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ABSTRACT

This document presents more useful statewide testing as a rationale for a revision to the California Assessment Program (CAP). A brief description of the revision procedures, and an illustrative outline of the skills and concepts covered by CAP are included. Approximately 270 districts and counties participated in the test development process to ensure that the test would reflect both the statewide curriculum frameworks (reading, mathematics, or English language) and the intermediate curriculum commonly taught in public schools throughout California. The Survey of Basic Skills: Grade 6 consists of 418 reading items, 342 written language items, and 480 mathematics items. Under the matrix sampling technique, each pupil takes only a small portion of this comprehensive test. The Survey has been divided into 40 unique forms. Each pupil takes one form made up of 9 written language items, 12 mathematics items, and 10 reading items. Each test form contains items from all major skill areas, and a balance is maintained between easy and difficult items. (Author/PN)

Survey of Basic Skills: Grade 6

Rationale and Content

California Assessment Program

CALIFORNIA STATE DEPARTMENT OF EDUCATION • Wilson Riles, Superintendent of Public Instruction • Sacramento, 1982

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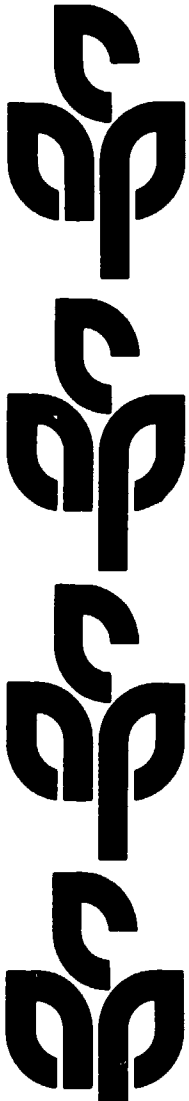

Survey of Basic Skills: Grade 6

Rationale and Content

Prepared under the direction of
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California Assessment Program

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Preface

Art may exist for art's sake, but the day of testing for the sake of testing is over. Test results must be useful, and statewide test results are no exception to the rule. It is not enough that test results indicate the relative quality of a school program; they must also guide the action taken to improve that program. As discussed in this rationale, the usefulness of test results has two prerequisites: (a) relevance of what is tested to what is taught, and (b) specificity of the findings, so that action can be taken to correct specific deficiencies.

Neither of these prerequisites can be met in a statewide assessment setting without a proper combination of commitment and technical sophistication. Relevance can only be ensured when hundreds of California teachers and other educators are involved in the test development process. The Department is grateful for the generous cooperation extended to us by teachers, principals and curriculum specialists in outlining the desired focus of the test and reviewing hundreds of test items to ensure the match between instruction and testing. Specificity of findings can only be provided by a very comprehensive test. But a very comprehensive test means a very long test, unless the powerful efficiency of matrix sampling is brought into play to simultaneoulsy reduce testing time and increase specificity and reliability of the results. The advantages of matrix sampling are substantial, if not remarkable.

The pattern for more useful statewide testing in California can be traced to 1974, but it was not fully established until the new Survey of Basic Skills: Grade 3 was first administered in 1980. The 1982 fully-revised version of the sixth-grade Survey follows that pattern, and even more fully exploits the new technologies of matrix sampling and item response theory. It is not an exaggeration to say that California's pioneering application of matrix sampling, now combined with item response theory, is in the national and international forefront of efforts to make test results more accurate and useful.

The new test not only covers the "basics" with the same thoroughness as the third-grade test, but also reflects and thereby promotes the higher-level thinking and problem-solving skills which are emphasized in the upper elementary grades in California schools. Minimal proficiency testing is important, but statewide assessment must have a broader focus; it must report on the progress of students on all the varied goals that good instructional programs seek to foster.

This document presents a rationale for this important revision to the California Assessment Program, a brief description of the steps involved in developing the test, and an illustrative outline of the skills and concepts covered.

DONALD R. McKINLEY
Chief Deputy Superintendent of Public Instruction

ALEXANDER I. LAW
Chief, Office of Program Evaluation and Research

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Introduction

The primary purpose of Survey of Basic Skills: Grade 6 Rationale and Content is to describe the skills that the Survey of Basic Skills: Grade 6 is designed to measure. The rationale for the test content specifications and the methods used to assess skills are discussed, and the activities that were conducted during the test development process are highlighted.

Use of this Document

The real value of thi publication lies in its usefulness to school personnel in interpreting California Assessment Program (CAP) test results. Generally, when the CAP results for a school are made available, the school personnel immediately ask, "How did we do?" This can be answered by studying the overall scores from a number of perspectives; for example, by comparing them with the result from earlier years, or by comparing content area to content area. However, a more productive question might be, "How did we do in specific skill areas, such as vocabulary?" If the scores for some skill areas are relatively lower than others, then the question should be, "Are the scores low enough and are the skill areas important enough to merit special attention and review - perhaps more emphasis or a change in instructional materials or techniques?" It is virtually impossible to answer this question, or decide what action to take, without a clear understanding of the skills being measured on the Survey.

This document is designed to help meet that need. The skill area definitions provided herein are meant to be descriptive but not excessively detailed.

Teaching and Testing

It is important that creative and effective teaching and learning practices be employed in efforts to improve pupils' skills. The sample test items included in this booklet are not provided for instructional use. The skill descriptions and illustrative test items are meant to "define" the basic skill outcomes of a good instructional program. Comprehensive recommendations as to how those skills can best be taught are not included because methodology involves a much larger and more difficult question which each school principal and intermediate grade teacher must answer on the basis of the needs of the pupils. Efforts to raise test scores by focusing too narrowly upon these and similar items in a drill-and-practice manner is a serious misuse of the materials, a probable waste of valuable instructional time, and therefore a disservice to the pupils.

The objective multiple-choice testing format is a valid and most efficient system for measuring pupils' understanding and competence but it is not, of course, a substitute for good teaching. The instructional program must include as many opportunities as possible for pupils to learn to read by reading, to write by writing, and to build math competence by solving problems. Only then will there be a balance between teaching and testing, one that allows each pupil to build a foundation of basic literacy and academic skills.

Rationale

The test development process for the new sixth-grade CAP test was based on two primary considerations: relevance to instruction and usefulness. First, every effort was made to ensure that the test would reflect both the state Frameworks and the intermediate curriculum commonly taught in public schools throughout California. Secondly, the test was designed to ensure that the sixth-grade assessment information to be reported back to schools and districts would be as useful as possible in the identification of programmatic strengths and weaknesses. Essentially, all test development efforts can be traced back to these two overriding considerations as is illustrated in the following discussion.

Relevance to Frameworks and Instruction

The first step taken to insure a match between the CAP test and California's basic skills curriculum was to reconvene committees of content area specialists in reading, language, and mathematics. Such committees have traditionally served in an advisory capacity to the Department in the creation of the reading, language, and mathematics assessment instruments. The content area specialists who served on the three advisory committees represented a cross section of geographical regions and educational institutions from across the state. The advisory committees served as the final decision-makers in the test development process.*

The task of test development began with a thorough examination of the appropriate statewide curriculum frameworks (reading, mathematics, or English-language). In each case the framework provided the guiding philosophy for the creation of test content specifications and assessment items. The content area committees also relied heavily on content analyses of commonly used state-adopted sixth-grade textbooks.

Lists of objectives with sample item formats were developed and refined. The process culminated in the drafting of preliminary sets of test content specifications which served as blueprints throughout the item-writing process.

*For a list of the members serving on these committees, see Appendix

In February of 1981, every school district and county in California received an invitation from the Department to participate in the development of the new sixth-grade CAP test. Approximately 270 districts and counties agreed to participate in some phase of the test development process.

As soon as the preliminary sets of test content specifications were drafted, copies were mailed to those districts which had indicated a willingness to review them. Participating reviewers were asked to (1) rate each of the proposed skill areas in terms of the degree of emphasis that the district placed on it, and (2) indicate whether or not the given skill should be tested on the sixth-grade CAP test. About 700 teachers from 152 districts completed the review forms. The advisory committees used the data from these field reviews to make final decisions about the skills to be included in the CAP's Test Content Specifications.

Teachers from across the state were then invited to write questions in accordance with the specifications. The item-writing phase of the test development process resulted in large pools of items for each of the content areas. The item pools were reviewed, refined, and checked for compliance with the specifications by the appropriate content-area committees and departmental staff.

The item pools were then subjected to several rounds of field review and field testing. During the field-testing phase, participating teachers were asked to evaluate specific test items on the basis of these two questions: (1) To what degree have you emphasized the skill measured by this item by the end of grade six? (2) Should this item be retained, modified or omitted?

Over 700 teachers completed these specific item reviews. These teacher-judgment data were then used by the advisory committees, who eliminated or modified unacceptable items. This process resulted in a test which has not only relevance to common instructional practices throughout California but also to high quality educational goals and objectives which are expressed in the state Frameworks. For example, the emphasis of the reading test is on higher-level comprehension skills; of the math test, on problem solving and real-world applications; and of the language test, writing process skills.

Usefulness of the Test

The second major consideration in the test development effort was that the results be useful to school personnel in evaluating and improving their instructional programs. It was determined that the results would be useful only if the following criteria were met:

1. The results must be reported in sufficient detail to permit identification of specific strengths and weaknesses. A single score for a content area, such as math, may be helpful in judging the overall success of a math program, but it does not indicate how the program can or should be improved.
2. The reporting categories, or skill areas, must be clearly described and must correspond to logical learning units, or strands, so that teachers can easily relate performance in a given skill area to the corresponding instructional component.
3. The test items themselves must be valid; that is, they must measure the actual skill or concept in question. The variety of potential barriers to creating valid test items is almost unending. Poorly-worded directions; confusing item formats, poor test layout; passage independent comprehension items (items that one could answer without reading the accompanying passage), difficult vocabulary in the language and math sections, and cultural, sex, and linguistic bias are only a few of the obstacles that must be avoided. A number of analyses were conducted to be sure that the questions were "functioning" as intended.

A few of the steps that were taken to ensure the usefulness of the test findings are described below:

- The test was designed to produce the greatest amount of program-diagnostic information possible to report to districts and schools. A total of 143 reporting or skill areas were designated (50 for math, 54 for reading, and 39 for written language). Most schools will receive scores for each of these categories and a total score for each content area.
- Care was taken to ensure that categories correspond to logical learning units typical of everyday instructional practices so that the test would clearly reflect the impact of good teaching. For example, instead of reporting only a score for major comprehension skills (literal, inferential, etc.), these broad areas were broken into specific elements corresponding to typical strands in most reading texts (such as details, main ideas, cause and effect, etc.). This should enable teachers to better pinpoint and address specific weaknesses (such as cause and effect questions within inferential comprehension, analyzing characters within interpretive comprehension, detecting author's purpose within critical/applicative comprehension), whereas attempting to address all of inferential comprehension, for example, might be as overwhelming as it is nebulous.
- The vocabulary and syntax of all directions on the test were simplified as much as possible and checked for communicability in a wide variety of settings. Moreover, the directions on most of the language items were designed to be read aloud by the teacher to ensure doubly against any confounding effect from directions and from switching rapidly from one format and skill to another.
- Item formats were carefully selected to ensure congruence with the actual skill being assessed. For example, the language item formats were designed to simulate written production within the context of a multiple-choice format. On most language questions pupils are asked to select the missing letter, word, or sentence for a blank in a word, sentence, or paragraph.

  On the spelling items, pupils are asked to write the word on their booklets and then to select the missing letters needed for a blank in the word. Again, the purpose of this format is to simulate actual production and to avoid presenting children with misspelled words.
- A variety of readability concerns was addressed on every section of the Survey. Math and written language items were carefully monitored to keep the reading difficulty as low as possible.
- Special efforts were taken to ensure that the test items would actually measure the intended learning. For example, departmental staff, teachers, and other reviewers carefully checked the reading comprehension items to be sure that none could be answered without the pupils' reading the accompanying test passage. Those items suspected of passage independence were then excluded.
- Several steps taken to eliminate linguistic, sex, and cultural biases were directly related to the goal of ensuring that the test would measure only the intended learning outcomes. These steps included (1) a series of in-depth reviews by linguists and representatives of ethnic minorities, and (2) a scrutiny of several statistical indexes designed to facilitate identification of bias which might be introduced as a result of ethnic, sex, linguistic, or socioeconomic variables.
- The distractors were written so that pupils would have a fair opportunity to demonstrate their knowledge of skills without being misled by "tricky" alternatives.

Description of the Test

The *Survey of Basic Skills: Grade 6* consists of 1,240 items covering the skill areas described in this publication. The test includes 418 reading items, 342 written language items, and 480 mathematics items. Under the matrix sampling technique, each pupil takes only a small portion of this comprehensive test.

The *Survey* has been divided into 40 unique forms. Each pupil takes one form made up of 9 written language items, 12 mathematics items, and 10 reading items Each test form contains items from all major skill areas, and a balance is maintained between easy and difficult items.

The language questions appear first in the test booklets since the directions for the first 6 are administered orally. Pupils work on their own on the remaining test items. Each form includes only one reading passage, and all of the reading questions are derived from this selection. In this way, pupils are never asked to deal with reading skills apart from the context of a passage. The reading passages fall into three categories: literature, science, and social studies.

Reading

The reading section of the Survey of Basic Skills: Grade 6 contains questions from six broad skill areas: (1) vocabulary; (2) literal comprehension; (3) inferential comprehension; (4) interpretive comprehension; (5) critical/applicative comprehension; and (6) study-locational skills. (For an overview of all skill areas to be reported at the local level, see the outline of reading skills in the box on page 7.) These skill areas reflect the emphases in the Reading Framework for California Public Schools, Handbook for Planning an Effective Reading Program, and state-adopted reading textbooks commonly used at the sixth-grade level.

Decisions about the relative emphasis and breadth of content for each of these skill areas were made by the Reading Assessment Advisory Committee, a group of reading specialists representing a cross section of geographical regions, educational institutions, instructional levels, and professional groups throughout California. In making these decisions, the committee members considered information from field reviews of preliminary test content specifications. The results indicated the degree of emphasis placed on each skill area and whether or not the skill should be assessed on the Survey. These field reviews reflected district, school, and teacher points of view.

After careful consideration of the reading framework and field review information, the reading committee decided that the area of comprehension should receive the greatest emphasis in the reading section of the Survey. This decision was also consistent with the state-adopted Handbook for Planning an Effective Reading Program, which includes the following statement: "Comprehension is the central goal of reading" (page 7). Thus, approximately 80 percent of the reading questions are comprehension items.

The major features of the reading section of the Survey of Basic Skills: Grade 6 are highlighted below:

- The new reading test reflects the new Reading Framework for California Public Schools which emphasizes comprehension development, higher level thinking, reading in the content areas, and promotion of positive attitudes toward reading in order to establish a lifelong desire to read.

- Content area reporting is a brand new feature of the revised Survey. Comprehension and vocabulary scores will be reported for science, social studies, and literature. In most cases, literal, inferential, interpretive, and critical/applicative comprehension scores as well as vocabulary scores will be reported for the literature, science and social studies passages. (For exact details regarding the content area reporting, see the list of reading skill areas on page 7.)

- The vocabulary items test (1) understanding of prefixes, roots, and suffixes, (2) recognition of word meanings, and (3) the ability to use context to select the appropriate meaning of a word with multiple meanings (such as "saw" or "cold"). All vocabulary items are based on words which are used and underlined in the test passage. This formatting feature was used to (1) enable children to use the context of a story in answering these questions; and (2) avoid fragmenting and isolating these skills from context. This approach reflects psycholinguistic research which has shown that children are more successful in identifying words in context than in isolation. Those items measuring recognition of word meanings were designed to assess general and content area vocabulary knowledge independent of the passage; however, the student is encouraged to use context as it may very well be of some help in retrieving the meaning. (Graded content area vocabulary lists were used in conjunction with the science and social studies Frameworks in selecting final vocabulary items.)

  While context clues might be helpful with the word items, they must be used on the multiple meaning items, or students are likely to select an out-of-context answer.

- The comprehension items cover a wide variety of specific skills. These skills were defined in precise and objectively describable terms so that the items would be the purest possible measure of each skill area. This concern with precision is perhaps best illustrated by the literal detail questions, which involve identifying details from a single sentence within a passage or from two or three sentences within a passage. Classifying the detail questions in this manner was, thus, an objectively definable process directly amenable to public inspection.

- All reading passages on the test were carefully controlled so as to cover an appropriate range of readability. Readability was also the primary consideration in the selection of size, color, and style of print; amount of blank space; and color of paper.

- In the comprehension items the actual language of the passage was used as much as possible. Where this was not possible, words equal to or below the readability level of the passage were used. This was done to ensure that the degree of reading difficulty of the items would be consistent with that of the passage.

- Study-locational skills have been expanded to include the following: parts of a book, reference materials, and maps, graphs and charts.

- Attitudes toward reading will be assessed from time to time to tap this important dimension stressed in the Framework.

Skill Areas in Reading

I. Vocabulary
- A. Prefixes, roots and suffixes
- B. Word meanings
- C. Using context with multiple-meaning words

II. Comprehension
- A. Literal
  - 1. Details
    - a. from a single sentence
    - b. from two or three sentences
  - 2. Pronoun references
  - 3. Sequence
- B. Inferential
  - 1. Main ideas
  - 2. Cause and effect
  - 3. Following organization
  - 4. Putting information together
  - 5. Predicting outcomes
  - 6. Making comparisons and contrasts
  - 7. Drawing conclusions from details
  - 8. Drawing conclusions from overall meaning
- C. Interpretive
  - 1. Analyzing character
  - 2. Identifying setting
  - 3. Summarizing plot
  - 4. Understanding dialogue
  - 5. Sensing mood
  - 6. Understanding figurative language
- D. Critical/applicative
  - 1. Detecting author and author's attitude
  - 2. Detecting author's purpose
  - 3. Separating fact from opinion
  - 4. Applications to a different context

III. Study-Locational Skills
- A. Reference materials and parts of a book
- B. Maps, graphs and charts

Reading in the Content Areas

I. Vocabulary — B. Word Meanings
- A. General
- B. In science
- C. In social studies

II. Comprehension of Literature Passages
- A. Literal
- B. Inferential
- C. Interpretive
- D. Critical/applicative

III. Comprehension of Science Passages
- A. Literal
- B. Inferential
- C. Critical/applicative

IV. Comprehension of Social Studies Passages
- A. Literal
- B. Inferential
- C. Interpretive
- D. Critical/applicative

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Reading in the Content Areas

"Each content area subject presents unique problems for the reader. If students are to comprehend the materials used in a content area subject, they must learn the vocabulary of that subject. Other problem areas involve the concept density, information load, and the level of abstraction of the information presented. In science the concepts may be very concrete, but the information load and concept density in the material may be very heavy. In social science subjects the concepts are more abstract with varying information loads and concept densities.

"The students who learn to generalize, to make judgments, to use problem solving techniques, and to reach conclusions have much greater assurance of experiencing success in the content areas than those who have not learned those skills."[1]

As explained in the introduction on page one, the reading section of the Survey of Basic Skills: Grade 6 was developed around representative passages drawn from science, social studies, and literature found in typical textbooks and everyday instructional materials. These will provide school- and district-level breakouts in vocabulary and the major comprehension skills for each of the content areas, as shown on page seven.

Passages A, B, and C are illustrative of the passages included in the Survey. All items, with the exception of the study-locational skills, are passage-derived. (See the description of the test on page four.)

PASSAGE A — Illustrative story

The beasts and birds of the dark woods were gathered around an old boot. They had come to find out what it was.

"There is no doubt about it," said the lion, pointing to the outside. "It is the shell of some kind of nut."

"Not at all," replied the wolf, putting his paw inside. "It is a nest. Here is a deep hole for the bird to go in and be safe with her eggs and young ones."

"No," said the bear, holding up a lace. "This is the long root of some plant."

"I can tell you what it is," hooted the wise old owl from a nearby tree. "It is a man's boot."

"What is a man?" cried the beasts and birds. "What is a boot?"

"A man," said the owl, "is a thing with two legs who can make himself go faster than we can, and he can fly without wings."

"That can't be true," said the beasts. "How can anything with two legs go faster than we can with four?"

"It can't be true. Nothing without wings can fly," the birds added angrily.

"Well," the owl continued, "they make things like this and put them on their feet."

"Shame, shame," cried all the beasts and birds. "No one wears things on their feet. It's not true. You are not fit to live with us."

So they chased the poor old owl out of the woods and never let him come back.

[1] Reading Framework, 1980, p. 15.

PASSAGE B illustrative science passage

Some kinds of fish need to be cleaned of the parasites that feed on them. If the parasites stay on the fish, sores can form.

In the Pacific Ocean are small cleaner fish called wrasses. The wrasses get their food by removing parasites from the head and gills of other fish. Many large and dangerous fish come to them to be cleaned.

To get customers, a wrasse usually sets up business near a busy spot. Its cleaning station may be a rock or patch of white sand. When another fish swims near the station, the wrasse does a kind of dance to catch the fish's attention. If the fish wants to be cleaned, it holds quite still.

Sometimes a large group of fish wait to be cleaned at a wrasse's cleaning station. In the group are many different kinds of fish, such as jacks, parrotfish, eels, bass, or sunfish.

A wrasse uses its teeth and jaws to remove the parasites from the customer's body. The wrasse may want to clean under the customer's fin. It gives the other fish a gentle push and the customer lifts it fin. If the wrasse wants the customer to open its mouth, it pokes between the fish's teeth and lips.

PASSAGE C illustrative social studies passage

In 1860, a Midwestern stagecoach company let people know about an exciting new plan which would affect our entire country. The company planned a faster mail service to California — the Pony Express which would deliver the mail in ten days or less.

Strong young men were the riders. Buffalo Bill was one of the famous ones. These men had to have courage. Every day they faced many kinds of danger. They had been told, "Remember, you travel alone and the country is wild and rugged. You may be cold, hungry, wet and tired, but you must go on! The mail must go through!" And it did go through!

Over the saddle of the Pony Express horses was hung a leather blanket or "mochila." In the four pockets of it were the tissue-thin letters. Five dollars was the usual price for sending a letter.

The route cut directly across from Missouri to Sacramento. Each rider rode nonstop for about a hundred miles, and then a new rider took over. The horses used were chosen for speed and were changed every ten miles. Quickly the mail was thrown over the saddle of the fresh horse, much like a relay race. Horses were saddled and ready to go at every station. With a leap, the rider was in the saddle — and off like the wind!

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
I. Vocabulary *"Since reading is comprehending, words used to convey a message must have meaning for the reader. Consequently, helping students to develop a functional vocabulary must be an integral part of the reading program. . .* *". . . Every subject area has a vocabulary of its own, and the extent to which vocabulary is mastered affects the reader's ability to draw meaning from the content. Similarly, the vocabulary level of reading material will affect the flexibility and rate of reading. As the reader becomes increasingly aware of the power of words to influence and persuade, he or she will be able to read more critically and analytically."*[1]	70	The student will recognize word meanings in context (including content area vocabulary in science and social studies); will select the appropriate meaning of multiple-meaning words from the context of a passage; and will recognize the meanings of affixes and roots in the context of a passage.	See examples for each specific reporting category.
A. Prefixes, roots, and suffixes	16	The student will identify the meaning of a prefix, root, or suffix of a word which is used and underlined in a passage.	In the word nonstop, the non makes the word mean o without stopping. o after stopping. o outside the stop. o over the stop. (See Passage C.)

[1] Reading Framework for California Public Schools. (Sacramento: California State Department of Education, 1980) p. 10.

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Recognizing word meanings	37	The student will identify the meanings of words which are used and underlined in a passage. The student will demonstrate knowledge of particular words which are used and underlined in a literary, science, or social studies passage. While the student is encouraged to make use of context, these items were developed to test knowledge of word meanings independent of the material in the passage.	In this passage, parasites means o friends who stop to chat. o many different kinds of fish. o fish that eat smaller fish. o animals that live on another animal. (See passage B.)
C. Using context with multiple-meaning words	17	The student will use the context of a passage to identify the meaning of a multiple-meaning word which is used and underlined in a passage. Because these are multiple-meaning words, the student must use the context of the passage in order to avoid selecting an out-of-context meaning for the word.	In this story, nut means o a seed enclosed in a shell. o a funny person. o a metal piece fitted on a bolt. o a crazy animal. (See passage A.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
II. Comprehension *"Comprehension is the very heart of the reading act: to read is to comprehend. The mere pronunciation of words without the accompanying comprehension of their message does not constitute reading. A primary goal of the teacher, therefore, is to help students understand that reading should make sense in the same way that speaking does.* *"Comprehension is an active mental process. Readers bring their own concepts, vocabularies, interests, experiences, and language competencies to the printed page. In helping readers improve reading comprehension, the effective teacher can: (1) build on the oral language of the students to provide readiness for the text, (2) reinforce, extend, and develop concepts necessary for understanding material to be read, (3) relate the content to the lives and experiences of the students, (4) encourage students to set a purpose for reading, (5) promote active reasoning before, during and after the reading, and (6) provide opportunities for the reader to react to the information read and apply it in a variety of situations."* ading Framework, p. 11	330	The student will respond to a wide variety of questions which cover the following range of levels: literal, inferential, interpretive, and critical applicative.	See examples for each specific reporting category.

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
A. Literal *"Literal: Reading 'on the lines,' responding to information explicitly stated in the text."*[3] *"Students should be encouraged always to seek meaning when they are reading. Current research reveals that poor readers tend to pay too much attention to the mechanics of reading and, thus, fail to focus on deriving meaning or understanding ideas. Therefore, instructors should avoid overemphasizing decoding and isolated skills to the neglect of comprehesion; rather, they should ensure that students develop the habit and skill of reading for meaning from their first reading experiences. Many poor readers simply do not know that reading should make sense in the same way that listening does. When learners are trained from the beginning to read for meaning, they can keep the mechanics of reading in perspective and use them efficiently."*[4]	62	The student will identify details stated in one, two, or three sentences, recognize antecedents of pronouns, and answer questions concerning the order of events or elements in a passage.	See examples for each specific reporting category.

[3]Reading Framework, 1980, p. 11.
[4]Handbook for Planning an Effective Reading Program, (Sacramento: California State Department of Education, p. 8.

Skill Areas Assess[illegible] Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
1. Details	31	The student will identify the verbatim answer to a question which is derived entirely from a single sentence within a passage.	Where are the small cleaner fish? o in the Atlantic Ocean o in rivers and streams o in lakes and ponds o in the Pacific Ocean (See passage B.)
a. From a single sentence	14		
b. From two or three sentences	17	The student will identify the verbatim answer to a question which is derived from putting together two or three sentences within a passage.	What was the exciting new plan? o a new stagecoach company o a relay race o a faster mail service o a hundred-mile race (See passage C.)
2. Pronoun references	16	The student will answer a question which involves identifying the antecedent of a pronoun	Who chased the owl out of the woods? o a man with a boot o the other owls o the beasts and birds o a thing with two legs (See passage A.)
3. Sequence	15	The student will answer a question which involves identifying the sequence of events, facts, or other elements in a passage.	Which of these does the wrasse do first? o sets up business near a busy spot o does a kind of dance to catch a fish's attention o uses its teeth and jaws to remove parasites o gives the other fish a gentle push (See passage B.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Inferential *Inferential: Reading "between the lines," responding with ideas or opinions based on the material read but not stated explicitly in the text.* *"The fullest comprehension requires rising above the literal to the inferential, that is, to induction, deduction, analogy, and other logical processes. It also invites individualistic, imaginative elaborations based on what the writer has suggested. These sets of competencies are sometimes called "thinking skills." Although these competencies are not unique to the reading process, they are essential to success in reading."*[5]	127	The student will identify main ideas, associate cause and effect, follow organization, put information together, predict outcomes, make comparisons and contrasts, and draw conclusions from details and overall meaning.	See examples for each specific reporting category.
1 Main ideas	16	The student will discriminate between the topic of a passage and lesser details within the passage, or will recognize a paraphrase of the gist of the passage.	The main idea of this passage is that o the wrasse is a fish which keeps other fish free of sores by cleaning them of parasites. o a wrasse's cleaning station can be many things. o the Pacific Ocean has many kinds of fish. o the wrasse is a parasite which feeds off of other fish, causing sores to form. (See passage B.)

[5]Framework in Reading for the Elementary and Secondary Schools of California (Sacramento: California State Department of Education, 1973) p. 43.

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
2. Cause and effect	15	The student will associate a cause with an effect. The student will either infer a casual relationship from stated events in a passage, or infer the cause of an effect or an effect of a cause.	Why does the wrasse remove parasites from other fish? o to clean them o in order to get food o to free them from sores o to do a dance (See passage B.)
3. Following organization	16	The student will select a topic of detail to complete an outline written according to the organization of a paragraph or test passage.	The following outline is based on the entire passage. Which point is needed to complete the missing part? I. Wrasses A. How wrasses get their food B. C. Different kinds of customers o Different kinds of parasites o How wrasses get customers o Sores on a fish o The Pacific Ocean (See passage B.)
4. Putting information together	15	The student will arrive at a conclusion which is inferred by putting together two other pieces of information, usually stated in different parts of the passage.	You can conclude from the passage that the wrasse probably o will attack the fins of a parrotfish to kill it. o cleans around the mouth and teeth of large, dangerous fish. o dances on land with its fins. o will die if eels do not clean it. (See passage B.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
5. Predicting outcomes	18	The student will predict an outcome which is a logical extension of the material presented in the passage. Sometimes these items project the student into the setting and ask him or her to predict what would have been observed in the situation. Some items ask the student to predict what would probably have happened had certain conditions, mentioned in the passage, been changed.	What do you think would usually happen when the rider reached Sacramento? o He would go to New York. o He would eat and rest. o He would brand horses. o He would meet Buffalo Bill. (See passage C.)
6. Making comparisons and contrasts	17	The student will compare or contrast elements within a passage to other elements within the passage; or to elements outside the passage (but within the range of everyday experiences of most sixth graders).	The "mochila" used by the Pony Express rider can best be compared to the o sleeping bag used by the camper. o sandpapaer used by the carpenter. o mail pouch used by the mail carrier. o pen used to write a letter. (See passage C.)
7. Drawing conclusions — from details	16	The student will draw a conclusion from one or more details presented in a passage.	You can conclude from the passage that o someone at each station prepared a fresh horse for the rider o Buffalo Bill was bored by the Pony Express. o the worst danger was from the cold. o few people ever heard about the Pony Express. (See passage C.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
8. Drawing conclusions — from overall meaning	14	The student will draw a conclusion or "moral" from the overall meaning of a story or nonfiction passage.	One conclusion to be drawn from this story is that o the lion is truly the "King of the Jungle." o new ideas are not easily accepted. o flying is not possible without wings. o truth is always quickly recognized. (See passage A.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
C. Interpretive *"Interpretive: Reading 'between the lines,' responding with ideas or opinions based on the material read but not stated explicitly in text."*[6] *"Awareness of various levels of comprehension is of particular importance as the teacher formulates both oral and written questions. Classroom instruction historically has emphasized student reponses at the literal level. While this level provides the foundation for comprehension at higher levels, attempts should be made to expose students to activities and questions that "stretch their thinking." Research indicates that the kinds of questions teachers ask and the way in which they ask them can influence student thought processing. Teachers who incorporate a variety of questions before and after the reading experience are actively involved in promoting thought and comprehension."*[7]	18	The student will analyze characters, infer setting, summarize plot, understand dialogue, sense mood, and interpret figurative language. Some of these skills (such as inferring setting and summarizing plot) apply exclusively to the literary passages. Items assessing character analysis, dialogue, mood, and figurative language do occur in several social studies passages.	See examples for each specific reporting category.

[6]Reading Framework, 1980, p. 11.
[7]ng Framework, 1980, pp. 11-12

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
1. Analyzing characters	18	The student will identify character traits, probe motivations underlying the actions of characters, and draw conclusions about the feelings of characters based upon the information in a passage.	The beasts and birds can best be described as o proud and closed-minded. o understanding and wise. o sleepy and lazy. o thrifty and hard-working. (See passage A.)
2. Understanding setting	12	The student will identify and interpret the time and or place of a particular story or event presented in a test passage.	You can tell that this story took place o in a city park. o at a zoo. o in a forest. o near a boot factory. (See passage A.)
3. Summarizing plot	13	The student will select the statement that summarizes the events of a story or poem.	Which of the following best states what happened in the story? o The animals met to find out what a boot was and chased away the owl who told them the truth. o The animals of the dark woods stole a boot to punish a man who entered their forest o The animals held a meeting to decide how to find more eggs and nuts. o The animals chased a man out of the forest by frightening him with a boot. (See passage A.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
4. Understanding dialogue	12	The student will identify the message of quoted dialogue, the speaker of the quoted material, and or the listener to whom it was directed	You can tell that the wolf thought that o the lace could be used in making a nest. o the leg of the boot was the deep hole of a nest o the bird's eggs could go on top of the boot. o the birds could put the boot up in a tree. (See passage A.)
5. Sensing mood	12	The student will recognize the mood of an entire passage or of parts of a passage (such as the beginning or ending).	At the beginning of this story, the mood is one of o disappointment and sorrow. o curiosity and excitement. o fear and suspense. o thankfulness and joy. (See passage A.)
6 Understanding figurative language	12	The student will identify the meaning of a metaphor, simile, idiom, or other image or figure of speech used in a passage, story, or poem	The author's choice of the words "sets up business" and "cleaning station" are used to show that o the wrasse's means of getting food is almost like a business service. o wrasse fishing is big business. o all fish set up stations o the wrasse enjoys cleaning itself in the water. (See passage B.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
D. Critical applicative comprehension *Critical/Applicative:* *"Reading 'beyond the lines, investigating, evaluating, and integrating the information and ideas with one's own experience and/or applying it in a new context."*[8] *"Critical evaluation is also an essential component of comprehension. In a sense, students need to learn to conduct dialogues with the author. They should agree, disagree, support, and qualify as they read. In exposition, they should note gaps in information or logic, and in literature they should observe failures in motivation or credibility. They should make imaginative and logical inferences. They are encouraged to use their gathering store as a critical reference resource to bring to each new reading they undertake."*[9]	62	The student will detect the author, author's attitude, author's purpose, separate fact from opinion, and apply information and insights from the passage to another context	See specific reporting categories for examples

[8]Reading Framework, 1980, p. 11.

[9]mework in Reading, 1973, pp. 43-44.

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
1 Detecting author, and author's attitude	12	The student will 1) draw conclusions about the characteristics of the author from clues within the material or 2) identify the author's attitude toward something or someone in the passage.	The author's attitude toward the Pony Express riders can best be described as one of o confusion o amusement o worship. o admiration (See passage C.) You can tell from the first sentence the author was probably o a mailman. o an American. o a native of Puerto Rico o a friend of Buffalo Bill's (See passage C.)
2. Detecting author's purpose	19	The student will identify the author's purpose in writing the passage, story, or poem (such as to inform, persuade, teach, etc.)	The author's purpose in writing this passage is to o inform the reader o amuse the reader o advertise a product o teach a moral (See passage A.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
3. Separating fact from opinion	16	The student will recognize if passages consist mostly of facts or opinions; or if a particular statement is an example of a fact or opinion.	Which of the following is an example of an opinion? o "In 1860, a midwestern stagecoach company let people know about an exciting new plan." o "The mail must go through." o "The route cut directly across from Missouri to Sacramento." o "Each rider rode nonstop for about 100 miles." (See passage C.)
4 Applications to a different context	15	The student will apply information, inference, or insight to a different context. The questions require that a context other than that described in the passage is presented in the item stem	If you had lived in Missouri in 1855 and had posted a letter to Sacramento, you can tell that it would have taken o longer than 10 days. o 10 days. o 5 days. o less than 9 days (See passage C.)

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
III. Study-Locational Skills *"Study skills may be defined as those skills which are used when the student intends to do something with the content of printed materials other than simply read it. For example, the reader may be seeking information to use in writing a report* *"Foundations are laid in the primary grades for the use of study skills when students learn to alphabetize and find a story in the table of contents. The skills are expanded to meet new needs as students progress through school. Since such skills are a means to an end — i.e., acquiring, assimilating, and synthesizing information — they are learned most effectively when they are applied within a meaningful context* *"After students leave school, they should be able to use study-locational skills as the need arises in their daily lives."*[10]	30	The student will demonstrate knowledge of how to find and use parts of a book, reference materials; and how to interpret maps, graphs, and charts.	

[10] ding Framework, 1980, p. 16

Skill Areas Assessed in Reading, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
A. Reference materials and parts of a book	15	The student will demonstrate an understanding of how to find and use (1) parts of a book (such as title page, table of contents, and index), and (2) reference materials (such as dictionary, atlas, encyclopedia, and card catalogue).	Where would you look to find a list of all the presidents of the United States? o an encyclopedia o a newspaper o a dictionary o an atlas
B. Maps, graphs, and charts	15	The student will demonstrate an understanding of how to read and interpret a variety of maps, graphs, and charts. (Twelve of these are basic comprehension items from the mathematics section of the test.)	 MAIL COLLECTION Monday-Friday Except Holidays / Saturday / Sunday AM PM AM PM AM PM 10 00 — — — Holiday — — — 2 30 — — — 6 00 — — — — If you put a letter in this mailbox on Sunday at 9:00 a.m., it would be collected at o 2.30 p.m. Sunday. o 2.30 p.m. Saturday o 10.00 a.m. Monday. o 6.00 p.m. on a holiday.

Written Language

The language section of the Survey of Basic Skills: Grade 6 contains questions from nine skill areas which are divided into two main categories. The first is "Writing Process Skills" which deals primarily with matters of judgment in effective writing. The skills included in this category are: (1) judging student writing; (2) paragraphs; (3) sentence combining; (4) sentence recognition; and (5) language choices. The other category is "Supporting Skills," also a necessary part of writing instruction, and includes the following skills: (6) standard English usage; (7) word forms; (8) capitalization and punctuation; and (9) spelling. These skills reflect the goals and objectives stated in the English Language Framework for California Public Schools: Kindergarten Through Grade Twelve and the Handbook for Planning an Effective Writing Program as well as the major written language skills covered in state-adopted language textbooks commonly used in California's sixth grade classrooms.

The relative emphasis and breadth of content covered in each of the nine skill areas was decided on by the English Language Assessment Advisory Committee* which is composed of language arts experts representing a cross section of instructional levels and educational institutions from across the state.

The committee members considered the following sources of information during the test development process:

1. Content analyses of commonly used sixth-grade language textbooks adopted by the State Board of Education.
2. Field reviews of skill area compilations (written at the finest level of detail) in which teachers and curriculum specialists indicated the degree of emphasis they assigned to each skill area.
3. Reviews in which teachers judged each language item as to the degree of instructional emphasis placed on that particular skill and whether the item should be retained, modified, or omitted.

Special features of the language section of the Survey are highlighted below:

- A new skill area receiving considerable emphasis is judging student writing. Samples of student writing, which have been corrected for all mechanical errors, are presented with a multiple choice question pertaining to the writing sample. Students are asked to identify particular strengths such as: recognizing effective use of detail, paragraphs in which all sentences support the topic sentence, and letters which successfully communicate a message to a given audience. Students may also be asked to identify weaknesses such as: recognizing repetitious statements, paragraphs which drift away from the topic, essays with many short, choppy sentences, persuasive letters which fail to present convincing arguments, and essays which lack a strong introduction or conclusion.
- Paragraph items require students to choose a sentence for a blank in a paragraph which will make sense in the context of the paragraph. These items include topic sentences, relevant details, sequential elements, elements from an outline, and verbs or pronouns which are consistent grammatically with the rest of the paragraph.
- Sentence combining items require students to form effective sentences from a set of simple sentences. These include (1) simple sentences with modification and interrupters (such as appositives); (2) compound sentences or sentences with compound parts; and (3) complex sentences. Another group of items requires students to use conjunctions correctly by (1) choosing a sentence which follows logically from a given statement and underlined conjunction (e.g., I like cake, but _____.), and (2) choosing the correct conjunction for the sentence (such as, I like cake, _____ I don't like pies.).
- Sentence recognition items require students to form a complete sentence by supplying a needed subject or verb, and to discriminate between complete sentences, run-ons, and fragments.
- Language choice items assess the student's ability to (1) select specific words or sentences which provide the most detailed or exact information (for example, the word "apple" is more specific or exact than "fruit" or "food"), (2) words which appeal to a given sense (e.g., "buzzing" or "screeching" with the sense of sound); and (3) words which will achieve a particualr tone or feeling (e.g., "stingy" is associated with a more negative feeling than "thrifty").

*See Appendix for a list of the members of the English Language Assessment Advisory Committee.

- The standard English usage items require students to use irregular verbs, pronouns, and noun determiners correctly to achieve subject-verb agreement and to avoid double negatives in sentences.

- Word form items assess the student's ability to use words with suffixes, irregular noun plurals (for example, "geese," "children," and "shelves"), and contractions correctly.

- Punctuation and capitalization items require the student to use periods, question marks, commas, apostrophes, and quotation marks correctly, and to select words (such as names, places, and holidays) which are correctly capitalized.

- The spelling items require students to write the word out directly on their test booklets, and then select the missing letters in the partially written word. The purpose of this format is to simulate actual spelling production as much as possible and to avoid presenting children with misspelled words. Most of the spelling items assess students' knowledge of words which follow predictable and generalizable spelling patterns. The spelling content area was deliberately organized in this way to reflect sound instructional practices in the area of spelling (as is stated in the English Language Framework).

- In most cases, the language items were written to simulate actual production of written language as much as possible within the restrictions of a multiple-choice testing format. Consequently, many of the language items require pupils to choose needed letters, words, or sentences for a blank in a word, sentence, or paragraph rather than to identify errors.

- The directions for almost all of the language items are read aloud by the teacher so as to minimize any possible interference from written directions.

- The sentences used to provide necessary context in the language items were written with a carefully controlled vocabulary so as to minimize any possible interference from reading difficulty. Most of the words used in the language items were designated at or below the fourth-grade level on a graded vocabulary list.

- The written language section of the Survey will assess 38 skill areas so that instructionally relevant areas of strength and weakness can be identified for a school. A list of these skill areas is shown below. An illustrated description of each skill area, accompanied by the underlying educational rationale, is presented on the following pages

Skill Areas in Written Language

I. Writing Process Skills

A Judging student writing

B Paragraphs

1. Topic sentences
2 Details and sequence
3. Outlines for organization
4 Consistency of verb tense and pronoun usage

C. Sentence combining

1. Simple sentences with modification
2 Compound sentences and sentence parts
3. Complex sentences
4 Conjunctions

D. Sentence recognition

1. Supplying subjects
2. Supplying predicates
3 Forming complete sentences

E. Language choices

1. Sensory words
2. Specific words and sentences
3. Achieving tone through word choices

II. Supporting Skills

A. Standard English usage

1. Irregular verbs
2 Pronouns
3 Subject-verb agreement
4 Noun determiners
5. Double negatives

B Word forms

1. Suffixes
2. Irregular noun plurals
3. Contractions

C. Spelling

1 Predictable words
2. Words with suffixes
3 Demons
4. Homophones

D. Capitalization and punctuation

1. Capitalization
2 Punctuation

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
I. Writing Process Skills *". . . a teacher with a planned program assists students in (1) finding out who they are and what they stand for (voice), (2) communicating with various types of people (audience), (3) having something to say (content), (4) giving shape to ideas (form); (5) developing an individualistic way of communicating ideas (style), and (6) gaining awareness of strengths and weaknesses in composing (self-evaluation)."*[1]	182	The student will identify strengths and weaknesses in student writing, select sentences or words needed to maintain the integrity of a paragraph, combine sentences effectively, use conjunctions meaningfully, recognize complete sentences, and make word choices appropriate to a given context	See examples for each specific reporting category.

[1]English Language Framework for California Schools (Sacramento: California State Department of Education, 1976) p. 29.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
A. Judging student writing *"For many teachers and students, the word revise means 'proofread, edit, and copy it over in ink.' A true revision, however, involves a process during which a writer 'revees' and 'rethinks' a piece of his or her writing many times while writing and rereading it, with special emphasis on how effectively the written material communicates his or her intent to the audience."*[1]	22	The student will identify a particular strength (such as imaginative ideas and content, effective use of concrete details, successful communication of a message to a given audience), or weakness (such as drifting off the topic, using short, choppy sentences, repeating statements, and excluding necessary introductions and conclusions) in a sample of student writing which has been corrected for mechanical errors	Read the student letter, and answer the question below *Dear Mr. Vega,* *I think the tidal pools would be a fun place to go for the fifth graders. It would be very interesting and fun. Please consider this request carefully.* *Yours truly,* *Pat Jones* Suppose your friend just wrote this letter. What advice would help her make it more convincing to the principal? o Indent "Dear Mr. Vega." o Add Mr. Vega's address in the upper right-hand corner of the letter. o Mention the dangers of going to the tidal pools o Add examples of what could be learned by going.

[1] ... Book for Planning an Effective Writing Program (Sacramento: California State Department of Education, 1982) pp. 15-16.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Paragraphs *"The broadest goals of composing are helping students to develop self-assurance in communication, to develop language proficiency, and to structure a segment of experience into an aesthetically coherent whole."*[3]	40	The student will select (1) a topic sentence, (2) supporting element, (3) element from an outline, (4) verb, or (5) pronoun needed for a blank in a paragraph.	See examples for each specific reporting category.
1 Topic sentences	10	The student will select a topic sentence for a blank at the begining or end of the paragraph.	Choose the sentence which is the best topic sentence (main idea) for the paragraph. _____. *You should try to stay away from trees and telephone wires. Whenever the string gets loose, roll it in until you've tightened it. When you feel the kite pulling away from you, give it more string a little at a time. The whole trick is to give it exactly the right amount of string at all times.* o It is so much fun to make a kite. o When you're flying a kite, there are several things you should keep in mind. o It is so much fun to fly a kite. o When you're buying a kite, you should remember to take enough money with you

glish Language Framework, 1976, p. 29.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
2. Details and sequence	10	The student will select a supporting sentence which provides a relevent detail, reason, or needed sequential element for a blank in a paragraph	Choose the sentence for the blank in the paragraph that best supports the topic sentence If I had to choose to be something other than a human being, I would become a lion_____ If I were a lion, I wouldn't be afraid of anything. Lions are huge and powerful. I would be "King of the Beasts." o I would like to be a zebra because they live in Africa o I once read a story about animals. o I admire lions because they represent power and dignity o I am going to take a trip to the zoo.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
3 Outlines for organization	10	The student will select an element needed for the organization of a paragraph according to an outline.	The following outline was used in writing the paragraph below it. Choose the sentence needed to complete the paragraph according to the outline. I. Athletes don't get fat A. Example – tennis players B Other examples gymnasts and wrestlers C. Conclusion strict diets Most successful athletes don't allow themselves to become fat, because extra weight slows them down_____ If they are ten pounds overweight, they may be slowed down by ten percent. Gymnasts and wrestlers must also be careful not to increase their body weight in order to compete successfuly. Athletes usually maintain rather strict diets that keep their weight down. o There are many sports which I enjoy watching. o Tennis players, for example, have to move with lightning speed. o You can play tennis at any age. o Staying on a diet is difficult.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
4 Consistency of verb and pronoun usage	10	The student will select the correct verb or pronoun which is consistent grammatically with the rest of the paragraph.	Choose the one which is needed for the blank in the paragraph or letter *Dear John,* *Mother just read me the part of Aunt Emm's letter about your robot man winning first prize at the state science fair. Congratulations! We are proud of you. When we come to visit you this summer, I hope _____ will show me how it works.* *Your cousin,* *Al* o he o she o they o you
C Sentence combining *"Sentence combining is a technique for combining short sentences into longer, carefully constructed sentences. Over the past ten years, several studies of classes from the elementary school level through the first year in college have shown that sentence-combining exercises, both oral and written, even when conducted with little or no grammatical terminology, can be effective in increasing the sentence-writing maturity of students."*[4]	50	The student will select effectively-combined simple, compound, and complex sentences, and will use conjunctions to connect ideas meaningfully	See examples for each specific reporting category.

[4] ...ng Handbook, 198... p. 4.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
"Work in grammar should give much practice in compounding, modifying, and subordinating. It should also include substituting structures within the basic sentence patterns and transforming the patterns themselves."[5]			
1 Simple sentences with modification	13	The student will select an effectively-combined sentence (that is, a sentence with modification and interrupters, such as appositives) from a set of simple sentences.	The teacher says: Choose the one below which combines the numbered sentences in the best way. 1. Roller skating is a sport. 2. Roller skating is challenging. 3. Roller skating is growing in popularity. 4. Roller skating is played indoors and out o Roller skating is a sport, and it is growing in popularity, and it is played indoors and out, and it is challenging o Roller skating, a challenging sport growing in popularity, is played indoors and out. o A challenging sport, roller skating, it is played indoors and out and is growing in popularity

[5] ...lish Framework, 1976, p. 45.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
2 Compound sentences and sentence parts	13	The student will select a compound sentence or a sentence with compound parts from a set of simple sentences	The teacher says, Choose the one below which combines the numbered sentences in the best way 1 John is going golfing. 2. James is going golfing. 3 Grace is going bowling. 4. Joyce is going bowling. o John is going golfing, and James is going golfing, and Grace is going bowling, and Joyce is going bowling. o John and James are going golfing, but Grace and Joyce are going bowling. o John is going golfing, James is going golfing, Grace is going bowling, and Joyce is going bowling.
3. Complex sentences	14	The student will select a complex sentence from a set of simple sentences	The teacher says: Choose the one below which combines the numbered sentences in the best way. 1 Ladybugs are beetles. 2 Ladybugs are small. 3 They feed on insects o Ladybugs are small beetles that feed on insects. o Ladybugs are beetles, and they are small, and they feed on insects. o Ladybugs feed on insects, and they are beetles, and they are small.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
4 Conjunctions	10	The student will select either (1) a sentence which follows logically from a given statement and conjunction, or (2) the appropriate conjunction for a blank in a sentence.	Choose the one that best completes the following sentence. (Note the underlined words.) The sun was much too hot; as a result, _____. o the team put on their jackets. o the team scored twenty points. o the team needed more water. Choose the word which best connects the thoughts in the sentence. The kitten is white, _____ the mother cat is black o nor o but o therefore o or
D Sentence recognition *"The study of basic sentence patterns can help students become more conscious of the subject-predicate relationship and the rhythm of the sentence."*[6]	30	The student will form complete sentences by supplying a needed subject or verb, and will discriminate between complete sentences, fragments, and run-ons	See examples for each specific reporting category
1 Supplying subjects	13	The student will select the word group which supplies a subject to form a complete sentence	The teacher says Choose the one which will form one or more complete sentences. _____ woke up the neighbors. o Every day o In the morning o His dog o Near the fence

[6] English Framework, 1976, p. 45

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
2. Supplying verbs	13	The student will select the word group which supplies a verb to form a complete sentence.	The teacher says: Choose the one which will form one or more complete sentences. The school carnival _____. o next week o is coming o lots of fun o games and prizes
3. Forming complete sentences	14	The student will select the word group which forms one or more complete sentences and excludes fragments and run-on sentences	The teacher says. Choose the one which will form one or more complete sentences. We go camping to get away from _____ _____. o crowds, we enjoy the peace and quiet o crowds. To enjoy the peace and quiet o crowds. We enjoy the peace and quiet o crowds. Enjoying the peace and quiet
B Language choices *"Practice in making the best word choice for precision and clarity should be regarded as important to each writing experience."*[7] *"As a daily writing exercise, give students a general declarative sentence and ask them to turn it into a vivid paragraph by making use of concrete and sensory details."*[8]	30	The student will make effective word choices by using words which appeal to a given sense, by using specific words and word groups that provide the most detailed information, and by selecting words which convey a given attitude or tone in a particular context	See examples for each specific reporting category.

[7]English Language Framework, 1976, p. 45
[8]...ing Handbook, 1982, p. 16.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
1. Sensory words	10	The student will select the word or words which most appeal to a given sense (taste, touch, smell, sight, or sound) for a blank in a sentence.	Imagine you are writing a ghost story. Choose the words that describe exactly how the wind might sound. The wind _____ all night long. o blew really a lot o howled and wailed o was so very bad
2. Specific words and sentences	10	The student will select the most specific and exact word, or the most detailed information for a particular context stated in the item.	Choose the word that tells exactly what Bugs Bunny did. Bugs Bunny _____ a carrot. o ate o had o munched Select the one which would give a reporter the most detailed information about what Tom and Sarah saw. Sarah and Tom stopped suddenly. On the street in front of them they saw _____ o some space ships with funny-looking people in them looking out the window o three saucer-shaped ships with green, yellow, and orange tiny creatures frowning at the blue sky o three large ships with some people in them who were just sitting there o you know, big ships, very funny-looking guys and some other stuff

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
3 Achieving tone through word choices	10	The student will select from a set of synonyms a word or expression for a blank in a sentence which reveals a particular attitude or tone	Select the one which suggests an unfriendly attitude from Mr. Houser Mr. Houser _____ that we pay the bill o asked o demanded o requested
II. Supporting Skills *"Various skills are best learned at particular stages of the writing process. For example, vocabulary is often expanded during pre-writing activities, such as brainstorming and clustering. Decisions about usage and grammar often occur during the revision stage when writers may rearrange or combine their sentences. Typically, spelling and punctuation become important when writers proofread their papers in the editing stage of the writing process."*[9]	160	The student will make decisions about the conventions of writing, such as with word forms, standard usage, capitalization, punctuation, and spelling	See examples for each specific reporting category
A Standard English usage *" Both the National Council of Teachers of English (NCTE) Commission on Composition and the Conference on College Composition have defended the students' right to use their own dialects in speech and writing, but they recommended that the*	50	The student will use irregular verbs, pronouns, and noun determiners correctly, achieve subject-verb agreement, and avoid double negatives	See examples for each specific reporting category.

[9] ...ng Handbook, 1982, p. 18.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
students should be exposed to standard usage as an alternative means of spoken and written expression"[10] *"Some skills . . . such as building one's vocabulary and using correct spelling, punctuation, usage, and grammatical constructions, are needed by all students in order to ensure that they write clearly and correctly"*[11]			
1 Irregular verbs	10	The student will select the correct form of an irregular verb for a blank in a sentence	The teacher says Fill in the bubble next to the one that completes the sentence correctly Jack _____ his lunch o brung o brought o brang o bringed
2 Pronouns	10	The student will select the correct pronoun for a blank in a sentence	The teacher says Fill in the bubble next to the one that completes the sentence correctly Send the equipment to Doug and _____. o she o me o I o they

[10] English Language Framework, 1976, p. 52

[11] Writing Handbook, 1982, p. 18

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
3 Subject-verb agreement	10	The student will select the verb form which agrees in number with the subject of the sentence	The teacher says Fill in the bubble next to the one that completes the sentence correctly The cats _____ together. o was playing o plays o were playing o is playing
4 Noun determiners	10	The student will select the appropriate noun determiner for a blank in a sentence	The teacher says Fill in the bubble next to the one that completes the sentence correctly. _____ students are in the marching band o This o Them o That o Those
5 Double negatives	10	The student will select the word for a blank in a sentence which will avoid a double negative.	The teacher says Fill in the bubble next to the one that completes the sentence correctly. He didn't buy _____ popcorn o no o any o none
B Word forms *"One key to successful instruction in the conventions of writing is to work as much as possible with the language which students produce themselves Confronting them with their own written expression in the*	32	The student will select the correct suffix (or a given word in context), irregualr noun plural, and contraction for a blank in a sentence	See examples for each specific reporting category

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
light of the conventions or rules of the language often produces the most lasting learning . . *" Students should be encouraged to edit their own writing by listening to the flow of their language Gross errors often become obvious when written material is read aloud"*[2]			
1. Suffixes	10	The student will select the word with the appropriate suffix (such as -er, -est, -ly, -s, -'s, -ness) for a blank in a sentence	The teacher says, Fill in the bubble next to the one which completes the sentence correctly His _____ was greatly appreciated. o kindly o kindness o kindest
2 Irregular noun plurals	10	The student will select the appropriate irregular noun plural (such as geese, knives, women) for a blank in a sentence	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. My two front _____ are missing o tooths o teeth o teeths

[2] ting Handbook, 1982, p 18

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
3 Contractions	12	The student will select the correct way of writing a contraction for a blank in a sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. I _____ seen her all day. o hav'ent o hav'nt o haven't o havent
B. Capitalization and punctuation *"Students can best develop their skill with the conventions of writing as the need for it arises in their work, rather than according to a fixed program. Writing itself, then, becomes the basis for determining which skills need to be learned by which students and at which time."*[1]	28	The student will select the correct capitalization and punctuation convention(s) for a blank in a sentence.	See examples for each specific reporting category.
1. Capitalization	14	The student will select the correctly capitalized words for a blank in a sentence (such as in names of persons, geographical locations, titles of books, days of the week, holidays, and given parts of a friendly or business letter).	The teacher says: Fill in the bubble next to the one which completes the sentence correctly The longest river in the United States is the _____. o Mississippi river o mississippi river o Mississippi River o mississippi River

[1] ing Handbook, 1982, p. 18.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
2. Punctuation	14	The student will select the correct punctuation for a blank in a sentence or part of a letter (including the common uses of periods, commas, apostrophes, question marks, and quotation marks)	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. Our high school band includes _____ trumpets, and drums. o clarinets o clarinets; o clarinets, o clarinets.
D. Spelling *"Ultimately, the test of a program lies in the students' spelling consciousness, which grows with knowledge of the language and the generalizations applicable to spelling. Isolated lists, on the other hand, which are memorized and regurgitated in weekly spelling tests tell very little about spelling consciousness. Children who recognize their options and the possible ways to spell may have less trouble than those who spend Thursday night memorizing for Friday's test."*[4]	50	The student will select the correct spelling for predictable words, words with suffixes, demons, and homophones	See examples for each specific reporting category.

[4] English Language Framework, 1976, p. 43.

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
1. Predictable words	15	The student will (1) write the word; and (2) select the letter(s) needed to spell a predictable word correctly. (Predictable words are those which follow generalizable patterns and can be taught with similar words in word families or groups.)	The teacher says: On the dotted line, write out the word with the missing letters. Now choose the letter or letters needed to spell the word correctly, and fill in the bubble next to the one you choose. I enjoyed the dis_ussion after the movie. o k o c o ck o g .....
2. Words with suffixes	15	The student will (1) write the word; and (2) select the letter(s) needed to form a word with a suffix added. (These items sample common patterns for spelling words when adding suffixes.)	The teacher says: On the dotted line, write out the word with the missing letters. Now choose the letter or letters needed to spell the word correctly, and fill in the bubble next to the one you choose. We will go swim____ every day. o ing o ming o eing o in .....

Skill Areas Assessed in Written Language, *Survey of Basic Skills: Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
3 Demons	10	The student will (1) write the word; and (2) select the letter(s) needed to spell a demon (an unpredictable word) correctly.	The teacher says: On the dotted line, write out the word with the missing letters. Now choose the letter or letters needed to spell the word correctly, and fill in the bubble next to the one you choose. The fire swept thr____ the woods. o ioux o ue o oo o ough .....
4 Homophones	10	The student will select the correct homophone for a blank in a sentence.	The teacher says: Fill in the bubble next to the one which completes the sentence correctly. The boys could _____ strange noises in the c e. o here o hear

Mathematics

The mathematics section of the sixth-grade Survey contains questions from nine skill areas: (1) counting, numeration, and place value; (2) nature of numbers and properties; (3) operations; (4) expressions, equations, and coordinate graphs; (5) geometry; (6) measurement; (7) probability and statistics; (8) tables, graphs, and integrated applications; and (9) problem solving. These skill areas closely match the strands discussed in the Mathematics Framework for California Public Schools: Kindergarten through Grade Twelve (1975), Addendum to the Framework (1981), The County Course of Study (1981), and the content outline of mathematics textbooks commonly used at the sixth-grade level.

The relative emphasis and the breadth of the content covered in each of the nine skill areas assessed on the Survey was decided on by the Mathematics Assessment Advisory Committee*. The committee members considered the following sources of information during the test development process:

1. Content analyses of commonly used sixth-grade mathematics textbooks adopted by the State Board of Education.
2. Reviews of a detailed test content outline in which teachers and curriculum specialists from districts indicated the degree of emphasis they assigned to each skill area and whether or not the skill in question should be assessed on the Survey.
3. Reviews in which teachers looked at the actual test items during the field testing. For each item, the teachers indicated the degree of instructional emphasis and whether the item should be retained, modified, or omitted.

The following are the major features of the mathematics section of the sixth-grade Survey.

- An overriding criterion for selecting items was that the items reflect sixth-grade classroom instruction. Even test items that proved to be very easy (for example, addition of numbers) were not excluded from the test. This method allows the test to be useful for diagnosis of strengths and weaknesses in pupil achievement.
- The mathematics questions were written in several formats so that pupils exposed to different textbooks have ample opportunity to reflect their achievement.
- The word problems were written so that, as often as possible, the stories would reflect an actual situation rather than a contrived situation. The story problems were written in short sentences and, as far as possible, the readability level was not allowed to exceed the fifth-grade level.
- The test questions were written so that they provide the maximum opportunity for students to reflect on the test what they have learned.
- The test reflects the "umbrella" concept of Problem Solving/Applications emphasized in the Addendum to Mathematics Framework (1981). In the new Framework, the Problem Solving/Applications, rather than being a separate strand, is now positioned to receive equal emphasis in conjunction with each of the other strands of mathematics. To reflect this viewpoint on the Survey, each skill area consists of skill and application questions and will be reported as such separately on the school reports.
- The test also consists of questions in problem solving. The questions in this category are nonroutine applications of mathematical skills, and generally cut across two or more skill areas of mathematics. The test questions in problem solving assess the skills in the following components of problem solving:
    - Problem formulation
    - Problem analysis and strategies
    - Problem interpretation
    - Problem solution

  In problem formulation, analysis and strategy, and interpretation, the task for the student is to "make sense" out of the question and "set it up" using many of the strategies without asking them to find the actual solution. In problem solution, however, students provide the correct answer to a problem presented in familiar context.
- The test reflects a broad curriculum with the main emphasis on counting, numeration, place value, number properties, and operation. These skills comprise about fifty percent of the mathematics test. About forty percent of the test comprises

*See Appendix for a list of the members of the Mathematics Assessment Advisory Committee

questions from graphs, function tables, evaluating expressions, geometric terms and relationships, measurement, probability and statistics, and reading tables and graphs. The remaining ten percent of the questions are in problem solving.

- The test consists of 15 questions on "integrated skills," which are applications of two or more math skills in a "life-coping" situation, such as reading and interpreting road signs, schedules, food labels, etc
- In measurement, the questions relate to both U.S. Customary and metric units. The majority of questions, however, are in metric measurement. Field review data indicated that students are instructed in the use of both U.S. Customary and metric units. The schools will get separate scores for metric and U.S. Customary measurement questions
- The mathematics section of the test will contain 50 reporting categories so that instructionally relevant areas of strengths and weaknesses can be identified for a school. A list of these skill areas is given below, a description of each skill area is given on the following pages

Skill Areas in Mathematics

I. Counting, Numeration, and Place Value
- A Skills
  - 1. Counting and numeration
  - 2 Place Value
- B Applications

II. Nature of Numbers and Properties
- A Skills
  - 1. Ordering and properties
  - 2. Classification of numbers
- B Applications

III. Operations
- A. Skills
  - 1 Addition subtraction of whole numbers
  - 2 Multiplication of whole numbers
  - 3. Division of whole numbers
  - 4. Addition subtraction of decimals
  - 5 Multiplication division of decimals
  - 6. Operations (+, , ×, ,) on fractions
  - 7. Percents and equivalent fractions decimals
- B Applications
  - 1 One-step involving whole numbers
  - 2 One-step involving rational numbers
  - 3. Two- (or more) steps

IV. Expressions, Equations, and Coordinate Graphs
- A. Skills
  - 1. Expressions and equations
  - 2. Graphs and function tables
- B. Applications

V. Geometry
- A Skills
  - 1 Shapes and terminology
  - 2 Relationships
- B Applications

VI. Measurement
- A Skills
  - 1. Metric units
  - 2 U.S Customary units
  - 3 Length, area, and volume
- B Applications

VII. Probability and Statistics
- A. Probability
- B Statistics

VIII. Tables, Graphs, and Integrated Applications
- A. Tables and graphs
- B. Integrated applicatio s

IX. Problem Solving
- A. Formulation
- B. Analysis and strategy
- C Interpretation
- D. Solution of problems

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
I. Counting, Numeration, and Place Value	40		
A Skills	25		
1 Counting and numeration	15	The student will identify numbers in a counting sequence; express a number in repeated multiplication or exponent form; read and write correctly whole numbers, decimals, or fractions; and identify fractional parts of shapes	Which number comes next? 3254, 3354, 3454, _____ o 3654 o 3554 o 3544 o 3455 How would you read 9007? o nine hundred seven o nine hundred and seven o ninety thousand seven o nine thousand seven
2. Place value	10	The student will identify the place value of a given digit in a whole number or decimal, recognize a number that is equivalent to a number in expanded notation, and round off whole numbers or decimals.	Round 86,405 to the nearest hundred. o 86,500 o 86,450 o 86,400 o 86,000

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B Applications	15	The student will apply the skills in counting, numeration, and place value in the context of word problems	Sheri received a check that was written for $503.69. How would the check be written in words? o Fifty-three and 65/100 dollars o Five hundred three and 69 dollars o Five hundred three and 69/100 dollars o Fifty-three and 69/100 dollars
II. Nature of Numbers and Properties	50		
A Skills	35		
1 Ordering and properties	15	The student will identify relational symbols and phrases (greater than, equal to, less than, in between), identify the least or greatest whole number, decimal, or fraction from among several numbers, identify points on a number line, use the commutative, associative, and distributive properties, and identify properties of zero and one	Which set of numbers is in order from least to greatest? o 0.130, 0.031, 0.013 o 0.031, 0.130, 0.013 o 0.013, 0.130, 0.031 o 0.013, 0.031, 0.130

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
			What is the missing number? $2 \times \square = (2 \times 5) + (2 \times 2)$ o 5 o 7 o 13 o 14
2. Classification of numbers	20	The student will recognize odd, even, and prime numbers; identify numbers that are divisible by 2, 3, 5, and 10; find factors and prime factors of a number; find multiples of a number; and identify the least common multiple (LCM) or greatest common factor (GCF) of two or three numbers	If a number is divisible by 10, it is also divisible by o 2 and 5 o 4 and 5 o 3 and 5 o 3 and 7 Which numbers are prime factors of 9? o 3 and 9 o 3, 6, and 9 o 2 and 7 o 3

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B Applications	15	The student will apply the skills in number classification, ordering of numbers, and properties in the context of word problems.	Mary's bicycle license plate number was divisible by 2 and 3. Which could be her license plate number? o 233 o 274 o 282 o 210
III. Operations	145		
A Skills	98		
1. Addition, subtraction of whole numbers	15	The student will identify terminology such as "sum," "difference," "more than"; identify the result of addition or subtraction; and understand algorithms of addition and subtraction	In the problem 7 4 = 3 the number 3 is called the: o sum o difference o product o remainder 3048 + 7692 = o 10,640 o 10,730 o 10,740 o 11,640

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
2 Multiplication of whole numbers	14	The student will identify terminology such as "product" and "factors," identify the result of multiplication of two numbers, and understand the algorithm of multiplication	2,759 × 806 o 233,274 o 2,173,754 o 2,174,754 o 2,223,754
3 Division of whole numbers	15	The student will identify terminology such as "divisor," "quotient," and "remainder," identify the result of division, and understand the algorithm of division	24) 492 o 2 R 12 o 20 R 2 o 20 R 12 o 22
4 Addition subtraction of decimals	14	The student will identify the sum of two or three decimals, and the difference of two decimals or a decimal and a whole number	12.7 + 183 = o 12.883 o 37 o 195.7 o 310

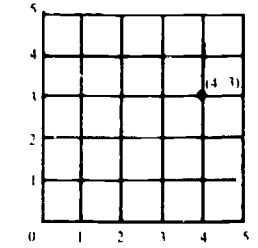
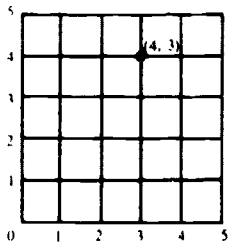
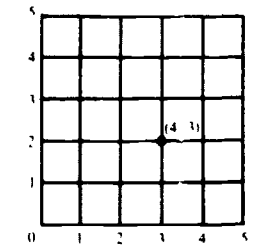
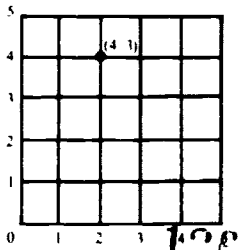
Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
5. Multiplication/division of decimals	12	The student will identify the product of two decimals or a decimal and a whole number, and the result of dividing with a whole number or a whole number with a decimal.	$8\overline{)487.2}$ o 609 o 60.9 o 6.9 o 6.09
6. Operations on fractions	16	The student will identify the sum, difference, product, or quotient of two fractions or a fraction and a whole number.	$5 \times \frac{4}{5} =$ o $\frac{4}{5}$ o 4 o $4\frac{1}{5}$ o $6\frac{1}{4}$
7. Percents and equivalent fractions and decimals	12	The student will select the given percent of a number; select what percent of a given number is another number; identify equivalent fractions, decimals; and identify fractions in lowest terms.	$\frac{3}{4} =$ o 0.075 o 0.34 o 1.3 o 0.75

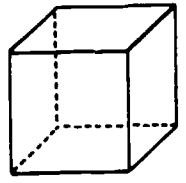
Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Applications	47		
1. One-step involving whole numbers	12	The student will apply his her knowledge of one-step operations on whole numbers in the context of word problems.	72 students went to summer camp. The camp cook prepared 3 hamburgers for each student. How many hamburgers were prepared? o 24 o 68 o 75 o 216
2. One-step involving rational numbers	20	The student will apply his her knowledge of one-step operations on fractions and decimals in the context of word problems.	Leah hiked 2.5 kilometers each hour. How long will it take for her to hike 10 kilometers? o 2.50 hours o 4 hours o 12.5 hours o 25 hours
3. Two- (or more) steps	15	The student will apply his her knowledge of two- (or more) step operations on whole numbers, decimals, or fractions in the context of word problems.	Greg needs 100 points to get extra credits in class. He received 15, 25, 30, and 16 points for the projects he has already completed. How many more points does he need? o 4 o 14 o 16 o 86

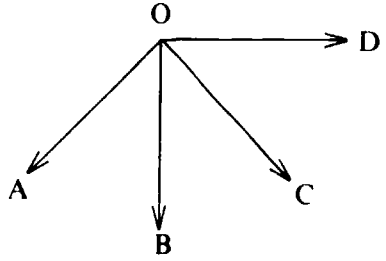
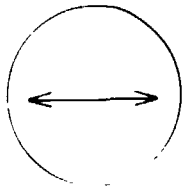
Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
IV. Expressions, Equations, and Coordinate Graphs	42		
A. Skills	27		
1. Expressions and equations	15	The student will identify the translation of an algebraic sentence into an English phrase, evaluate simple algebraic expressions, and solve a simple equation.	Find $4a + 7$, if $a = 5$. o 13 o 16 o 27 o 32 If $a - 24 = 37$, find a. o $\frac{37}{24}$ o 13 o 59 o 61
2. Graphs and function tables	12	The student will identify points on a coordinate plane, and identify the missing number from an ordered pair of numbers.	Which graph shows the correct location of point (4, 3)? o  o  o  o 

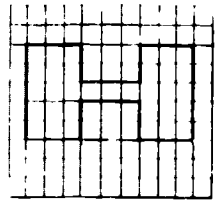
Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
			What's the rule? A | B 21 | 3 14 | 2 28 | 4 7 | 1 o subtract 18 o subtract 7 o divide by 6 o divide by 7
B. Applications	15	The student will apply his/her skills in translating algebraic phrases, evaluating expressions, or solving equations and identifying ordered pairs in the context of word problems.	12 pencils were divided equally among 4 children. Which of the following tells you how many pencils each child received? o 12 × 4 = o 12 ÷ 4 = o 12 + 4 = o 12 − 4 =
V. **Geometry**	40		
A. Skills	24		
1. Shapes and terminology	12	The student will identify drawings of geometric shapes (triangle, square, rectangle, quadrilateral, parallelogram, pentagon, hexagon, cube, cylinder, sphere, and pyramid) in 2 and 3 dimensions and recognize line segment, ray, radius, and diameter.	This is a drawing of a:  o pyramid o cube o cylinder o sphere

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
2. Relationships	12	The student will identify types of angles (right, acute, and obtuse), types of triangles (equilateral and right), parallel and perpendicular lines, and similar and congruent figures. The student will also be able to identify figures that are divided by a line of symmetry, identify measurements with the help of a protractor, and recognize simple spatial relationships.	Which of the angles is greater than a right angle?  o ∠AOB o ∠AOC o ∠AOD o ∠BOC
B. Applications	16	The student will apply his her knowledge in geometric shapes and relationships in the context of word problems.	A wheel measures 26 inches across as shown below.  The distance across the wheel is called: o radius o circumference o segment o diameter

Skill Areas Assessed in Mathematics, [illegible] of Basic Skills Grade 6 (Continued)

Skill Area and Rationale	Number of Items	Description of Skill Area	Illustrative Test Question
VI. Measurement	58		
A Skill	42		
1 Metric units	20	The student will estimate length, area, volume, and mass of familiar objects, choose the most appropriate unit for measuring length, area, volume, and mass for a given situation, and convert from one unit to another within the system	The length of a house door is about: o 5 centimeters o 7 millimeters o 5 kilometers o 2 meters How many meters are there in 200 centimeters? o 2 o 20 o 200 o 2,000
2 U.S. Customary units	10	The student will estimate length, area, volume, and mass of familiar objects, choose the most appropriate unit f measuring length, area, volume, mass, time, and angle, and convert from one unit to another within the system	Choose the most appropriate unit to measure the length of a classroom. o inch o foot o square inch o square foot
3 Perimeter, area, and volume	12	The student will identify formulas of perimeter, area, circumference, and diameter of a circle, and calculate perimeter, area, volume, and circumference of a circle. The student will also use nonstandard units to measure length, area, and volume	What is the perimeter of this figure?  o 0.3 unit o 8 units o 12 units o 60 units

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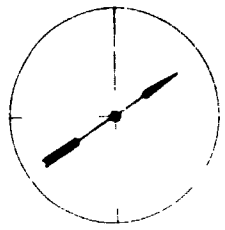
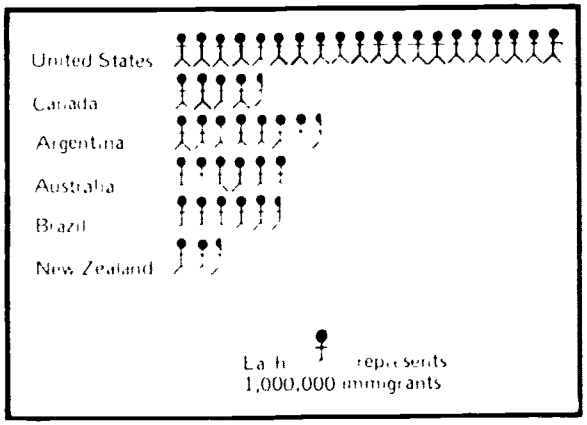
Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B Applications	16	The student will apply his/her knowledge of estimation, measurement in standard and nonstandard units, conversion from one unit to another, and basic formulas to compute perimeter, area, volume and distance (distance-rate formula) in the context of word problems.	Luke wants to paint one wall of his room. The wall is 8 meters wide and 3 meters high. If it takes one can of paint to cover 12 square meters, how many cans of paint must he buy? o $\frac{1}{2}$ o 1 o 2 o 23
VII. Probability and Statistics	23		
A. Probability	12	The student will select the probability of an event or the complement of an event, identify the probability for an event certain to occur or not to occur, and find the probability associated with, e.g., the tossing of a coin or spinner; the student will also apply those skills in the context of word problems	What is the probability that the spinner will stop on yellow if you spin it one time? o $\frac{1}{2}$ o $\frac{1}{3}$ o $\frac{1}{4}$ o $\frac{1}{8}$ 

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Statistics	11	The student will choose the mean, median, mode, and range for a given set of numbers and be able to apply the skill in the context of word problems	Five players scored the following home runs. Home Runs Sam 3 Maria 6 Sally 12 Tom 2 Bill 2 What is the average number of home runs by the five players? o 5 o 6 o 25 o 30 What was the median (the middle) of the home runs made by the 5 players? o 2 o 3 o 12 o 25

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
VIII. Tables, Graphs, and Integrated Applications	30		
A. Tables and graphs	15	The student will read tables and graphs (circle, line, bar and pictographs) and interpret the information in the tables or graphs.	IMMIGRANTS TO VARIOUS COUNTRIES SINCE 1820  Which country had 5,500,000 immigrants? o Argentina o Brazil o Canada o New Zealand

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Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Integrated applications	15	The student will use his her knowledge of various mathematical skills such as operations, geometry, and measurement to solve word problems involving synthesis of those skills The integrated applications involve reading and interpreting food labels, schedules, and mileage charts, etc.	Read the following notice and answer the question. DOG OWNERS City of Berkeley will issue dog license tags covering one-to-two year periods beginning July 1, 1982. 1-year fee, regular $8.50 2-year fee, regular $12.75 1-year fee, spayed or neutered $4.25 2-year fee, spayed or neutered $6.25 If you elect to purchase the 2-year license tag, your dog's current rabies inoculation must be valid through December 31, 1983. How much more is a regular 2-year fee than a regular 1-year fee? o $4.25 o $8.50 o $12.75 o $21.20

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
IX. Problem Solving	52		
A. Formulation	15	The student will	(Relevant mathematical problem.)
"The ability to formulate meaningful problems is more useful in the marketplace than the ability to find a solution to a textbook 'word' problem. Real problems do not always exist in neat, written textbook form. They often appear in very poorly defined, complex physical or abstract situations. The ability to ask questions or pose problems which clarify the relationships among the variables in a situation is indeed a valuable skill. It is proposed here that students be given considerable experience in formulating mathematical questions. To this end, it is expected that instructional programs in mathematics shall include a significant number of concrete, meaningful but perplexing situations which students can explore and discuss."[1]		• identify relevant mathematical problems given a word description of a practical situation • given a description of a situation, identify mathematical questions that can be answered using information given in the description • identify problems or situations that can be represented by given mathematical models (number sentences, equations, diagrams, tables, graphs, etc.) • identify the kind of information that needs to be gathered in order to state solve a given problem	Lincoln School was planning their school picnic. What is one of the problems they probably will have to solve? o How much does each person weigh? o What is the size of the school field? o How many buses will they need? o What is the average age of the children?

[1]Addendum to the Mathematics Framework for California Public Schools, Kindergarten Through Grade Twelve (Sacramento: California State Department of Education, 1980), p. 6.

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
B. Analysis and strategies *"A mathematics program should systematically help students develop strategies and tactics for analyzing problems and devise appropriate mathematical models to represent the problems. A strategy here means a general plan of attack, while a tactic means a single technique which will help with a part of the problem. The first step in developing a strategy is to identify those features which are significant to the central problem."*[2]	25	The student will • identify the given facts, unknowns, or questions in a given problem. • select an appropriate operation that will lead to the solution of a given problem. • identify mathematical models (number sentences, charts, tables, etc.) for given problems. • identify missing or extraneous information in a given problem • use mathematical reasoning to understand or solve given nonroutine problems. • identify alternate strategies or tactics for solving given problems. • identify simpler problems that can lead to the solution of more complicated problems. • use guess-and-check (trial-and-error) strategy to solve problems. • use estimation to predict reasonable solutions and to identify problem-solving tactics needed to solve a given problem	(Identify facts) A man normally breathes 20 times a minute at sea level. He takes one extra breath per minute for each increase of 1500 feet in altitude. How high above sea level is he if he breathes 24 times a minute? Which of these facts are given in the information above? o The man breathes 24 times a minute at 1500 feet above sea level. o The man increases his breathing rate from 20 to 24 times per minute for each 1500-foot increase in altitude. o The man increases his breathing rate 1 breath per minute for each 1500-foot increase in altitude above sea level. o The man increases his breathing rate 20 times a minute for each increase of 1500 feet in altitude.

[2] ...dendum to the Mathematics Framework, 1980, p. 7.

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
			(Identify the question) What are you trying to find out in this problem? o The number of breaths per minute at 1500 feet above sea level. o How many more breaths per minute the man takes at 1500 feet than at sea level o How many feet the man is above sea level. o The number of extra breaths the man takes while climbing to 1500 feet above sea level. (Reasonable solutions) One bag of lawn fertilizer will cover 590 square feet. Myron's lawn is a 92' by 76' rectangle. How many bags should Myron buy to fertilize his lawn? _____ What is a reasonable method of estimating the solution? o (100 × 70) . 600 o (90 × 80) : 500 o (100 × 70) : 500 o (90 × 80) : 600

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
C. Interpretation *"An instructional program in mathematics should systematically include experiences in the interpretation of the solution obtained. These experiences should be an explicit part of the instructional program and occur at all levels of instruction. Too often students accept answers that are found without regard to the original situation. The problem and its solution should be reviewed to judge both the validity of the model and the accuracy of the mathematical manipulations used to find the solution."*	12	The student will • check a given solution in the context of the original problem. • recognize a sensible answer to a problem. • draw reasonable conclusions using given information from the analysis or interpretation of given information	(Reasonable conclusion) A farmer can grow a good crop if about 4 inches of rain fall from May to October. The rainfall during these months last year was: May ..... 1 inch June ..... 0 inches July ..... 0 inches August ..... 1 inch September ..... 10 inches October ..... 12 inches The weather bureau calculated that this year the average monthly rainfall was 4 inches for these months. Which of these is a reasonable conclusion? o The farmer had a good crop last year. o The farmer did not have a good crop last year. o Last year the rainfall each month was close to the monthly average. o Last year most of the rain fell in August.

Skill Areas Assessed in Mathematics, *Survey of Basic Skills Grade 6 (Continued)*

Skill Area and Rationale	*Number of Items*	*Description of Skill Area*	*Illustrative Test Question*
D. Solution of problems *"The solution of problems requires a wide variety of technical skills. Computational skills and an understanding of operations and number properties are essential to solutions to many problems. In addition to skills related to solving equations and inequalities, students need skills of graphing, constructing geometric figures, and analyzing tabular data. An instructional program in mathematics should include a substantial number of ready-to-solve problems that are designed specifically to develop and reinforce these technical skills and concepts."*[3]	154	(The questions in this category include all the questions in applications from counting, numeration, and place value; nature of numbers and properties; operations; expressions, equations, and coordinate graphs; geometry; measurement; tables, graphs, and integrated applications.)	

[3] ...dum to the Mathematics Framework, 1980, p. 9.