?
- What does an STS booklet consist of?
- How are the STS scores recorded?

WHAT ARE STANDARD TEACHING SEQUENCE BOOKLETS USED FOR?

The STS booklets are used more than any of the other IPI material. Each booklet contains material on <u>one skill</u> in a unit. The booklets provide materials for learning a new skill and for practicing what has been learned.

HOW MANY STS BOOKLETS ARE THERE FOR THE IPI MATHEMATICS CONTINUUM?

There is an STS booklet for every <u>skill</u> in every unit except for a few oral skills at Level A.

HOW IS WORK PRESCRIBED FOR AN STS BOOKLET?

After a student's Pretest in a unit has been scored by the aide, the teacher analyzes it to decide which STS booklets she will prescribe for him and which pages within the booklets she will prescribe.

On the next few pages you will find an example of a student's first prescription and some sample pages from the STS booklet in which the student worked. Complete the following sentences using information from these pages.

Page 59

1. Jim Bowen's prescription sheet shows that he is working in the unit _____.

.....

C-Fractions

2. The teacher's first prescription for Jim is in Skill_____as indicated by his score in the_____.

.....

Skill 1; Pretest

3. The teacher prescribed the Student Page and then only pages_____ in the STS booklet.

.....

1, 2, 4, 5, 9.

ipi MATHEMATICS PRESCRIPTION SHEET

STUDENT NAME Jim Bowen STUDENT NUMBER 0812

SCHOOL STAMP _____

GRADE 3 ROOM 107 UNIT C-FRAC

UNIT DATES	
UNIT BEGAN	9/26
UNIT ENDED	
DAYS WORKED	

DATE OF PRETEST

SKILL BOOKLETS

DATE PRES.	PRES. INIT.	SKILL NO.	PAGE NO.	INST. TECH CODES	INSTRUCTIONAL NOTES	TOTAL POINTS	NUMBER CORRECT
10/2	EP	1	Read Student Page				
			1	01		3	
			2	12			
			4				
			5				
			9				

CURRICULUM TEST

PART 2			
NO. OF POINTS	%	NO. OF POINTS	%

JIM'S FIRST PRESCRIPTION FOR THIS UNIT

PRETEST SHOWED THAT JIM NEEDED WORK IN SKILL 1.

PRE AND POST TEST SCORES

SKILL NUMBER	MAX POINTS PER SKILL	PRE SCORE	%	POST SCORE	%	POST SCORE	%	POST SCORE	%
1	4	1	25						
2	7	6	85						
3	5	3	60						
4	5	2	40						
DATES		9/26							

WHAT DOES AN STS BOOKLET CONSIST OF?

Complete the following sentences using information from pages 61-76:

1. Each Standard Teaching Sequence (STS) booklet covers_____
_____.

.....

only one skill

2. The Student Page gives examples of the kinds of items the student will find in the booklet. It is found_____
and the answers are checked by_____.

.....

at the beginning of each booklet; the student

3. Scores are transferred from the STS booklet to the_____.

.....

Prescription Sheet

4. Most pages have_____where answers are given with dotted lines. The aide should bake sure that the student does/does not go over these answers. She does/does not include them in the score.

.....

Sample items; does go over them and does include them in the score.

5. It is important that the answer Keys always be used for scoring both tests and STS booklets because_____.

.....

it is faster and more accurate

6. There are_____Curriculum Embedded tests (CET's) in each STS booklet.

.....

two

7. Scores for CET's are found_____so that students who self-correct STS booklets will not have test answers in front of them.

.....

in seperate answer keys

ipi
MATHEMATICS

Name Jim Bowen Date 10/2

Class 3 Number 0812

STUDENT FILLS IN NAME

AIDE FILLS IN OTHER INFORMATION

Standard Teaching Sequence

REVISED DEVELOPMENTAL EDITION

- *based upon materials developed by the*

IPI Project Staff

LEARNING RESEARCH AND DEVELOPMENT CENTER

University of Pittsburgh

- *distributed by*

RESEARCH FOR BETTER SCHOOLS, INC.

- *written and revised by*

the staff of Appleton-Century-Crofts

under the direction of Jerome D. Kaplan

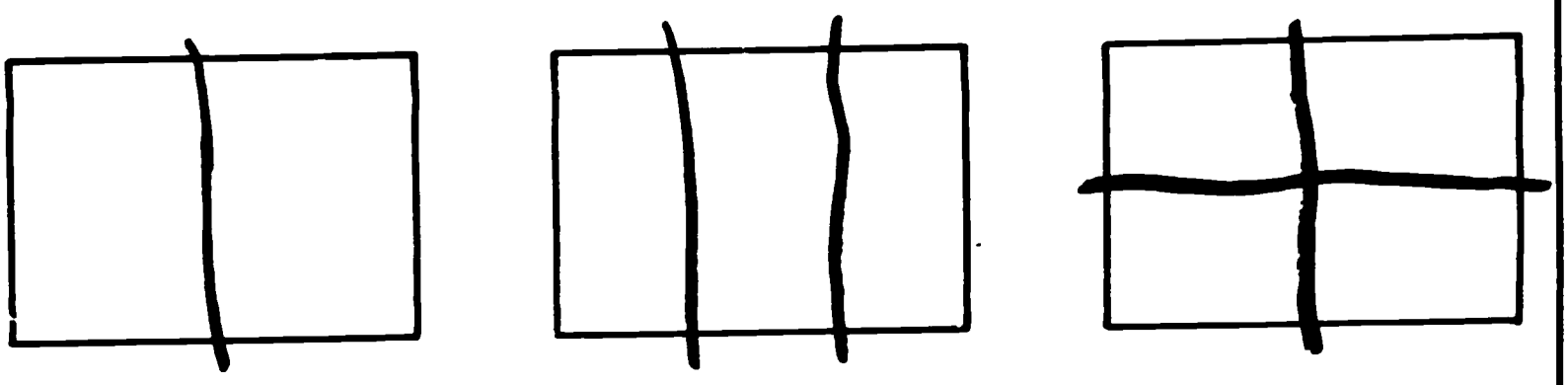
EACH BOOKLET COVERS ONLY ONE SKILL.

INDIVIDUALLY PRESCRIBED INSTRUCTION

LEVEL C, FRACTIONS (08), SKILL 1

TO THE STUDENT

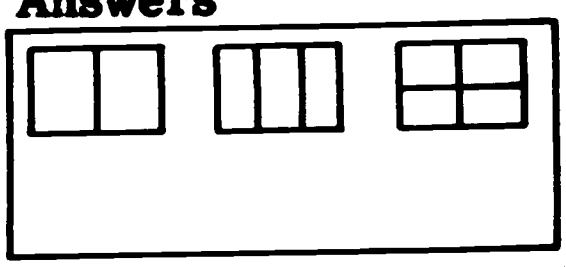
Divide the first box into halves, the second box into thirds and the last box into fourths.



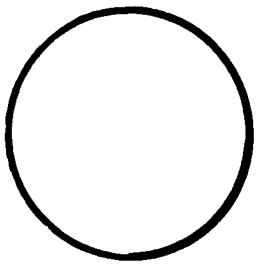
THERE IS A STUDENT PAGE AT THE BEGINNING OF EACH STS BOOKLET

STUDENT CHECKS HIS OWN ANSWERS ON STUDENT PAGE.

Answers

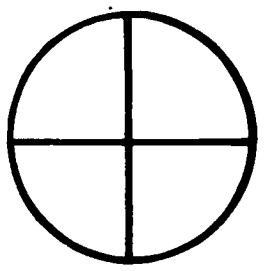


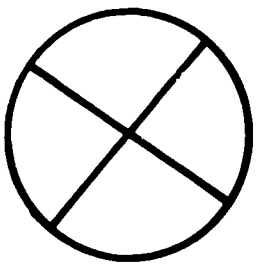
Fill in the blanks.



This is a circle.

This circle is divided into 4 **equal parts.**





This circle is divided into how many equal parts? 4

When an object is divided into 4 equal parts, we say the object is divided into fourths.

This box is divided into how many equal parts? 4

SCORES TRANSFERRED FROM HERE TO PRESCRIPTION SHEET

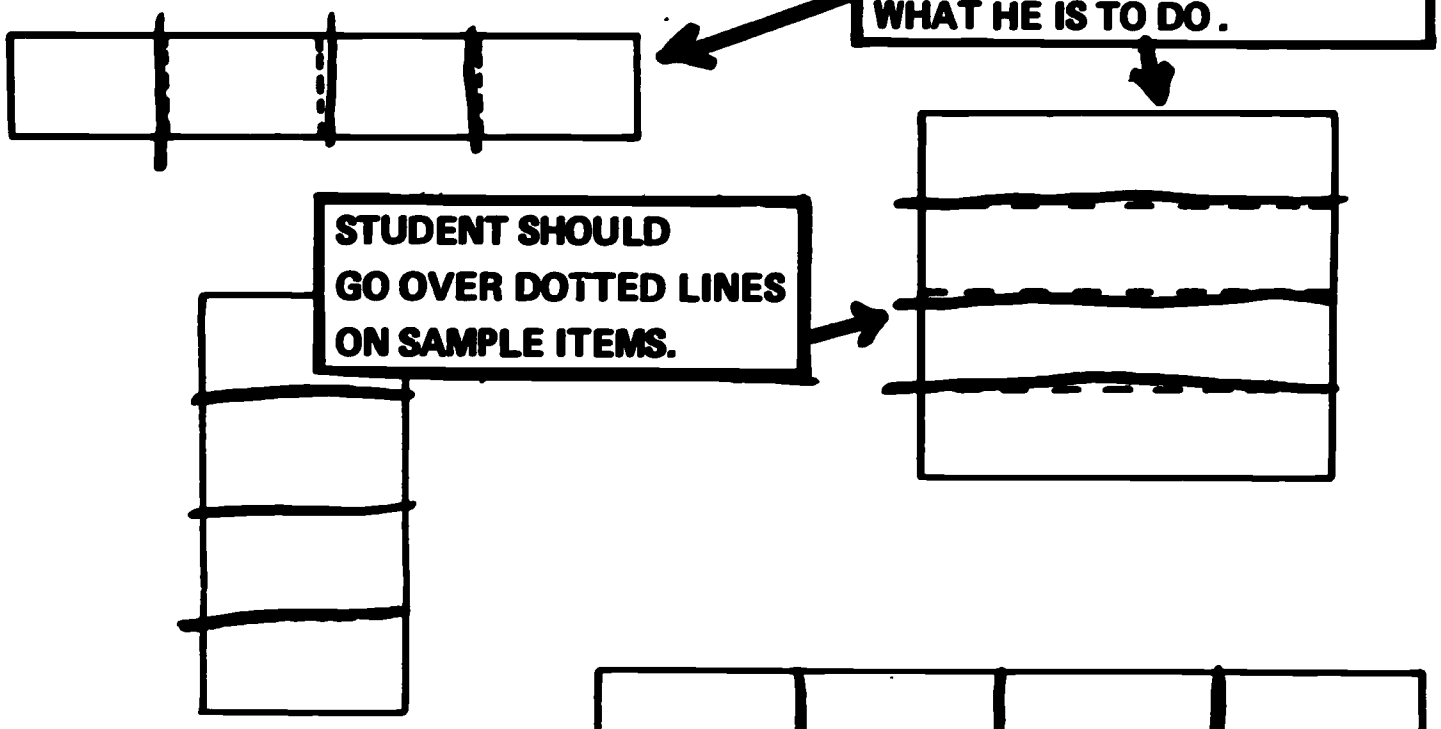
THIS IDENTIFICATION MATCHES THAT ON ANSWER KEY PAGE. (SEE P. 73).

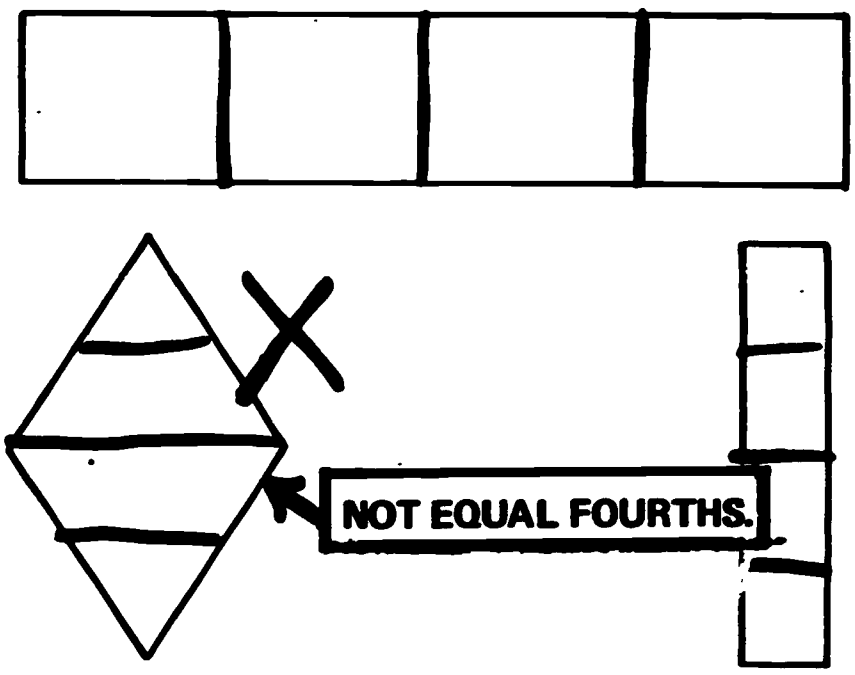
TOTAL POINTS	NUMBER CORRECT
3	3

LEVEL	UNIT	SKILL	PAGE
C	08	1	1

When an object is divided into 4 equal parts, it is divided into fourths.

Divide the objects below into fourths.





All these objects are now divided into equal parts.

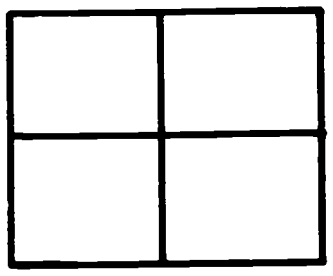
They are four X

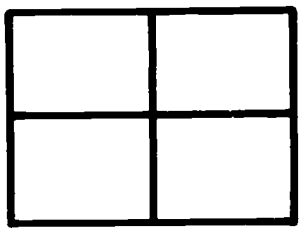
TOTAL POINTS INCLUDE SAMPLE ITEMS.

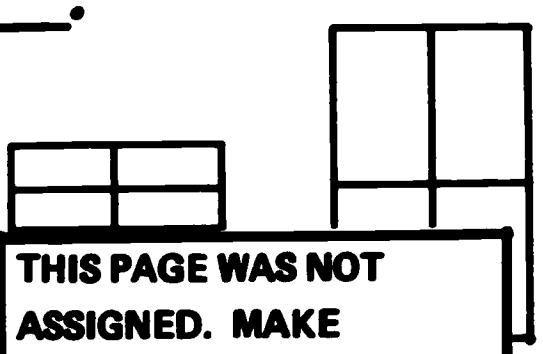
TOTAL POINTS	NUMBER CORRECT
7	5

LEVEL	UNIT	SKILL	PAGE
C	08	1	2

These boxes are divided into _____.





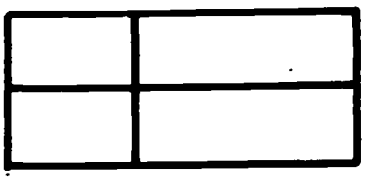


THIS PAGE WAS NOT ASSIGNED. MAKE SURE STUDENT DOES ONLY PRESCRIBED PAGES

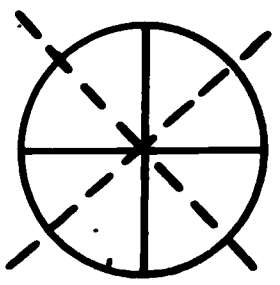
This box is not divided into fourths. Why not?

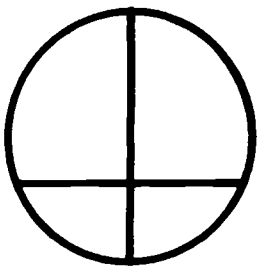
_____

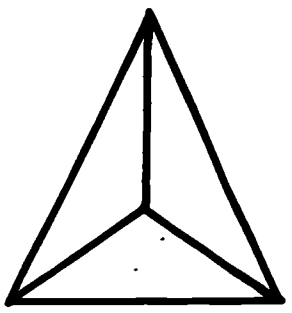
_____

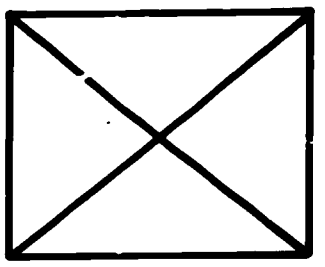


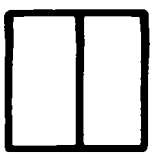
Put an X on the figures that are divided into fourths.

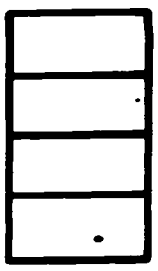


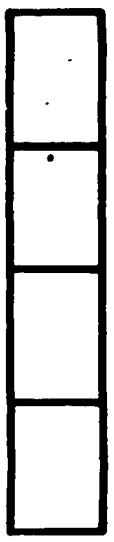


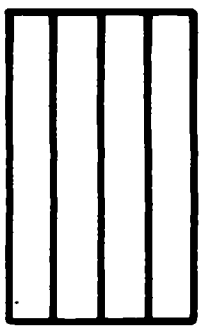


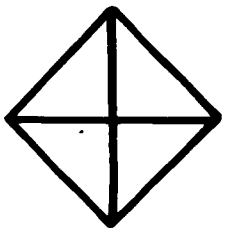










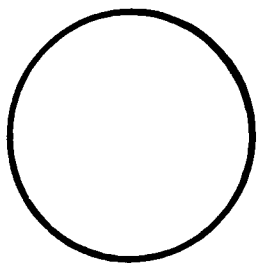


Practice, 11.

TOTAL POINTS	NUMBER CORRECT
12	

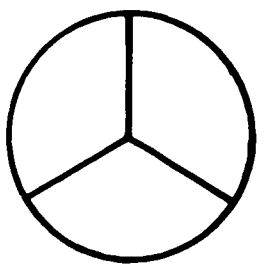
LEVEL	UNIT	SKILL	PAGE
C	08	1	3

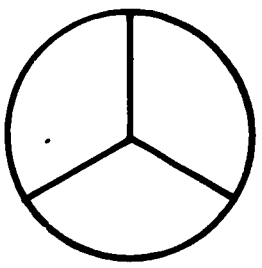
Fill in the blanks.



This is a circle.

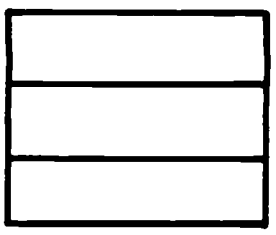
This circle is divided into 3 **equal parts.**





How many equal parts is this circle divided into? 3

When an object is divided into 3 equal parts, we say the object is divided into thirds.



This box is divided into 3 **equal parts.**

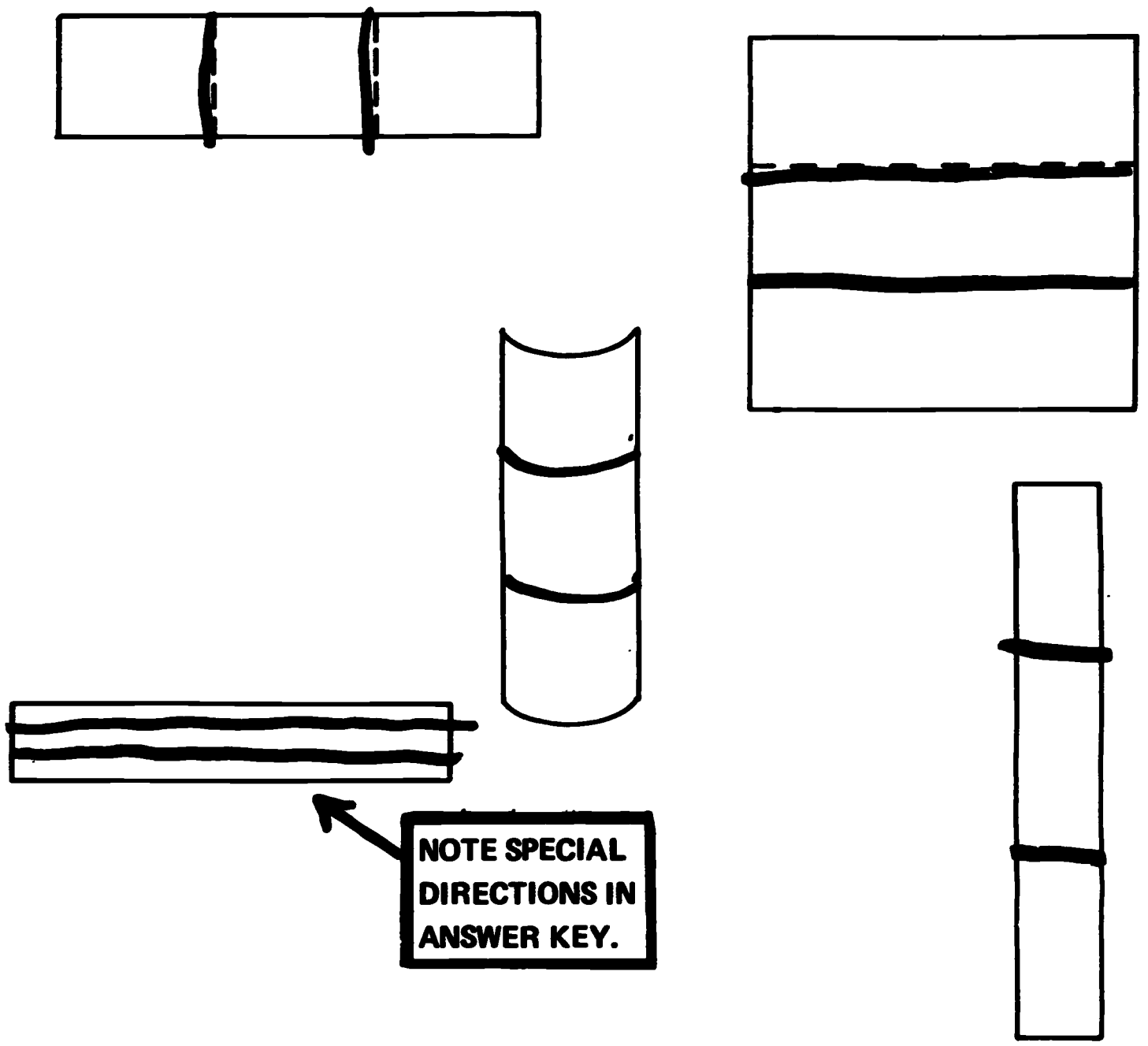
It is divided into thirds

TOTAL POINTS	NUMBER CORRECT
4	4

LEVEL	UNIT	SKILL	PAGE
C	08	1	4

When an object is divided into 3 equal parts, it is divided into thirds.

Divide the objects below into <u>thirds</u>.



All these objects are now divided into equal parts.

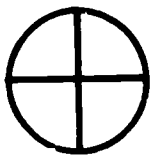
They are divided into thirds

TOTAL POINTS	NUMBER CORRECT
6	6

LEVEL	UNIT	SKILL	PAGE
C	08	1	5

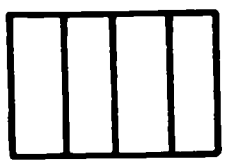
How is the picture divided?

Ring the answer.



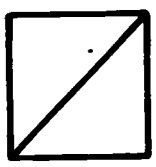
is divided into

thirds halves **fourths**



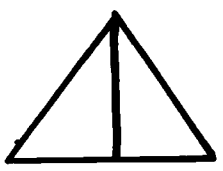
is divided into

fourths **thirds** halves



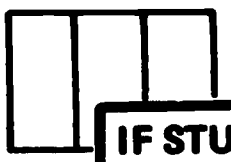
is divided into

halves thirds fourths



is divided into

halves thirds fourths



IF STUDENT MAKES ERRORS ON STS (NOT ON TESTS)) TEACHER MAY HAVE HIM MAKE CORRECTIONS.

halves

Practice, 12.

TOTAL POINTS	NUMBER CORRECT
5	4

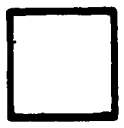
LEVEL	UNIT	SKILL	PAGE
C	08	1	9

CET I

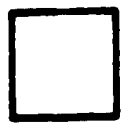
TL. PTS.	
8	100%
NO. OF PTS.	%
7	88
6	75
5	63
4	50
3	38
2	25
1	13

Divide the figures into the parts named.

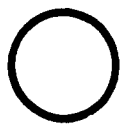
halves



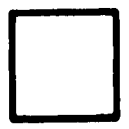
thirds



fourths



fourths

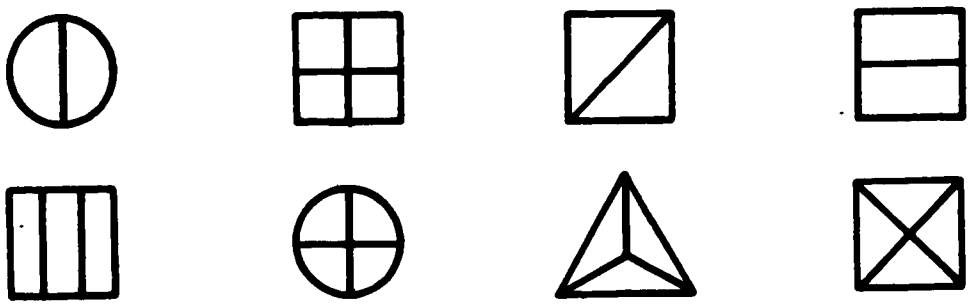


halves

Mark each figure in the row that matches the word.

thirds

halves



fourths

TL. PTS.	
3	100%
NO. OF PTS.	%
2	67
1	33

Ring the fraction.

$\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{4}$

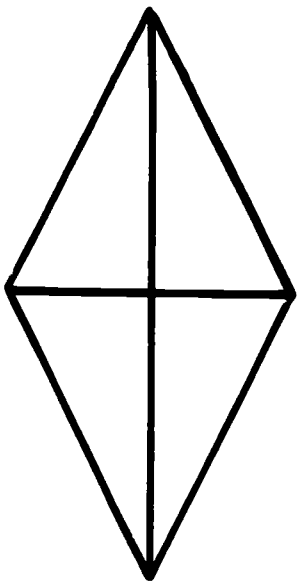
$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

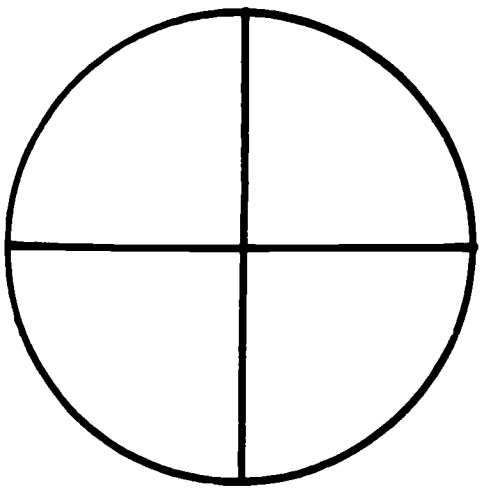
$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

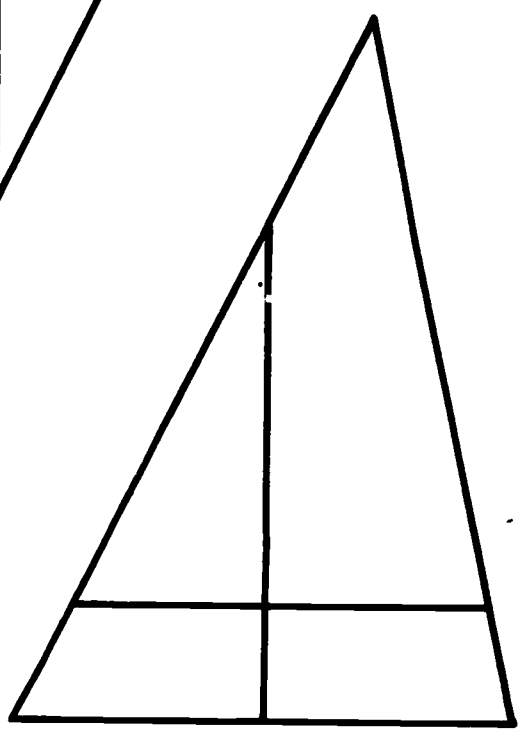
LEVEL	UNIT	SKILL	PAGE
C	08	1	10

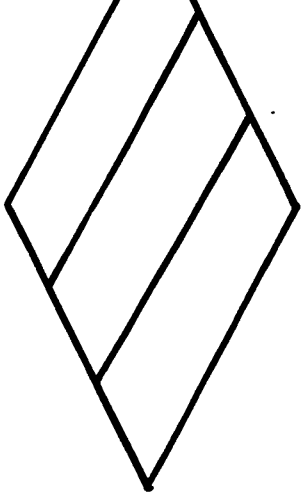
SUPPLEMENTARY
PAGE (SEE BACK COVER)

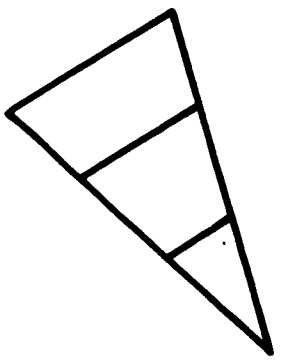
Ring all the objects that are divided into fourths.

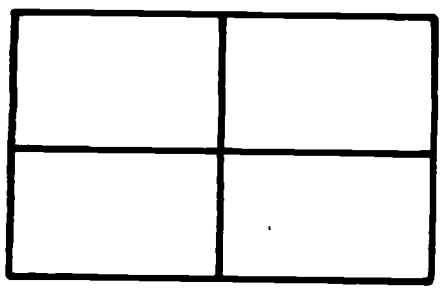


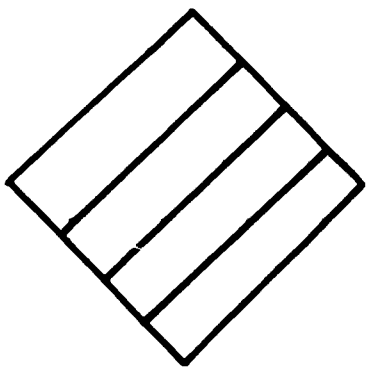












TOTAL POINTS	NUMBER CORRECT
7	

LEVEL	UNIT	SKILL	PAGE
C	08	1	11

THERE ARE TWO CET'S IN EACH BOOKLET, WITH SUPPLEMENTARY PAGES IN BETWEEN.

TL. PTS.	
8	100%
NO. OF PTS.	%
7	88
6	75
5	63
4	50
3	38
2	25
1	13

CET II

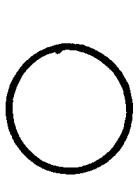
Mark each figure in the row that matches the word.

fourths

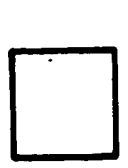
thirds

halves

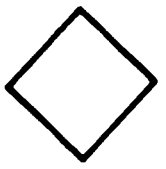
Divide the figure into the parts named.



thirds



halves



fourths

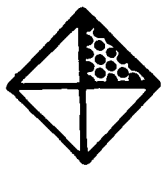
halves

thirds

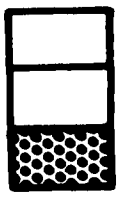
Ring the fraction.

TL. PTS.	
3	100%
NO. OF PTS.	%
2	67
1	33

$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$



$\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$



$\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{4}$

LEVEL	UNIT	SKILL	PAGE
C	08	1	13

LEVEL C, FRACTIONS, SKILL 1

THIS PAGE IS THE GUIDE WHICH THE TEACHER USES IN PRESCRIBING WORK FOR THE STUDENT.

OBJECTIVE: Divides a whole object into halves, t… object
…hirds, or fourths.

TEACHER CIRCLES PAGES TO BE DONE BY STUDENT AND WRITES THEM ON THE PRESCRIPTION SHEET.

…ARD TEACHING SEQUENCE

Pages		Supplementary Material
1.	Says that an object is divided into 4 equal parts or into <u>fourths</u>.	
2.	Divides objects into fourths.	
3.	Puts an X on figures that are divided into fourths, rejecting all figures not divided into 4 equal parts.	11
4.	Says that an object is divided into <u>3</u> equal parts or into <u>thirds</u>.	
5.	Divides objects into thirds.	
6.	Puts an X on figures that are divided into thirds, rejecting all figures not divided into 3 equal parts.	
7.	Divides objects into halves.	
8.	Circles the objects which are divided into halves.	
9.	Circles the word which tells whether a given object is divided into halves, thirds, or fourths.	12
10.	CET I.	
	CET II.	13

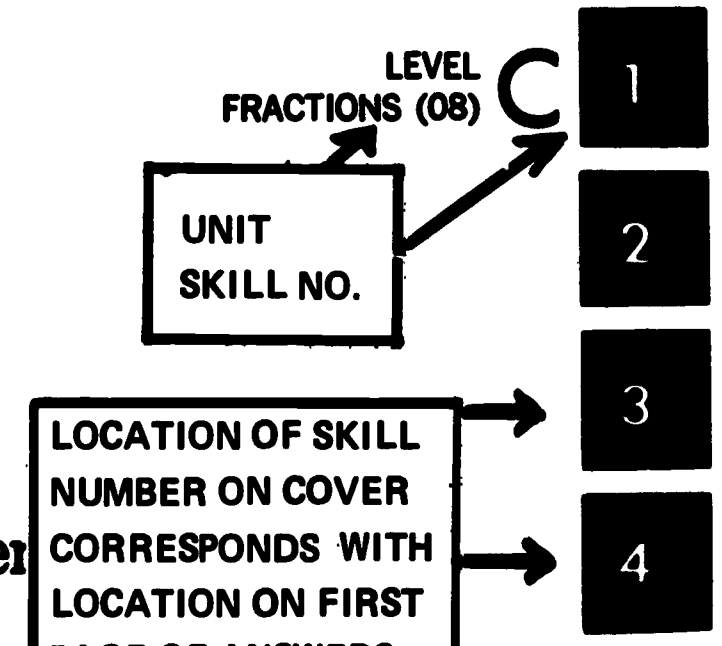
Teaching Aids:

Fraction pies
Fraction wheel (Ideal)
Flannel board (Instructo)
Fractional parts: squares, circles
Teacher's fraction kit, flannel board
Fractions Made Easy (Ideal)
Simple Fractions Kit (Creative Playthings)
Fraction parts on a board (M. Bradley)

Circle pages that are to be done.

ipi MATHEMATICS

ANSWER KEYS



Standard Teaching Sequer

REVISED DEVELOPMENTAL EDITION

- *based upon materials developed by the*

IPI Project Staff

LEARNING RESEARCH AND DEVELOPMENT CENTER

University of Pittsburgh

- *distributed by*

RESEARCH FOR BETTER SCHOOLS, INC.

- *written and revised by*

the staff of Appleton-Century-Crofts

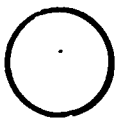
under the direction of Jerome D. Kaplan

IT IS BOTH FASTER AND MORE ACCURATE TO USE ANSWER KEYS WHEN SCORING ALL STUDENT WORK.

Level C, Fractions (08), Skill 1 (Pages 1-4)

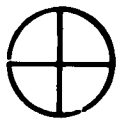
Page 1

Fill in the blanks.



This is a circle.

This circle is divided into 4 equal parts.



This circle is divided into how many equal parts? 4

When an object is divided into 4 equal parts, we say the object is divided into fourths.

This box is divided into how many equal parts? 4

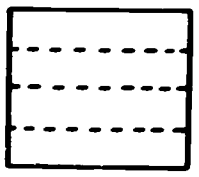
3

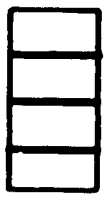
C | 08 | 1 | 1

Page 2

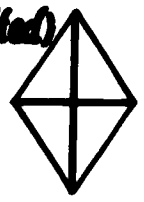
When an object is divided into 4 equal parts, it is divided into fourths.

Divide the objects below into fourths.





(any fourths permitted)



All these objects are now divided into equal parts.

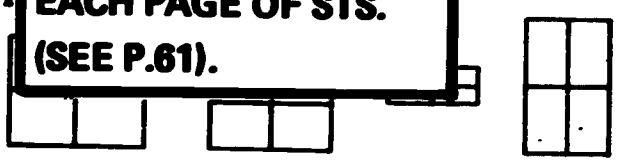
They are divided into fourths.

7

C | 08 | 1 | 2

THIS IDENTIFICATION MATCHES THAT ON EACH PAGE OF STS. (SEE P.61).

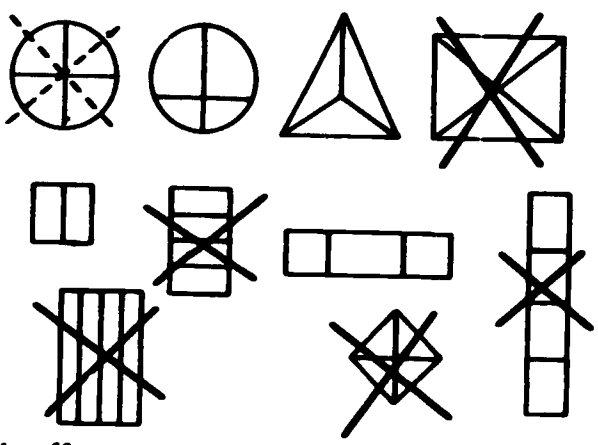
Page 3



This box is not divided into fourths. Why not?

It is not divided equally into 4 parts (or any similar answer)

Put an X on the figures that are divided into fourths.



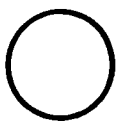
Practice, 11.

12

C | 08 | 1 | 3

Page 4

Fill in the blanks.

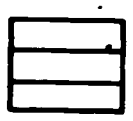


This is a circle.

This circle is divided into 3 equal parts.

How many equal parts is this circle divided into? 3

When an object is divided into 3 equal parts, we say the object is divided into thirds.



This box is divided into 3 equal parts.

It is divided into thirds.

4

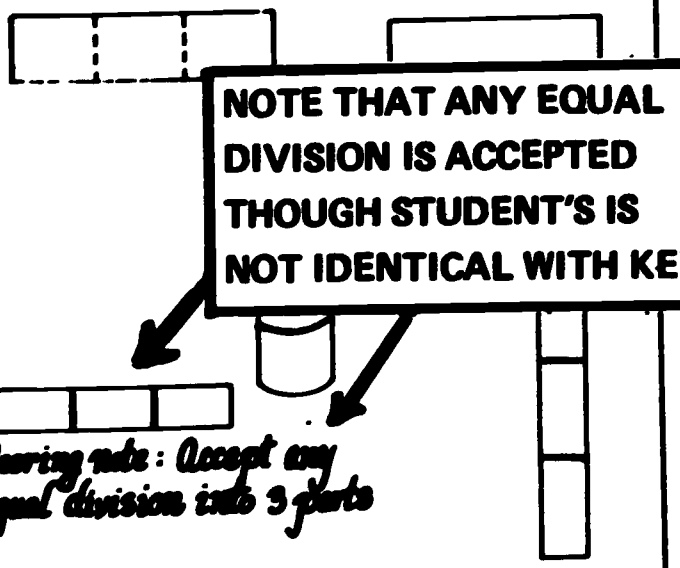
C | 08 | 1 | 4

Level C, Fractions (08), Skill 1 (Pages 5-8)

Page 5

When an object is divided into 3 equal parts, it is divided into thirds.

Divide the objects below into thirds.



NOTE THAT ANY EQUAL DIVISION IS ACCEPTED THOUGH STUDENT'S IS NOT IDENTICAL WITH KEY.

Scoring rule: Accept any equal division into 3 parts

All these objects are now divided into equal parts.

They are divided into thirds.

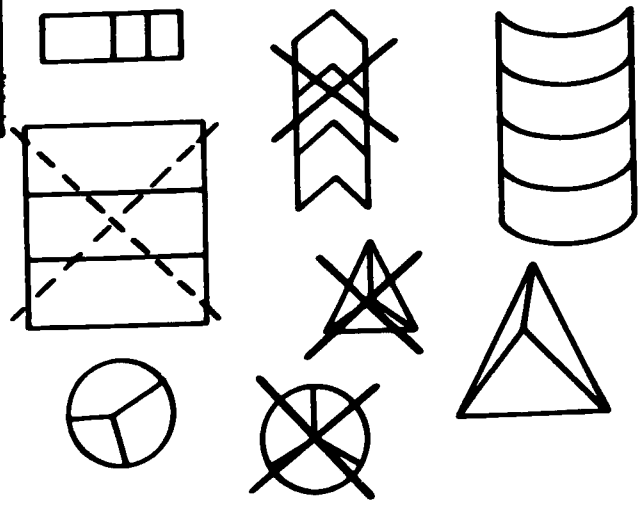
Page 6

This circle is divided into thirds.

This circle is not divided into thirds. Why not?

Because it is not divided into 3 equal parts (or similar answer)

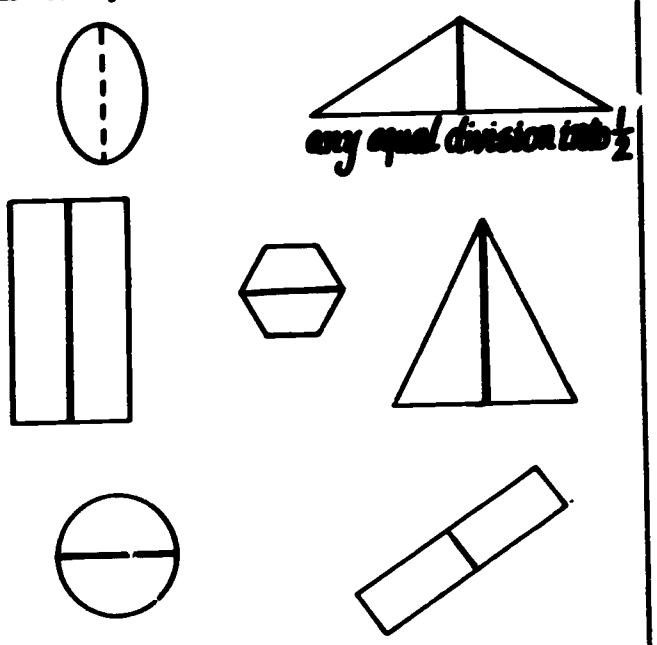
Put an X on the figures that are divided into thirds.



Page 7

When an object is divided into 2 equal parts, we say it is divided into halves.

Divide these objects into halves.

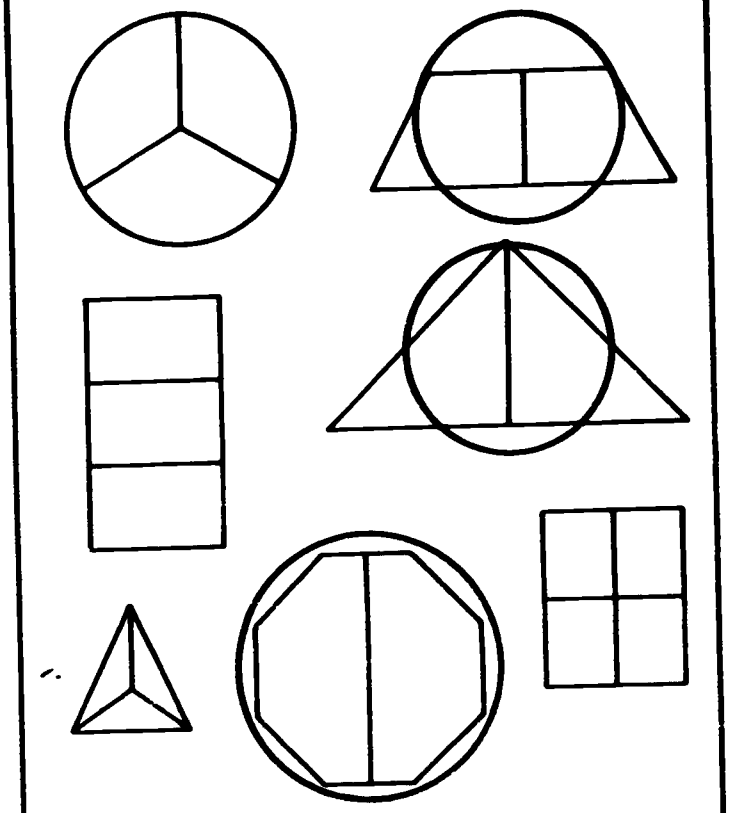


any equal division into $\frac{1}{2}$

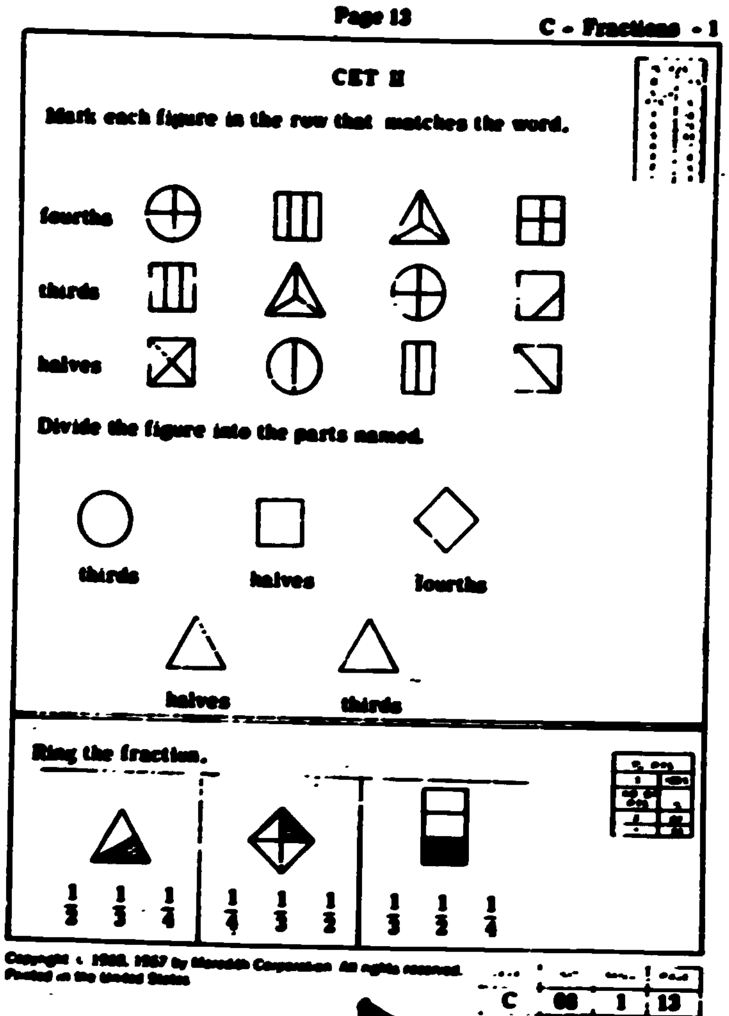
All these objects are now divided into halves.

Page 8

Ring the objects which are divided into halves.



Level C, Fractions (08), Skill 1 (Pages 13-14)



LEVEL C, FRACTIONS, SKILL 1

OBJECTIVE: Divides a whole object into halves, thirds, or fourths,or identifies an object divided into halves, thirds, or fourths.

STANDARD TEACHING SEQUENCE

Pages		Supplementary Material
1.	Says that an object is divided into 4 equal parts or into fourths.	
2.	Divides objects into fourths.	
3.	Puts an X on figures that are divided into fourths, rejecting all figures not divided into 4 equal parts.	11
4.	Says that an object is divided into 3 equal parts or into thirds.	
5.	Divides objects into thirds.	
6.	Puts an X on figures that are divided into thirds, rejecting all figures not divided into 3 equal parts.	
7.	Divides objects into halves.	
8.	Circles the objects which are divided into halves.	
9.	Circles the word which tells whether a given object is divided into halves, thirds, or fourths.	12
10.	CET I.	
	CET II.	13

Teaching Aids:

Fraction pies
Fraction wheel (Ideal)
Flannel board (Instructo)
Fractional parts: squares, circles
Teacher's fraction kit, flannel board
Fractions Made Easy (Ideal)
Simple Fractions Kit (Creative Playthings)
Fraction parts on a board (M. Bradley)

Circle pages that are to be done.

ENTIRE STS REPRODUCED IN ANSWER KEY, BUT NO ANSWERS GIVEN FOR CET'S

SINCE STUDENTS SOMETIMES SCORE THEIR OWN STS BOOKLETS, TEST SCORES ARE FOUND IN SEPARATE KEYS.

HOW ARE STS SCORES RECORDED?

There are two Mathematics Prescription Sheets on the following pages. The section shown on page 79 shows the first prescription after the scores have been recorded by the aide. The Prescription Sheet on pages 81 and 82 shows all of Jim's work in the unit C-Fractions up to the posttest.

If you look carefully at these pages you can see how the Prescription Sheet becomes a communication link between the teacher and the student with the help of the aide. These record sheets contain information about everything a student does after his placement testing is completed.

Complete the following sentences using information from these pages:

Page 79

1. Jim Bowen's prescription sheet was initialed by both_____ _____. The scorer is usually the aide, but may be the student or sometimes the teacher.

.....

The teacher and the scorer.

2. The teacher has put down code numbers for instructional settings (types of grouping) for pages_____in Skill 1. These code numbers are for the student's and teacher's information.

.....

1, 2 and 4

3. Code numbers for instructional materials are indicated for pages _____. The aide should be aware of these numbers because she may need to supply the materials for the student. The teacher has prescribed manipulative devices (code no.___), and a filmstrip (code no.____) for this student.

.....

2 and 4; 12; 08

TEACHER'S INITIALS

SCORER'S INITIALS

SKILL BOOKLETS								CURRICULUM TEST			
								PART 1		PART 2	
DATE PRES.	PRES. INIT.	SKILL NO.	PAGE NO.	INST. TECH CODES	INSTRUCTIONAL NOTES	TOTAL POINTS	NUMBER CORRECT	NO. OF POINTS	%	NO. OF POINTS	%
10/2	EP	1	Read Student Page ok								
			1	01		2	2				
			2	12	Fractional Parts	7	5				
			4			4	4				
			5			6	6				
			9			3	4				
10/4	EP	CF 10						8/8	100	3/3	100

CODE FOR TYPES OF GROUPINGS

CODE FOR MATERIALS OTHER THAN IPI TESTS AND SKILL SHEETS

INSTRUCTIONAL TECHNIQUES	
CODE	SETTING
01	Teacher Tutor
02	Peer Tutor
03	Small Group
04	Large Group
05	Seminar
07	Independent Study
11	Tutor of Others
MATERIALS	
06	Curr. Texts
08	Film Series
09	Records/Tapes
10	Research
12	Manipulative Devices

Pages 81 and 82

5. The first thing a student usually does in each STS is_____ which he scores himself.

.....

Read Student Page

6. In skill 1, Jim made errors on pages_____. The check mark shows that_____.

.....

2 and 9; he corrected his errors

7. The aide transfers the total points and the number correct from the _____.

.....

The score box on the STS skillsheets (see p.63)

8. Jim did no work in skill number____because_____ _____.

.....

Skill 2; his pretest score showed mastery of that skill.

ipi MATHEMATICS PRESCRIPTION SHEET

STUDENT NAME: Jim Bowen　　STUDENT NUMBER: 0812

SCHOOL STAMP: ____________

GRADE: 3　　ROOM: 107　　UNIT: [illegible]

UNIT DATES	
UNIT BEGAN	9/26
UNIT ENDED	
DAYS WORKED	

AIDE FILLS IN AS STUDENT BRINGS UP PAGES TO BE SCORED

TAKEN FROM SCORE BOX ON STS SKILL SHEETS

STUDENT PAGE SCORE IS NOT RECORDED. TEACHER MAY HAVE AIDE CHECK WHEN DONE CORRECTLY.

SKILL BOOKLETS / CURRICULUM TEST

DATE PRES.	PRES. INIT.	SKILL NO.	PAGE NO.	INST. TECH CODES	INSTRUCTIONAL NOTES	TOTAL POINTS	NUMBER CORRECT	PART 1	%	PART 2	%
10/2	EP	1	Read Student Page			OK					
			1	01		[illegible]	3				
					[illegible] Words	7	✓5				
						4	4				
						6	6				
						5	✓4				
10/4	EP							8/8	100	3/3	100
10/5	EP	3	Read Student Page			OK					
			4	08	"Seeing Fractions"	3	3				
			6			4	4				
10/5	EP		CET 8					3/6	50	1/2	50
10/6	EP		12			9	9				
			13			9	9				
			CET 13					6/6	100	1/2	50
10/9	EP	4	Read Student Page			OK					
			1	01		4	4				
			2			3	✓2				
			5	03		1	1				
			6			4	4				
			10			6	✓5				

CHECK MARK OFTEN USED TO SHOW THAT STUDENT HAS CORRECTED ERRORS ON STS.

INSTRUCTIONAL TECHNIQUES	
CODE	SETTING
01	Teacher Tutor
02	Peer Tutor
03	Small Group
04	Large Group
05	Seminar
07	Independent Study
11	Tutor of Others
MATERIALS	
06	Curr. Texts
08	Film Strips
09	Records/Tapes
10	Research
12	Manipulative Devices

PRE AND POST TEST SCORES

SKILL	[illegible]	PRE SCORE	%	POST SCORE	%	POST SCORE	%	POST SCORE	%
			25						
[illegible]	[illegible]	[illegible]	85						
(3)	5	3	60						
(4)	5	2	40						
DATES		9/26							

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MATHEMATICS PRESCRIPTION SHEET (cont'd.)

ipi MATHEMATICS

STUDENT NAME Jim Bowen STUDENT NUMBER 0812 UNIT C-FRAC

SKILL BOOKLETS								CURRICULUM TEST			
								PART 1		PART 2	
DATE PRES.	PRES. INIT.	SKILL NO.	PAGE NO.	INST. TECH CODES	INSTRUCTIONAL NOTES	TOTAL POINTS	NUMBER CORRECT	NO. OF POINTS	%	NO. OF POINTS	%
			11			6	✓2				TF
10/12	EP	4	CET 15					3/5	60		#6
			19			6	6				TF
			CET 22					5/5	100		TF

BACK OF PRESCRIPTION SHEET. NOTE DIFFERENCE.

POSTTEST ON STANDARD TEACHING SEQUENCE

Choose the best answers. Refer back to the page numbers when you need more information about any item.

1. Each STS booklet covers one_____. (p.57)
   a. unit
   b. skill 1._____

2. A new Prescription Sheet is made out for each_____(p.50).
   a. unit
   b. skill 2._____

3. A completed prescription sheet would show all of the student's work in_____(p.48,79).
   a. every skill in one unit
   b. those skills in one unit which are indicated by pretest scores
   c. one skill in a unit 3._____

Fill in the blanks:

4. There are____CET's in each STS booklet. Answers for these tests are found_____(p.58). 4._____

5. Robert Flaherty is working on the unit F-Geometry. His work is recorded on the prescription sheet below. Robert did not score his own work. Using the information given, fill in the blanks of the following sentences:

SKILL BOOKLETS								CURRICULUM TEST			
								PART 1		PART 2	
DATE PRES.	PRES. INIT.	SKILL NO.	PAGE NO.	INST. TECH CODES	INSTRUCTIONAL NOTES	TOTAL POINTS	NUMBER CORRECT	NO. OF POINTS	%	NO. OF POINTS	%
3/10	FW	6	4	12	compass	10	10				JG
			7			8	6				JG
			8			3	3				JG

   a. This prescription was made on_____by the teacher, whose initials are_____and was scored and recorded by the aide whose initials are_____. (p.78)

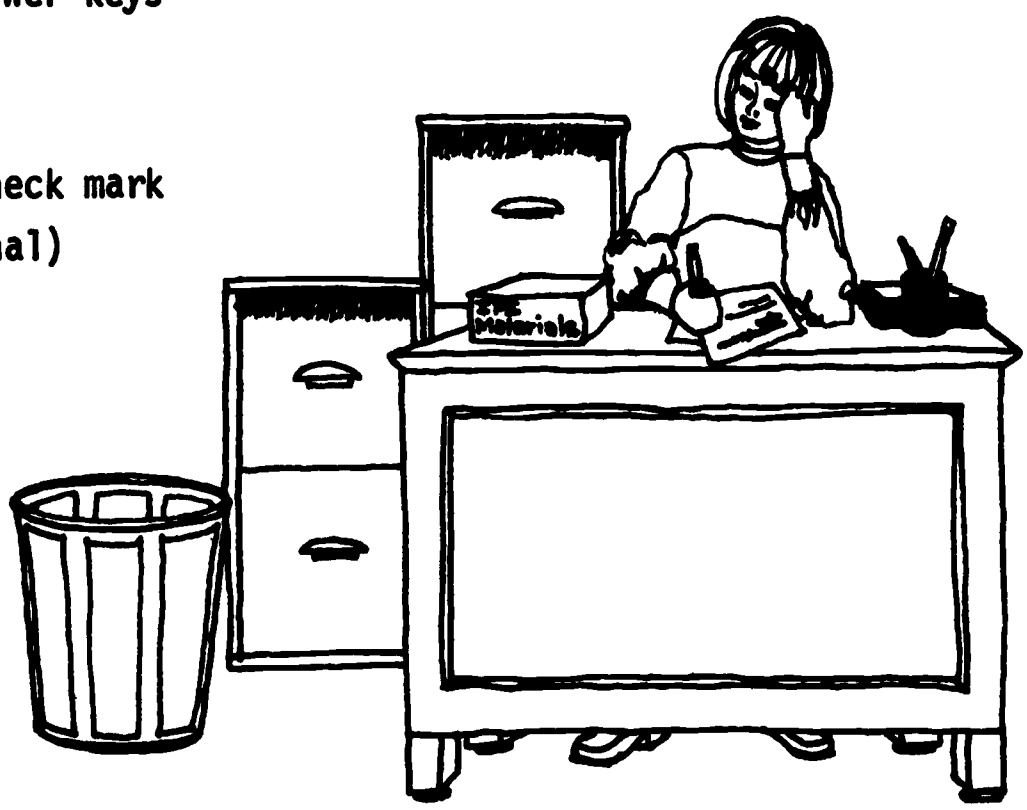
b. The prescription is for work in skill_____, pages_____(p.77)

c. Robert made errors on page_____which he has/has not corrected, as indicated by the_____. (p.78)

d. The teacher prescribed manipulative materials for Robert to use with page_____. This is indicated by the number_____in the column labeled_____(p.76)

ANSWERS TO POSTTEST

1. b
2. a
3. b
4. two, in separate answer keys
5a. March 10; FW;JG
 b. Skill 6; 4, 7 and 8
 c. 7, has corrected;check mark
 d. 4, 12; Inst(ructional)
 Tech(niques) Codes.



Now go back to your packet of IPI materials. Pick certain pages from one STS booklet, do the work, score them and record the scores on the Prescription form.

CURRICULUM EMBEDDED TESTS

Although Curriculum Embedded Tests (CET's) are included in the STS booklets, they need explanation separately. This section will answer the following questions:

What are CET's used for?
Where are CET's found?
What do CET's consist of?
How are CET's recorded?

WHAT ARE CET'S USED FOR?

CET's are used to keep track of a student's progress as he works within <u>one skill.</u> When the teacher decides that a student has mastered a skill, she prescribes a CET. The first part of the CET tests the student's mastery of that skill and the second part is a short pretest of the next skill.

He must receive a score of 85% or better on Part 1 to move on to the next skill. From his score on Part 2 of the CET and his Pretest score, his teacher will decide whether he needs to work in the next skill.

WHERE ARE CET'S FOUND?

CET'S are found in two places.
CET I and II for a skill are found in the STS booklet for the particular skill. There are also pads of CET I's bound together which are used as extras when needed.

Answer keys are similar to those for the STS booklets, but are kept separately.

WHAT DO CET'S CONSIST OF?

There are three CET's and an answer key on page 85 through 88.
Complete the following statements using information from these pages:

1. Most CET's consist of__parts which are seperated by_____.
   Do not confuse Part 1 and Part 2 with CET I and CET II.

.....

two parts; a double line

2. The only CET's which <u>do not</u> have two parts are the ones for_____
_____(see p.89)

.....

   the last skill in each unit.

3. Extra or supplementary CET's are found_____.

.....

   in pads

4. There is a separate_____for each part of a CET.

.....

score box

CET I

SKILL TESTED IN PART 1 OF THIS CET

TL. PTS.	
7	100%
PTS.	%
6	86
5	71
4	57
3	43
2	29
1	14

Circle the equation showing the associative principle.

$24 \times 7 = (20 + 4) \times 7$

$(8 \times 2) \times 4 = 8 \times (2 \times 4)$

Circle the equation showing the distributive principle

$8 \times 2 \times 3 = 3 \times 2 \times 8$

$480 + 24 = (60 + 3) \times 8$

Write the letter that stands for the principle used in e equation or expression.

SUPPLEMENTARY CET'S ARE EXACT DUPLICATES OF CET I AND ARE FOUND IN PADS.

C for commutative

A for associative

D for distributi

I for inverse

$8 \times 5 = 5 \times 8$ C

$4 \times (6 \times 8) = (4 \times 6) \times 8$ A

$3(210 + 3) = 630 + 9$ D

$3 + 9 = 9 + 3$ C

$525 \div 5 = 105$

$105 \times 5 = 525$ T

PART 2 (BELOW DOUBLE LINE) IS A PRETEST OF NEXT SKILL IN THE UNIT.

TL. PTS.	
1	100%
NO. OF PTS.	%

0

Solve the problem. Label your a

Jane bought some toy furniture for her doll house. The desk costs 15¢ and the color TV set costs 20¢. The table as much as the desk and the TV put together. How m the table cost? 35¢ X

SEPARATE SCORE BOX FOR PART 2.

LEVEL	UNIT	SKILL	PAGE
E	07	6	17

NOTE SIMILARITY TO CET I FOR THIS SKILL.

CET II

Circle the equation showing the associative principle.

TL. PTS.	
7	100%
NO. OF PTS.	%
6	86
5	71
4	57
3	43
2	29
1	14

$(9 + 8) + 5 = 9 + (8 + 5)$ $\qquad$ $74 \times 5 = (70 + 4) \times 5$

Circle the equation showing the distributive principle.

$372 \div 6 = (300 + 72) \div 6$ $\qquad$ $(12 \times 6) \times 4 = 12 \times (6 \times 4)$

Write the letter that stands for the principle used in each equation or expression.

CET II WAS NOT PRESCRIBED FOR THIS SKILL.

C for commutative $\qquad$ D for distributive

A for associative $\qquad$ I for inverse

$9 \times 26 = 26 \times 9$ ____ $\qquad$ $(9 \times 3) \times 2 = 9 \times (3 \times 2)$ ____

$240 + 48 = (40 + 8) \times 6$ ____ $\qquad$ $15 + 7 = 7 + 15$ ____

$14 + 7 = 21$ $\qquad$ $21 - 7 = 14$ ____

TL. PTS.	
1	100%
NO. OF PTS.	%

Solve the problem. Label your answer.

Fred bought a boat for 45¢ and a top for 30¢. How much change did he get from $1.00? _____

USE THIS TO LOCATE ANSWER KEY PAGE.

LEVEL	UNIT	SKILL	PAGE
E	07	6	24

CET I

SKILL 7 IS THE LAST SKILL IN E-COP

TL. PTS.	
4	100%
NO. OF PTS.	%
3	75
2	50
1	25

Solve each problem. Label your answers.

Jim and his father had to travel 137 miles to the boy scout camp site. Dick and his father traveled 27 more miles than Jim. Bob and his father traveled twice as many miles as Jim.

How many miles did Dick travel? _____

How many miles did Bob travel? _____

There are 6 rooms in Hillview Grade School. There are 198 children in the school. If each room has an equal number of children, how many children are in each room?

_____

BECAUSE THIS IS THE LAST SKILL IN THIS UNIT, THERE IS NO PART 2 TO THIS CET. (NO DOUBLE LINE.)

Mary flew 687 miles in an airplane from her home to Aunt Ann's house. She flew the same number of miles coming back. How many miles did she fly in all?

_____

LEVEL	UNIT	SKILL	PAGE
E	07	7	10

HOW ARE CET'S RECORDED?

Using the Prescription Sheet on the next page, complete the following statements:

1. The student made a score of_____% in Part 1 of the CET for skill 6, indicating that he_____.

.....

100%; can go on to the next skill

2. His score of _____ on part 2 of the same CET shows that he _____.

.....

0; will need to work in the next skill

3. The 17 in CET 17 indicates the _____ on which the CET is found in the_____.

.....

page number; STS booklet

4. Skill 7 happens to be the last skill in this unit. Therefore there is no_____.

.....

Part 2 for that CET

5. The scores of _____% and _____% on the first two CET's for skill 7 helped the teacher decide_____.

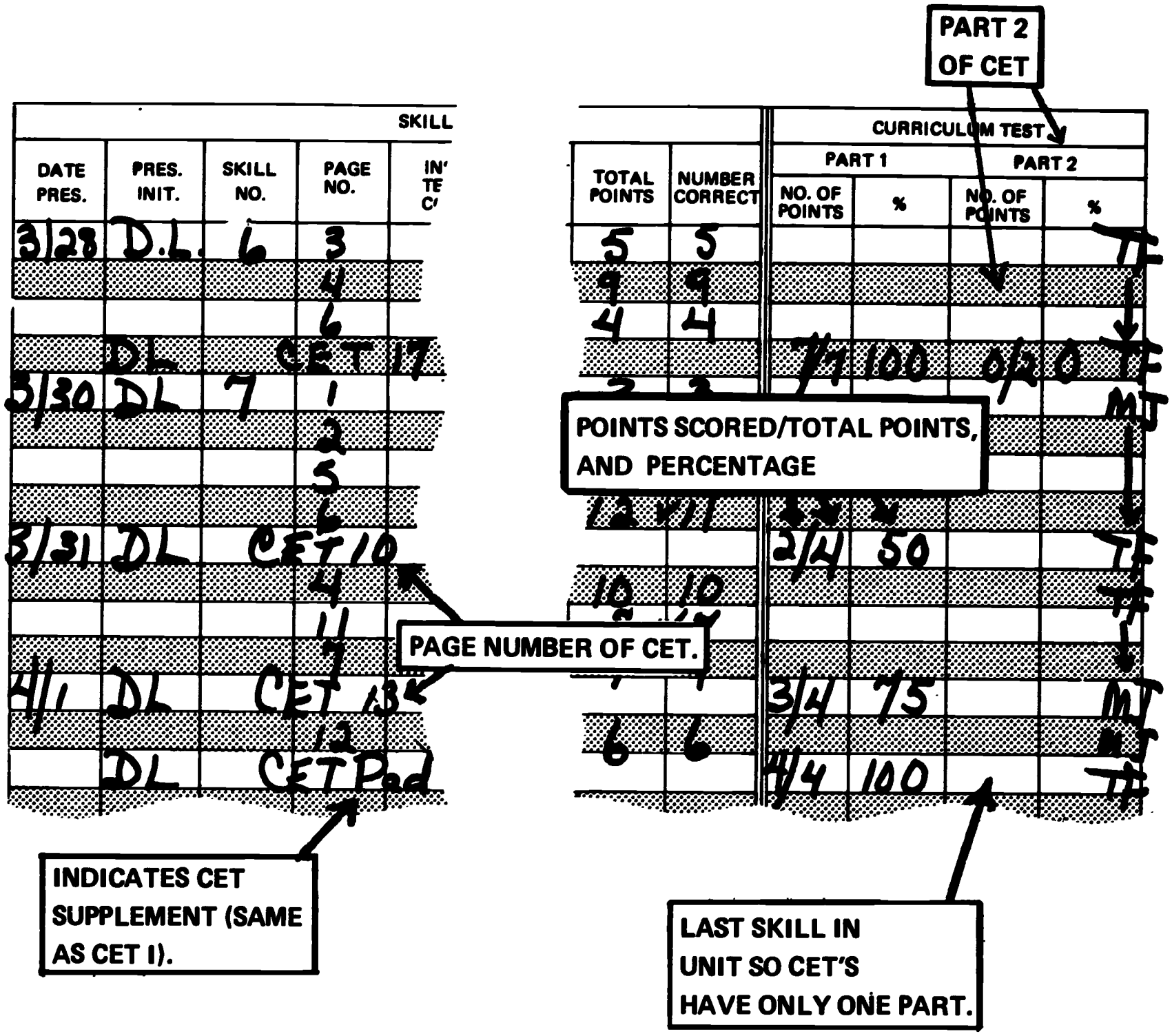
.....

that the student needed more work in that skill.

6. CET Pad means that the teacher used _____ which is <u>not</u> in the_____.

.....

the CET supplement; STS booklet


PART 2 OF CET
SKILL
DATE PRES.
PRES. INIT.
SKILL NO.
PAGE NO.
IN' TE C'
TOTAL POINTS
NUMBER CORRECT
CURRICULUM TEST
PART 1
PART 2
NO. OF POINTS
%
NO. OF POINTS
%
POINTS SCORED/TOTAL POINTS, AND PERCENTAGE
PAGE NUMBER OF CET.
INDICATES CET SUPPLEMENT (SAME AS CET I).
LAST SKILL IN UNIT SO CET'S HAVE ONLY ONE PART.

POSTTEST: CURRICULUM EMBEDDED TESTS

Complete the statement by selecting the best answer. Refer back to the page numbers when you need more information about any item.

1. CET's are designed to test mastery of (p.85)
   a. a complete unit.
   b. one skill in a unit. 1._____

2. Most CET's have two sections. Part 2, below the double line (p.85, 86)
   a. gives more details about the skill.
   b. is a brief pretest of the next skill. 2._____

3. The only CET's <u>without</u> two parts are (p.86)
   a. the ones for the first skill in a unit.
   b. the ones for the last sill in a unit. 3._____

4. When a student scores <u>below</u> 85% on Part 1 of a CET the teacher usually (p.85)
   a. assigns additional work in the skill.
   b. assigns Part 2 of the CET. 4._____

5. There are extra copies of_____bound in pads for supplementary uses.(p.85)
   a. CET I
   b. CET II 5._____

6. The CET I for a skill is (p.86)
   a. bound in the STS Booklet
   b. bound in a pad of identical CET's
   c. both of the above. 6._____

7. CET 7 indicates (p.91)
   a. the number of CET's the student has taken .
   b. the page number of the STS on which the CET is found. 7._____

ANSWERS TO POSTTEST

1. a
2. b
3. b
4. a
5. a
6. c
7. b

Now go back to your packet of IPI materials. Take a Curriculum Embedded Test (CET), score and record it on the Mathematics Prescription Sheet.

CONCLUDING AN IPI UNIT

When a student is finishing a unit, the IPI Posttest is usually the last thing he does. This section will show you how to score and record Posttests and, in addition, show you about the other things which the aide must do before filing the Prescription Sheet for the completed unit.

This section will answer the following questions:

What are IPI Posttests used for?

How many Posttests are there for the IPI Math Continuum.

What does an IPI Posttest consist of?

How are IPI Posttests recorded?

How does the aide record a completed unit?

WHAT ARE IPI POSTTESTS USED FOR?

IPI Posttests are used to measure <u>all the skills</u> in <u>one unit</u>. The teacher decides to posttest a student when information from STS skillsheets and CET's indicates that he will probably be able to pass the test.

Look over the Posttest on the following pages, comparing it with the Pretest for the same student on pages 40 and 45.

ipi MATHEMATICS POST-TEST

Name Lillian Ching Date 9/26

Class 2 Number 69 72

LEVEL C, NUMERATION (01) SKILL 1

TL. PTS.	
9	100%
NO. OF PTS.	%
8	89
7	78
6	67
5	56
4	44
3	33
2	22
1	11

Numeration: Directs the student to read, write, count, and put into sequence numbers to 200; and to skip count by 2's, 5's, and 10's to 200 from any starting point.

Fill in the empty boxes. Count down in each column.

SAME TYPE OF TEST AS PRETEST, BUT ITEMS ARE DIFFERENT.

129	137	145	153	161	169	177	185	193
130	138	146	154	162	170	178	186	194
131	139	147	155	163	171	179	187	195
132	140	148	156	164	172	180	188	196
133	141	149	157	165	173	181	189	197
134	142	150	158	166	174	182	190	198
135	143	151	159	167	175	183	191	199
136	144	152	160	168	176	184	192	200

T

SKILL 2

TL. PTS.	
5	100%
NO. OF PTS.	%
4	80
3	60
2	40
1	20

In each row, fill in the numbers.

196	197	198	199	200
99	100	101	102	103
108	109	110	111	112
131	132	133	134	135
157	158	159	160	161

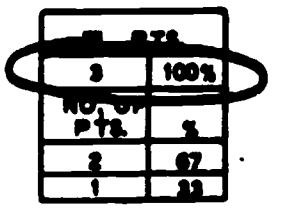
SKILL 3

TL. PTS.	
9	100%
NO. OF PTS.	%
8	89
7	78
6	67
5	56
4	44
3	33
2	22
1	11

Fill in the blanks to show what numbers come just after, just before, or between.

Just after	Just before	Between
28, 29	160 , 161	19, 20 , 21
109, 110	197 X, 196	175, 176 , 177
180, 181	101 , 102	139, 140, 141

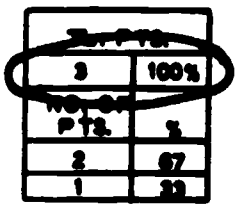
SKILL 4



In each row, count by 10's.

87	97	107	117	127
104	114	124	134	144
160	170	180	190	200

SKILL 5



In each row, count by 5's.

80	85	90	95	100
125	130	135	140	145
180	185	190	195	200

TL. PTS.
6

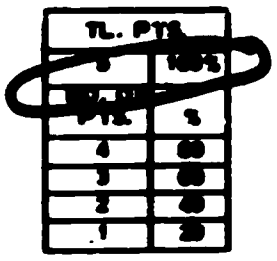
PTS.	%
5	83
4	67
3	50
2	33
1	17

In each row, count by 2's.

78	80	82	84	86
95	97	99	101	103
132	134	136	138	140

Ring the odd numbers.

7	20	43	168
146	172	56	135



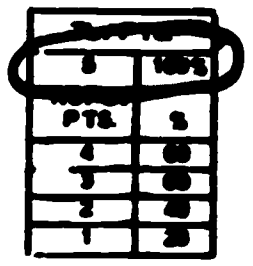
1. Fill in the numbers in the row. Then, in the circle, write the number you counted by.

116	118	120	122	124	2's
90	95	100	105	110	5's
160	170	180	190	200	10's

92	94	96	98	100	2's
135	140	145	150	155	5's

C NUMERATION (01) POST-TEST

SKILL 8



Write the word names for the numbers.

1 one

3 three

5 five

8 eight

10 ten

HOW MANY POSTTESTS ARE THERE FOR THE IPI MATHEMATICS CONTINUUM?

There is a Posttest that parallels the Pretest for every unit in the Continuum except for Level A, which has Posttests but no Pretests.

WHAT DOES A POSTTEST CONSIST OF?

Posttests are printed in blue for easy identification. (Pretests are printed in green.)

The Posttest for a unit is very similar to the Pretest for the same unit. It tests the same skills, and each section of the test contains the same number of items as the Pretest. The problems are not identical, however. At certain times the teacher will decide to use a Posttest in place of a Pretest. The aide then records it according to <u>what it was used</u> for rather than its title.

HOW ARE POSTTESTS RECORDED?

Using the Prescription Sheet on the next page, complete the following statements:

1. Posttest scores are recorded in the same section of the Prescription Sheet as the_____.

.....

Pretest

2. It is not necessary to write the maximum points per skill for Posttests because there are_____.

.....

the same number of items for Pretests and Posttests

3. When more than one Prescription Sheet has been used for a unit, Posttest scores and unit dates are recorded on the_____.

.....

first sheet

4. Mastery on Posttests is_____.

.....

85% or above

IF MORE THAN ONE PRESCRIPTION SHEET, POSTTEST SCORES RECORDED ON FIRST SHEET.

PRETESTS AND POSTTESTS HAVE SAME NUMBER OF ITEMS.

POSTTEST SCORES AND PERCENTAGES.

PRE AND POST TEST SCORES

SKILL NUMBER	MAX POINTS PER SKILL	PRE SCORE	%	POST SCORE	%	POST SCORE	%	POST SCORE	%
1	9	8	89	9	100				
2	5	4	80	5	100				
3	9	4	44	8	89				
4	3	2	67	3	100				
5	3	3	100	3	100				
6	6	4	67	6	100				
7	5	0	0	5	100				
8	5	1	10	5	100				
DATES		9/26		10/18					

MASTERY IS 85% OR ABOVE

WHEN ADDITIONAL POSTTESTS GIVEN, RECORD HERE.

HOW DOES THE AIDE RECORD A COMPLETED UNIT?

1. "Mastery" is written by the teacher at the top of the first Prescription Sheet for the unit when_____
_____. This indicates to the aide that the sheet should be filed.

.....

the student is ready for the next unit

2. Before filing, the aide should fill in the date of_____
_____and the number of_____.

.....

the last prescription; days worked

3. The last prescription for Lillian in the C-Numeration unit was the _____on_____. Sometimes the teacher will prescribe further work after the Posttest. In that case, the aide would use the last prescription date as the "Unit ended" date.

.....

the Posttest on October 18th

4. The "Days worked" is figured from the unit dates, excluding the _____
_____.

.....

Pretest and Posttest dates and weekends

WRITTEN WHEN STUDENT IS READY FOR NEXT UNIT.

MASTERY

ipi MATHEMATICS PRESCRIPTION SHEET

STUDENT NAME Lillian Ching

STUDENT NUMBER

DATE OF LAST PRESCRIPTION.

SCHOOL STAMP

GRADE 2 ROOM 10 UNIT C-Num.

UNIT DATES	
UNIT BEGAN	9/26
UNIT ENDED	10/18
DAYS WORKED	16

SKILL BOOKLETS								CURRICULUM TEST			
								PART 1		PART 2	
DATE PRES.	PRES. INIT.	SKILL NO.	PAGE NO.	INST. TECH CODES	INSTRUCTIONAL NOTES	TOTAL POINTS	NUMBER CORRECT	NO. OF POINTS	%	NO. OF POINTS	%
9/27	JG	2	Read Student Page								
10/18	JG	CET 13	Posttest					11	100		

DOES NOT INCLUDE PRE-OR POSTTEST DATES OR WEEKENDS.

LAST PRESCRIPTION.

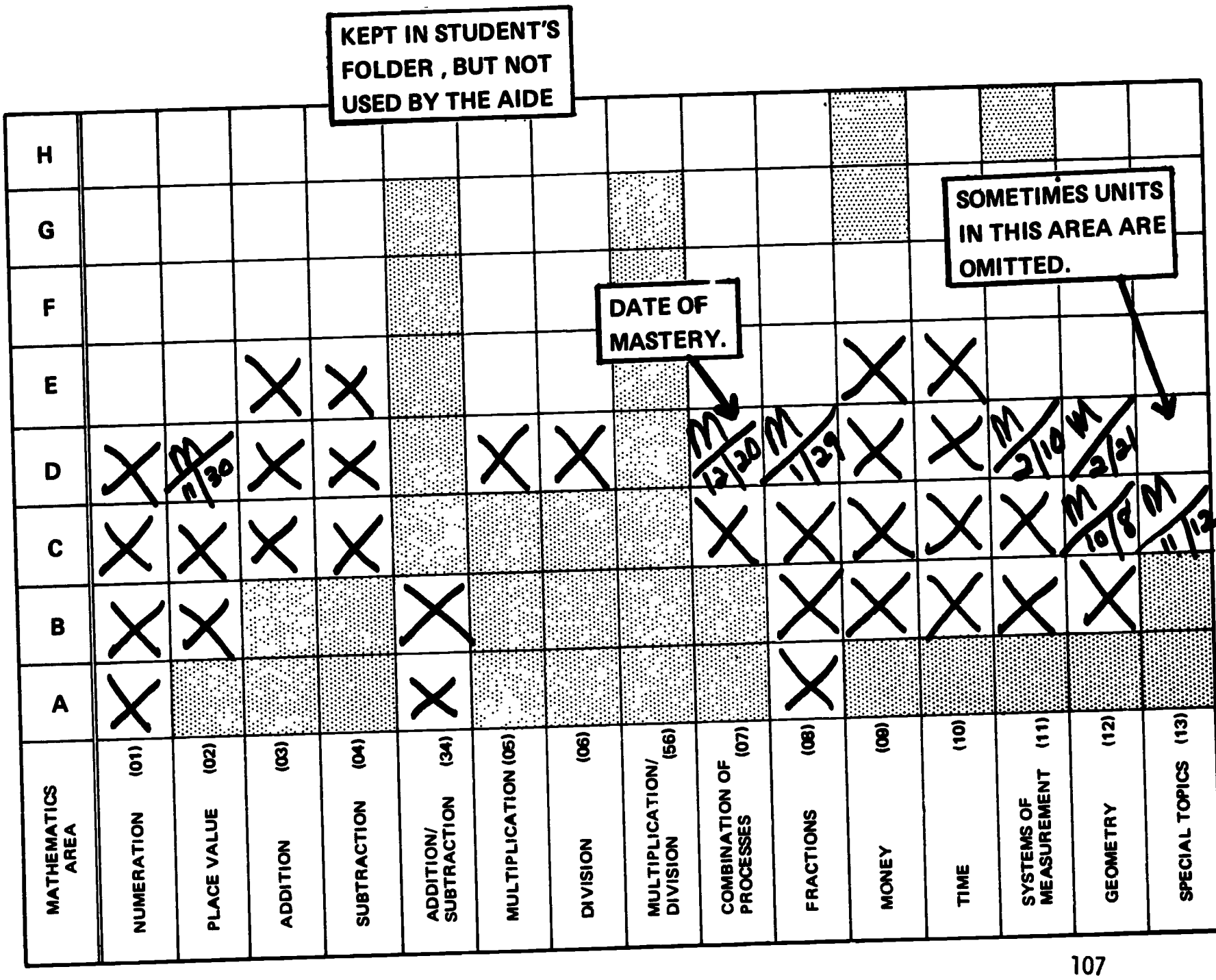
PRE AND POST TEST SCORES									
SKILL NUMBER	MAX POINTS PER SKILL	PRE SCORE	%	POST SCORE	%	POST SCORE	%	POST SCORE	%
1	9	8	89	9	100				
2	5	4	80	5	100				
3	9	4	44	8	89				
DATES		9/26		10/18					

You may remember that after Placement Testing, the information from the Placement Profile is transferred to the Student Profile (see p.35) As a student completes a unit the teacher writes "M" and the date of mastery of the unit in the appropriate box. Notice that the dates, starting with C-Geometry, show the order in which the units were prescribed.

The Profile is kept in the student's folder and although the aide does not use it, she should make sure that it is kept up to date. It is often helpful to attach it to a piece of construction paper or tag board since it will be handled often over the period of a school year.

ipi MATHEMATICS STUDENT PROFILE

Name Joseph Howard Grade 5 Room 7



Check (X) the box to indicate mastery of unit.

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POSTTEST ON CONCLUDING AN IPI UNIT

Choose the best answer for each statement. Refer back to the page numbers when you need more information about any item.

1. There is an IPI Posttest for each_____.(p.94)
   a. unit
   b. skill

1.____

2. In which of the following ways are a Pretest and a Posttest for the same unit <u>unlike</u> each other? (p.102)
   a. They test the same skills.
   b. There are the same number of items for each test.
   c. All items are exact duplicates of those on the Pretest.
   d. Mastery on both tests is 85% for any skill.
   e. They are recorded in the same section of the Prescription Sheet.

2.____

3. The teacher writes "Mastery" at the top of the Prescription Sheet (p.104)
   a. automatically after the student takes the Posttest.
   b. When she decides by Posttest scores and other evidence, that the student is ready for the next unit.

3.____

4. "Mastery" written at the top of a Prescription Sheet indicates to the aide that she (p.104)
   a. should file the sheet after scoring the Posttest
   b. should file the sheet after filling in the unit date and days worked

4.____

5. "Days worked" indicates (p. 102, 103)

   a. the exact number of days the student worked in the unit, not including Pretests and Posttests.

   b. the difference between the Pretest date and the Posttest date

5.____

6. The last prescription for a unit (p.102)

   a. is always the Posttest

   b. is sometimes not a Posttest

6.____

7. "M", for "Mastery", and the date the unit ended is filled in on the student Profile by_____(p.104)

   a. the teacher

   b. the aide

7.____

ANSWERS TO POSTTEST

1. a
2. c
3. b
4. b
5. a
6. b
7. a

Now go back to your packet of IPI materials. Take the Posttest, score and record it. Fill in the rest of the Prescription Sheet so it is ready for filing.

SUMMARY OF IPI MATERIALS

STUDENT MATERIAL	USE	LABEL	LOCATION	RECORDED ON
Placement Tests	Tests Levels B-G extensively	Level	Bound in booklets by levels.	Mathematics Placement Profile; Student Profile
Pretests	Tests all skills in a unit intensively	Unit (Level-Area)	Bound in booklets by units.	Mathematics Prescription Sheet
Standard Teaching Sequence (STS)	Teaches and gives practice in all skills in every unit as needed.	Unit skill (Level-Area-Skill No)	Bound in booklets by skills.	Math Prescription Sheet
CET	Tests One unit skill intensively; (Part I) next skill briefly. Part 2)	Unit skill (Level-Area-Skill No.)-Form I or II	Bound in STS Booklet for skill; extra CET I Pad.	Math Prescription Sheet
Posttests	Tests All skills in a unit intensively	Unit (Level-Area)	Bound in booklets by units.	Math Prescription Sheet; Mastery of unit on Student Profile.

GENERAL INFORMATION

As the description on pages 8 and 9 and the filmstrip indicate, the aide is involved in many things as part of her job besides scoring and recording. The largest part of this manual has been concerned with what might be called the "technical" aspects of working with IPI materials. The remainder will describe some other aspects of your job.

AIDE'S RELATIONSHIP TO THE SCHOOL AS A WHOLE

IPI schools may be as different from one another in many respects as any other kinds of schools. Principals, teachers, and aides find ways of working which meet the needs of their school, but which might not happen to work well for another. There are, however, things which have proved useful at other schools which may be of help to yours.

One of the most important ways of making your job run smoothly will be your relationship to the teachers. Each teacher has a slightly different way of working and each will probably have a slightly different relationship with the aide she works with. It is your job to follow the lead of the teacher in terms of classroom routines and the kinds of tasks you perform other than scoring and recording the children's work. You will find your working relationship more comfortable if you can clarify these things as much as possible before you begin. As the year progresses, be ready to discuss changes if the teacher finds things that might work better.

If there is a head aide in your school, she can help work out problems which you are not able to solve through talking with the teacher.

The following suggestions from another handbook for teacher aides* are important ones to keep in mind:

You are responsible to the principal and to the teacher or teachers with whom you work. They are ready to answer questions, supply information, and suggest solutions to problems. The key to the success of this program is the ability of the aide, the teachers, and principal to work together.

A sense of loyalty to the school and a proper regard for professional ethics is essential. Therefore, acquaint yourself with the general policies of the school; maintain strict confidence about the children, children's records, school problems, and your opinions about teachers with whom you work.

A"good relationship" on your part means that you:

1. Become a member of the team in spirit as well as in name.
   a. Strive for a consistent approach in working with children. Follow the lead of the teacher.
   b. Build up the teacher in the eyes of the children. She must come first in their thinking; remember, you are her helper.
   c. Do not allow children to circumvent the teacher's directions.
2. Remember that schooling attempts to help children grow in independence as well as in knowledge.
3. Maintain an attitude of encouragement with children. Each child needs success experiences, and each wants to be important.
4. Refer to each child by his name.
5. Work in the positive in matters of discipline.
6. Plan ahead. Try to foresee and prevent trouble before it happens.
7. Be slow to anger. When children are disagreeable to you, it is not generally meant for you personally. They are more often frustrated by the world as they see it.
8. Treat all information about children and families in strictest confidence.

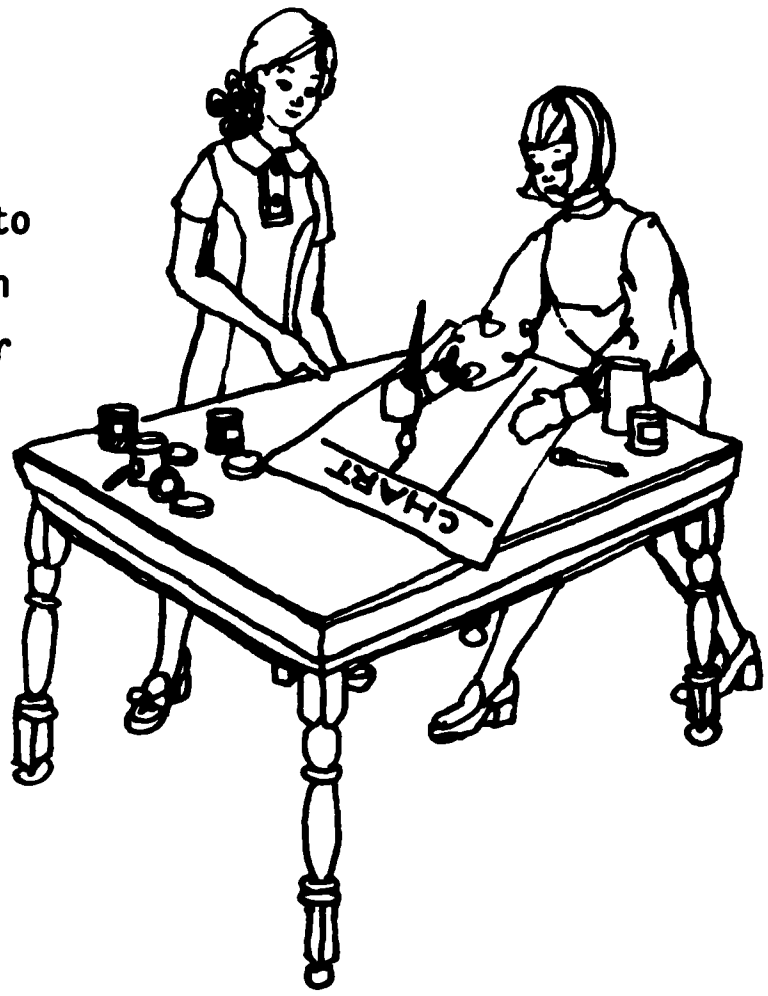
*Ferver, Jack, and Cook, Doris M., Teacher Aides: Handbook for Instructors and Administrators, The University of Wisconsin.

PREPARATION OF MATERIALS FOR TEACHERS

Aides are often asked to prepare materials other than prepared IPI materials for the use of teachers or pupils. This section will describe some of these.

Seminars

In many schools IPI teachers hold "Seminars", or full class sessions, once a week. This gives the aides a time to catch up on filing, scoring folders which may have piled up in a rush period, taking inventory, and so forth. The teachers may ask the aides to prepare materials for the seminars, such as charts or other audio-visual aids, or perhaps manipulative materials for the students to use.



Planning Sessions

Teachers in most schools have planning sessions once a week in which several teachers get together to discuss such things as ways to help individual children who are having difficulty on certain units, or ways to regroup children. The aide will need to make sure she knows what materials are needed for planning sessions. Flow charts, which are used to help the teachers keep up with each student's progress, are one of the things which the aide must prepare for planning sessions.

ipi MATHEMATICS PRESCRIPTION SH

STUDENT NAME Anthony Mamula STUDENT NUMBER ______

SCHOOL STAMP ______

GRADE 4 ROOM 109 UNIT D-SOM

SKILL BOOKLETS						
DATE PRES.	PRES. INIT.	SKILL NO.	PAGE NO.	INST. TECH CODES	INSTRUCTIONAL NOTES	TOTAL POINTS
5/13	JJ	1	Read Student page			Ok
			3			3
			4			

UNIT AND SKILL NUMBER

MATH -- GRADE 4 MRS. JOPLIN

	4/30	5/7	5/14	5/21
Hom, Richard	D-Sub Post	D-Div. 5	D-Frac Pre	
Mackenzie, Laura	Num Post	C-Add. 5	Sub 3	
Mamula, Anthony	D-COP 4	D-Frac 4	D-SOM 1	
Morales, Daniel	D-Num Post	D-Num 5	D-Som 1	
Micher, David	D-Cop Pre	D-COP 3	D-Cop Post	
Ochs, Sarah	E-PV 2	E-Sub 2	E-Sub 3	
Perez, Mary Ann	D-Frac 5	D-Time 2	D-Time 3	

Flow Charts

A Flow Chart shows the "flow" of each student's work from week to week. Notice in the samples on the opposite page that Anthony was working on Skill 4 of D-Combination of Processes on April 30th. He has moved on through D-Fractions, Skill 5, and is just beginning on Systems of Measurement for the same Level.

On the other hand, Mary Ann Perez, who was already on D-Fractions, may be having some problems with D-Time, since she has moved rather slowly in this unit.

Flow charts also may be made for several classes or a whole school. This combines the information from the charts for each class, not in terms of each child, but in terms of <u>numbers</u> of children who are working in a particular unit as of a particular date. The chart on page 117 is for all of the third graders in that particular school. As of November of that year there were 14 students in the unit D-Numeration, 4 in D-Place Value, and so forth.

Charts of this kind may be large wall charts, or they may be something like this one. Schools usually develop what is most useful to their own staff.

FLOW CHART

GRADE 3 NOVEMBER

MATHEMATICS AREA	A	B	C	D	E	F	G	H
NUMERATION (01)	0	2	9	14	2	0	0	0
PLACE VALUE (02)		0	1	4	0	0	0	0
ADDITION (03)			4	3	0	0	0	0
SUBTRACTION (04)			3	2	0	0	0	0
ADDITION/ SUBTRACTION (34)	0	2						0
MULTIPLICATION (05)				3	0	0	0	0
DIVISION (06)				2	0	0	0	0
MULTIPLICATION/ DIVISION (56)								0
COMBINATION OF PROCESSES (07)			6	2	0	0	0	0
FRACTIONS (08)	0	1	4	2	0	0	0	0
MONEY (09)		0	2	0	0	0		
TIME (10)		0	5	1	0	0	0	0
SYSTEMS OF MEASUREMENT (11)		1	4	2	0	0	0	
GEOMETRY (12)		0	2	0	0	0	0	0
SPECIAL TOPICS (13)			7	1	0	0	0	0

ORGANIZING MATERIALS

Arranging materials so you can get what you need when you need it, will make your life much easier. Many decisions about the arrangement of materials are up to the administrators, but some are up to you. Whatever decisions you do make will be most effective if all the aides discuss them and a decision is made based on all the suggestions which have been made.

Try to have materials organized in a way that makes sense both to you as an adult and to the children, since it is both to your advantage and to the student's if a student is able to obtain his materials easily on his own.

You may want to "color code" the materials on the shelves. For example, labels for Level A will be on blue paper, Level B on orange, and so forth. You can use the same colors for your answer Keys.

Answer Keys

Schools have various ways of keeping answer keys so that a particular test or skill booklet can be located easily. One convenient way is to have a 3 ring notebook for each Unit (for example, C-Numeration), or for each Level (ex: Level E) with pages keyed to Pretest, STS, CET, and Posttest. When students are doing their own scoring there can be one or two additional notebooks in each room containing only STS answer keys.

Another system is to have the key pages filed in a cardboard box, or "transfile" (a cardboard file with handles). These can be moved from class to class on a cart or table with wheels, or can be used in the materials center where they do not need to be moved around. Again each type of material, or each unit should be clearly marked and separated.

Inventory

One of the most annoying problems for a school can be to run out of materials. With the large number of materials used in IPI it may seem like an impossible task to keep such a thing from happening, but with good management it can be kept to a minimum.

There should be a regular day each week when a survey of materials is made so that new ones can be ordered well before the shelves are bare. Each week this need only be a visual survey but a thorough inventory should be taken each month, so that numbers can be planned for the month ahead. Even if one STS skill booklet is completely out, it can mean that new prescriptions have to be written and time is lost by students and teachers. Therefore, whatever, method can be devised for keeping ahead of the game will help IPI run more smoothly.

You can set an arbitrary number of materials, say 30, as a point at which new ones are ordered. In some schools a piece of colored paper is placed on top of the first 30 booklets on a shelf. When this paper turns up, it is automatically a signal to order new copies of that item. Materials usually come in cellophane packs of 15. If materials are kept in the wrappers until needed, it not only keeps the shelves heater, but is an easy check on inventory. The time at which an item needs to be ordered will vary with the size of the school and the frequency with which a particular item is used. You can use flow charts (see pages 114 and 117) as a way to check the number of children who are working in each skill or unit.

When checking material on the shelves, it is best not to take it for granted that each item is in it's correct place. Remember that upper grade students usually obtain their own materials. They occasionally pull out too many booklets at once and may be careless about putting things back exactly where they belong.

Be sure to check Placement Tests and Pre and Posttests regularly also, even though they may be kept in separate areas.

It is sometimes useful to divide the responsibilities of inventory and other duties so that each aide is in charge of keeping track of one type of material, for example, Pretests, or STS booklets Levels A through C.

Filing

It is recommended that Placement Tests, Placement Profiles, Pretests and Posttests and "Mastered" Prescription Sheets, be put in a permanent file for each student. During Placement testing at the beginning of the year a file folder is made for each student. The completed tests are put in this folder along with the Mathematics Placement Profile (see p.33) after the information has been transferred to the Student Profile (p.35). While a student is working in a unit he keeps all the work for that unit and the Student Profile in his own work folder. When a unit is mastered, the Pretest, Posttest and the Prescription Sheet are all placed in the permanent file so that they are available for teachers to use when needed. The teacher will decide what to do with the completed STS booklets and CET's.

There are always a few work folders left at the end of each IPI class which need corrections, new prescriptions, or new materials. Students can place their folders in different piles at the end of class depending upon what needs to be done. In the materials center, the folders can then be put in boxes or on shelves labeled as follows: "Prescriptions Needed" (for teachers), "To Be Filled", "To Be Corrected", "Ready For Class". All, of course, should be in the "Ready For Class" section by the beginning of the next IPI math period for that room.

CONCLUSION

The job of a teacher aide in an IPI school can be a challenging one if you know your job well and continually find ways to help make things run smoothly. Having gone through the manual once we hope you will continue to refer to it whenever it is useful to do so, and that using it has made your job easier.

THE SOUND FILMSTRIP

AIDING IPI

MAY BE USED WITH

THIS MANUAL

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