

DOCUMENT RESUME

ED 230 610

TM 830 438

TITLE Survey of Basic Skills: Grade 3 [and] Grade 6 - 1982. School Report for John M. Gomes Elementary. California Assessment Program.

INSTITUTION California State Dept. of Education, Sacramento.

PUB DATE 82

NOTE 134p.; Document contains small type.

PUB TYPE Tests/Evaluation Instruments (160)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.

DESCRIPTORS Academic Achievement; *Basic Skills; *Educational Assessment; Elementary Education; Grade 3; Grade 6; *Profiles; Scaling; Scoring; State Departments of Education; *State Programs; Student Evaluation; Testing Programs; *Test Results

IDENTIFIERS *California Assessment Program

ABSTRACT

The California Assessment Program (CAP) presents the Survey of Basic Skills report for grades 3 and 6 of an Alameda County elementary school for 1982. This report begins with an overview of school and district achievement and progresses to more detailed information related to performance in specific skill areas and scores for different groups of students. The report also includes interpretive materials. The "Content Area Summary" includes the following information: school and district scaled scores for 1982 and two previous years, comparison score bands for schools and districts, a summary of background factors, and pupil score distribution. "Program Diagnostic Displays" provide information about performance in the skill areas that are tested in reading, written language, and mathematics. The last section of the Display contains responses to attitudinal questions; students were asked to indicate how much they like reading, writing stories, and mathematics. "Student Subgroup Results" provide scores for different groups of students according to sex, mobility, socioeconomic status, English language fluency, and specially funded programs. "Using Survey Results" suggests a procedure for using CAP results. Included also are descriptions of the skill areas tested. "Interpretive Supplement and Conversion Tables" provides additional information and guidelines for interpretation of content area results. (PN)

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Survey of Basic Skills: Grade 3 — 1982

SCHOOL REPORT for:

JOHN M. GOMES ELEMENTARY

DISTRICT: FREMONT UNIFIED

COUNTY: ALAMEDA

CDS: 01 61176 6066468

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ED230610



California Assessment
Program

California State Department of Education
Wesley Egan, Superintendent of Public Instruction, Sacramento, 1982

M 830 438

INTRODUCTION TO THE GRADE 3 SURVEY REPORT

New Features for 1982

The *Survey* report for 1982 retains the same basic information as the 1980 and 1981 reports; however, the following new features have been incorporated to enhance the usefulness of the report:

- In Part I, school and district results are shown graphically as well as numerically.
- In Part II, additional explanatory and interpretive statements have been added to the program diagnostic displays.
- In Part III, the results for student subgroups are reported separately and include computer-generated interpretive examples.
- In Part IV, a new process for using CAP results to improve programs is presented.

How the *Survey* Report is Organized

This report begins with an overview of school and district achievement and progresses to more detailed information related to performance in specific skill areas and scores for different groups of students. The report also includes interpretive materials.

Part I — Content Area Summary

This section includes the following information: school and district scaled scores for 1982 and two previous years, comparison score bands for schools and districts, a summary of background factors, and pupil score distributions. (A statewide view of achievement is provided in the publication entitled *Student Achievement in California Schools — Annual Report, 1981-82* which is sent to every school district in the fall.)

Part II — Program Diagnostic Displays

The program diagnostic displays provide information about performance in the skill areas that are tested in reading, written language, and mathematics. The last section of Part II contains responses to attitudinal questions. Students were asked to indicate how much they like reading, writing stories, and mathematics.

Part III — Student Subgroup Results

Subgroup results provide scores for different groups of students according to sex, mobility, socioeconomic status, English language fluency, and specially funded programs.

Part IV — Using Survey Results

This section suggests a procedure for using CAP results. Included also are descriptions of the skill areas tested.

Part V — Interpretive Supplement and Conversion Tables

This part of the *Survey* report provides additional information and guidelines for interpretation of Part I results. Also included are tables for comparing school and district achievement to statewide results and for the conversion of scaled scores to percent correct figures.



Survey of Basic Skills: Grade 3 - 1982

Part I - CONTENT AREA SUMMARY

School: JOHN M. GOMES ELEMENTARY
 District: FREMONT UNIFIED
 County: ALAMEDA

Students Tested: 101 NES 0 Total 101

Scaled scores allow you to compare scores from year-to-year

For example, your scaled score for Reading is lower than the previous year's score of 330

Scaled scores also allow you to compare scores between content areas

For example, your Reading score of 305 is lower than your score of 313 for Written Language

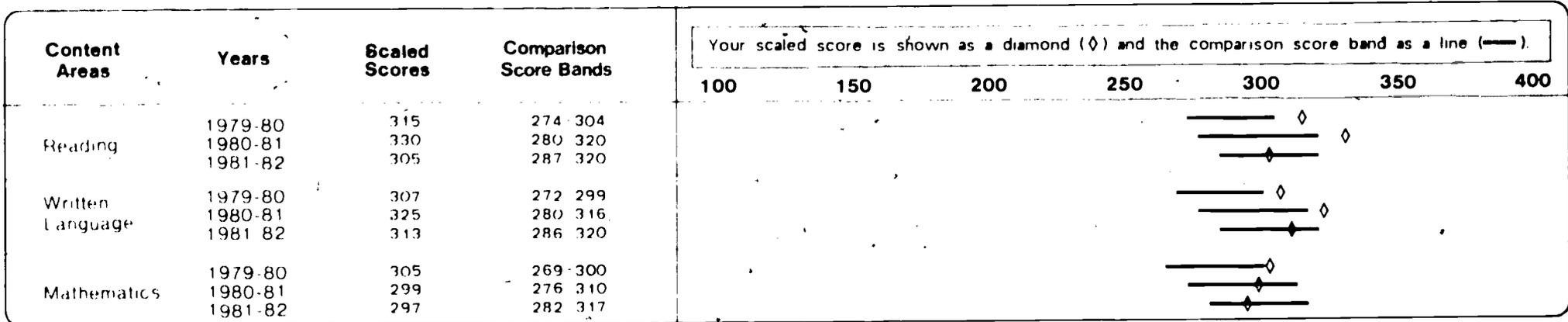
The bands indicate typical performance of schools or districts which, statistically, are like yours

For example, in Reading, the scores for schools like yours range from 287 to 320.

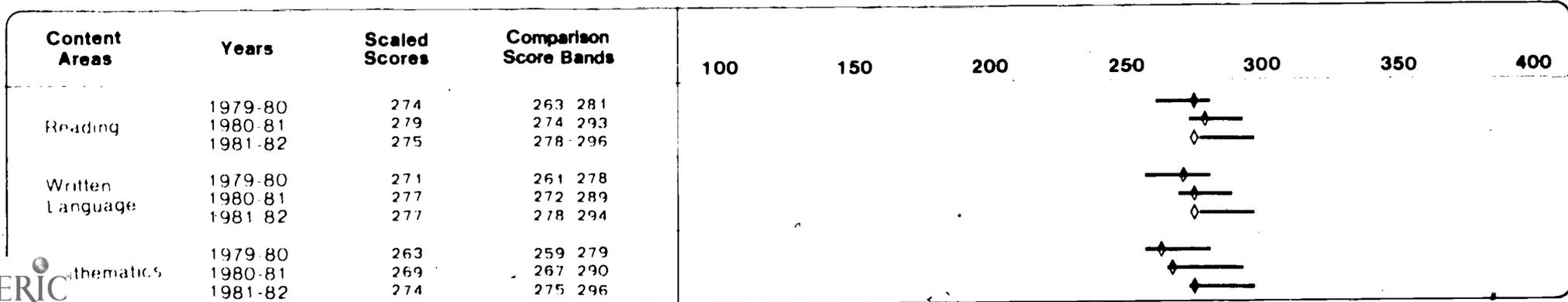
You can compare your school scores to district scores

For example, your school's score of 305 for Reading is higher than the district score.

A. SCHOOL SCORES



B. DISTRICT SCORES





School	JOHN M. GOMES ELEMENTARY
District	FREMONT UNIFIED
County	ALAMEDA

C. BACKGROUND FACTOR SUMMARY

Four background factors were used to calculate the comparison score bands. They are described in detail in Part V, and tables for comparing your background factors to those of other schools and districts can also be found in Part V of the report.

Interpretive Examples

You can observe changes over the years in background factor values:

Your school's socioeconomic index of 2.74 is lower than the previous year's index of 2.79.

School and district values can be compared to the values of other schools and districts (see the school/district norms tables in Part V)

According to the school norms table, your school's socioeconomic index of 2.74 is higher than 93 percent of the schools in the state.

Years	Entry Level Test	Socioeconomic Index	Percent AFDC	Percent LES/NES	
School	1979-80	30.09	2.67	0.3	3.8
	1980-81	30.06	2.79	1.1	2.3
	1981-82	30.51	2.74	1.2	3.0
District	1979-80	28.84	2.31	4.5	3.5
	1980-81	28.96	2.37	5.3	3.8
	1981-82	29.43	2.34	5.8	4.8

D. STUDENT SCORE DISTRIBUTIONS

The statewide distribution of student scores is divided into four equal groups by the state quartiles (Q₁, Q₂, Q₃). Each quartile marks off, respectively, the lowest quarter of scores, the next highest quarter, and so on. The percentages of your students scoring in each of these four statewide groups are presented for each content area. (No student score distributions are reported for schools or districts testing fewer than 15 students.)

Interpretive Example

You can observe changes that occur in proportions of students in any quarter:

In Reading, 35 percent of your students scored in the highest quarter of the state's distribution. This proportion is lower than the proportion that scored in this quarter in the previous year.

Content Areas	Years	Percentage of Students in Each Quarter of the State Student Distribution			
		Below Q ₁	Between Q ₁ and Q ₂	Between Q ₂ and Q ₃	Above Q ₃
Reading	1979-80	6%	16%	35%	43%
	1980-81	7%	19%	29%	45%
	1981-82	8%	25%	32%	35%
Written Language	1979-80	5%	17%	35%	43%
	1980-81	4%	18%	29%	49%
	1981-82	8%	19%	32%	41%
Mathematics	1979-80	6%	22%	26%	46%
	1980-81	7%	23%	33%	37%
	1981-82	9%	24%	32%	35%

Part II — PROGRAM DIAGNOSTIC DISPLAYS

Part I of this report is primarily concerned with overall results and comparisons over time and among content areas. The Program Diagnostic Displays on the following pages show performance on the specific skills within reading, written language, and mathematics. This information can be helpful in making judgments about program strengths and weaknesses and planning improvements. The diagram below will help you interpret the displays.

The Program Diagnostic Displays, when studied along with the resource documents indicated in the analysis process in Part IV, may assist school personnel in linking results to instruction. Chief among the recommended resources are *Survey of Basic Skills: Grade 3, Rationale and Content*, state frameworks, and the curriculum handbooks such as *Planning an Effective Writing Program*.

1. Total Score

Your total score for reading is printed in the box at the top of the display and shown graphically as a bold vertical line.

2. Interpretive Examples

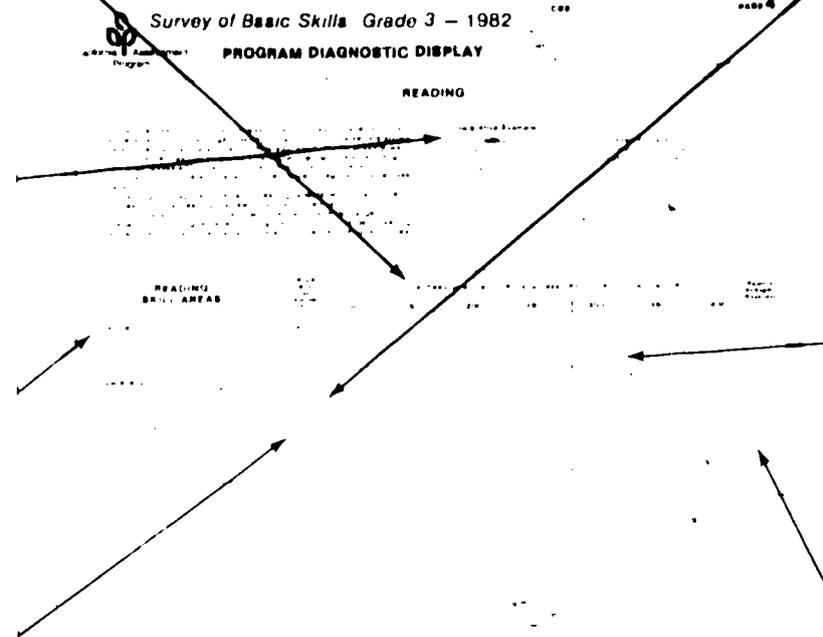
These statements are generated by a computer and tailored to your school results.

3. Skill Areas

The skill areas for reading are listed here. Major skill areas are described in Part IV and illustrated in detail in *Survey of Basic Skills: Grade 3, Rationale and Content*.

4. Skill Area Score

Your scaled score for each skill area is shown here.



5. Standard Error

The standard error tells how many score points you should "allow" for uncontrolled variations in the testing situation. It is a statistic, which when added to and subtracted from your scaled score, gives a range which can reasonably be expected to contain your "true" score.

6. Skill Area Bars

Each skill area score, plus and minus the standard error, is displayed graphically as a shaded bar. When the bar is entirely to the right of the total score (the vertical line), that skill area is identified as a relative strength. When the bar is entirely to the left of the total score, it is identified as a relative weakness. If the bar overlaps the total reading score, it is neither a relative strength nor a weakness.

7. Relative Strengths and Weaknesses

Relative strengths and weaknesses are identified here. (RS = Relative Strength, RW = Relative Weakness)



Survey of Basic Skills: Grade 3 — 1982

PROGRAM DIAGNOSTIC DISPLAY

READING

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

The program diagnostic display reflects a primary focus of the *Reading Framework for California Public Schools* by providing an analysis of student performance on a broad range of comprehension skills in addition to vocabulary, word identification, and study/location skills.

Interpretive Example
 Your total Reading score of 305 is expressed below as a bold vertical line, and each skill area score is displayed as a shaded bar. Your score in Vocabulary is identified as neither a relative strength nor a weakness because the shaded bar overlaps the vertical line.

See Part IV for an illustrative description of the Reading skill areas tested.

READING SKILL AREAS	Scaled Score and Standard Error	Your total Reading score of 305 is represented by the bold vertical line.						Relative Strength/Weakness				
		100	150	200	250	300	350	400	79-80	80-81	81-82	
Word Identification	322 ±19					305						
Phonics	322 ±26											RS
Vowels	293 ±29										RW	RS
Consonants	351 ±43											RS
Structural analysis	323 ±26					305						
Prefixes, suffixes, and roots	307 ±26											RS
Contractions and compound words	347 ±51											
Vocabulary	316 ±21					305						
Recognizing word meanings	348 ±32											RS
Using context	280 ±25											RS
Comprehension	299 ±13					305						
Literal	281 ±15					305						
Details	269 ±17										RW	RW
From a single sentence	275 ±23										RW	RW
From two or three sentences	262 ±24											RW
Pronoun references	307 ±27											
Sequence	281 ±25											
Inferential	317 ±17					305						
Main Ideas	307 ±27											RW
Cause and effect	318 ±26											RW
Drawing conclusions	322 ±23											RW
About characters	381 ±44											RS
From details	263 ±25											RW
From overall meaning	304 ±30											RW
Study Locational	291 ±24					305						
Alphabetizing	301 ±35											
Table of contents	282 ±33											





California Assessment Program

Survey of Basic Skills: Grade 3 — 1982

PROGRAM DIAGNOSTIC DISPLAY

WRITTEN LANGUAGE

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

The program diagnostic display for written language reflects the *English Language Framework for California Public Schools* by providing an analysis of student performance on a broad range of written language skills including language choices, sentence recognition, paragraphs, and a variety of supporting skills.

Interpretive Example

Your total Written Language score of 313 is expressed below as a bold vertical line, and each skill area score is displayed as a shaded bar. Your score in Sentence Recognition is identified as neither a relative strength nor a weakness because the shaded bar overlaps the vertical line. See Part IV for an illustrative description of the Written Language skill areas tested.

WRITTEN LANGUAGE SKILL AREAS	Scaled Score and Standard Error	Your total Written Language score of 313 is represented by the bold vertical line.						Relative Strength/Weakness				
		100	150	200	250	300	350	400	79-80	80-81	81-82	
Word Forms	325 ±18											
Prefixes	309 ±32											
Inflectional suffixes	316 ±40											
Derivational suffixes	366 ±52											
Irregular noun plurals	341 ±32											
Contractions	303 ±30											
Standard English Usage	298 ±17											
Irregular verbs	314 ±32											
Pronouns	303 ±40											
Subject-verb agreement	283 ±26											
Noun determiners	283 ±30											
Language Choices	297 ±20											
Sensory words	311 ±31											
Specific words	283 ±24											
Sentence Recognition	318 ±18											
Statements and questions	311 ±31											
Complete sentences	317 ±20											
Supplying verbs	341 ±29											
Supplying subjects	293 ±22											
Paragraphs	315 ±22											
Topic sentences	313 ±32											
Details and sequence	317 ±31											
Capitalization	370 ±58											
Persons	382 ±125											
Places	313 ±49											
Days and months	416 ±113											
Punctuation	275 ±19											
Periods and question marks	265 ±31											
Commas	255 ±28											
Apostrophes	305 ±38											
Spelling	308 ±17											
Predictable words	306 ±23											
Words with suffixes	366 ±33											
Demons and homophones	246 ±27											



Survey of Basic Skills: Grade 3 — 1982

PROGRAM DIAGNOSTIC DISPLAY MATHEMATICS

School JOHN M. GOMES ELEMENTARY
District FREMONT UNIFIED
County ALAMEDA

The questions on the *Survey* and the reporting of scores reflect a central concern of the *Mathematics Framework* that problem solving/applications serve as an umbrella for all mathematics strands. As shown below, the scores in all skill areas are broken down into skills and applications components. The "Applications" score under Problem Solving is an aggregation of scores for all application categories.

Interpretive Example

Your total Mathematics score of 297 is expressed below as a bold vertical line, and each skill area score is displayed as a shaded bar. Your score in Counting and Place Value is identified as a relative weakness (RW) because the shaded bar appears entirely to the left of the vertical line. See Part IV for an illustrative description of the Mathematics skill areas tested.

MATHEMATICS SKILL AREAS	Scaled Score and Standard Error	Your total Mathematics score of 297 is represented by the bold vertical line:						Relative Strength/Weakness			
		100	150	200	250	300	350	400	79-80	80-81	81-82
Counting and Place Value	273 ±17										
Skills	250 ±18										
Applications	318 ±35										
Operations	290 ±12										
Basic facts	313 ±34										
Addition	280 ±26										
Subtraction	272 ±19										
Multiplication	299 ±21										
Applications	290 ±18										
Basic facts	262 ±25										
Addition/Subtraction	322 ±35										
Multiplication	279 ±28										
Nature of Numbers and Properties	344 ±25										
Properties and relationships	362 ±42										
Money and fractions	361 ±50										
Applications	310 ±31										
Geometry	329 ±27										
Skills	322 ±33										
Applications	343 ±45										
Measurement	287 ±17										
Linear measures	285 ±25										
Other measures	303 ±32										
Applications	265 ±29										
Patterns and Graphs	276 ±19										
Skills	307 ±29										
Applications	245 ±23										
Problem Solving	295 ±12										
Analysis and models	307 ±29										
Applications	293 ±13										

STUDENT ATTITUDES TOWARD BASIC SKILLS

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

Attitude toward Reading

How much do you like to read?	School		District		State	
	Percent of Students	Reading Score	Percent of Students	Reading Score	Percent of Students	Reading Score
Very much	69%	300	59%	285	64%	270
A little	29%	312	35%	272	29%	251
Not at all	1%	---	5%	225	5%	195

Students were asked to indicate how much they like reading, writing stories, and mathematics. The results for your school are shown on this page along with those for the district and state.

For example, 69 percent of your students reported that they like to read "very much," whereas 29 percent reported liking to read "a little." The average score in Reading was 300 for those who like to read "very much" whereas the score was 312 for those who like to read "a little."

Attitude toward Writing

How much do you like to write your own stories?	School		District		State	
	Percent of Students	Language Score	Percent of Students	Language Score	Percent of Students	Language Score
Very much	49%	296	47%	279	51%	263
A little	38%	333	33%	284	33%	266
Not at all	13%	331	18%	270	15%	249

Attitude toward Mathematics

How much do you like math?	School		District		State	
	Percent of Students	Math Score	Percent of Students	Math Score	Percent of Students	Math Score
Very much	44%	326	52%	283	57%	269
A little	45%	277	34%	273	31%	260
Not at all	11%	304	13%	249	11%	236

NOTES:

1. The scaled score is not reported if fewer than 5 students responded.
2. The sum of the percentages may not equal 100 percent because of rounding or non-response.

Part III—SUBGROUP RESULTS

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

Subgroup results allow you to observe the performance of different groups of students in the school, district, and state. The results are based upon the information provided by teachers and students in response to questions in the Pupil Information Section of each test booklet. The scaled score is not

provided for a category if there are fewer than 5 students in the category. Statewide scores are provided in each table so that subgroup scores may readily be compared to the scores of all students.

Table A. BOYS AND GIRLS

This table displays the scores of students by sex. Teachers indicated this information on the test booklets.

Interpretive Example

In your school, boys scored 315 in Reading and girls scored 292. At the state level, boys scored 251 in Reading and girls scored 266.

Sex	SCHOOL					DISTRICT					STATE			
	Students		Scaled Score			Students		Scaled Score			Students		Scaled Score	
	No	%	Read	Writ	Math	No	%	Read	Writ	Math	%	Read	Writ	Math
All Students	101	100%	305	313	297	1595	100%	275	277	274	100%	258	260	261
Boys	44	44%	315	318	301	790	50%	271	270	272	50%	251	252	259
Girls	55	54%	292	310	298	796	50%	278	287	274	48%	266	270	263

Table B. MOBILITY

This table displays scores for students according to the grade at which they were first enrolled in the school. Teachers reported this information on the test booklets.

Interpretive Example

Students who first enrolled in your school at kindergarten scored 295 in Reading, and those who first enrolled at grade 3 scored 328.

Grade First Enrolled	SCHOOL					DISTRICT					STATE			
	Students		Scaled Score			Students		Scaled Score			Students		Scaled Score	
	No	%	Read	Writ	Math	No	%	Read	Writ	Math	%	Read	Writ	Math
All Students	101	100%	305	313	297	1595	100%	275	277	274	100%	258	260	261
K	51	51%	295	306	302	760	48%	280	281	279	47%	265	267	266
1	17	17%	315	300	308	219	14%	280	288	277	15%	263	264	265
2	19	19%	304	326	274	250	16%	280	282	279	15%	257	258	261
3	13	13%	328	361	326	357	22%	266	270	262	23%	250	252	253



SUBGROUP RESULTS, Continued

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

Table C. SOCIOECONOMIC STATUS

This table displays scores of students according to parent occupational categories. Teachers marked the category which corresponded to the occupation of the student's father, mother, or guardian.

Interpretive Example

At your school, 21 percent of the students have parents or guardians who are employed in skilled or semiskilled occupations. In your district, the percent of students in this category is 41.

Occupational Category	SCHOOL					DISTRICT					STATE			
	Students		Scaled Score			Students		Scaled Score			Students		Scaled Score	
	No	%	Read	Writ	Math	No	%	Read	Writ	Math	%	Read	Writ	Math
All Students	101	100%	305	313	297	1595	100%	275	277	274	100%	258	260	261
Professional	37	37%	312	343	330	313	20%	313	314	311	14%	330	324	322
Semiprofessional	38	38%	310	308	308	407	26%	288	295	284	20%	291	291	286
Skilled/Semiskilled	21	21%	280	290	249	653	41%	261	264	258	37%	254	258	257
Unskilled	2	2%	--	--	--	142	9%	240	245	244	21%	212	217	224
Unknown	0	0%	--	--	--	38	2%	249	264	272	6%	222	225	231

Table D. ENGLISH LANGUAGE FLUENCY

This table displays scores for students in terms of English Language fluency. Teachers indicated this information on each test booklet. Data presented here do not include non-English speaking (NES) students. However, the number of NES students is shown for your information.

Interpretive Example

At your school, "English only" students scored 302 in Reading, and at the district level, students in this category scored 278.

Level of Fluency	SCHOOL					DISTRICT					STATE			
	Students		Scaled Score			Students		Scaled Score			Students		Scaled Score	
	No	%	Read	Writ	Math	No	%	Read	Writ	Math	%	Read	Writ	Math
All Students	101	100%	305	313	297	1606	100%	275	277	274	100%	258	260	261
English only	80	79%	302	308	288	1335	83%	278	282	274	70%	272	274	269
Fluent English plus 2nd language	18	18%	317	347	358	194	12%	282	282	287	18%	242	244	252
Limited English plus 2nd language	3	3%	--	--	--	66	4%	205	211	240	7%	176	181	211
Non-English speaking	0	0%	--	--	--	11	1%	--	--	--	5%	--	--	--

Survey of Basic Skills: Grade 3 — 1982



SUBGROUP RESULTS, Continued

School	JOHN M. GOMES ELEMENTARY
District	FREMONT UNIFIED
County	ALAMEDA

Table E. SPECIALLY FUNDED PROGRAMS

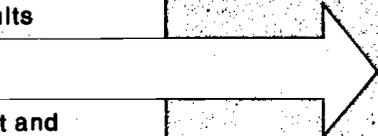
This table displays the numbers, percents, and scores of students according to their participation in specially funded programs as coded by teachers. Some students have been served by more than one program; therefore, the sum of the students in individual programs may exceed the number of program participants

Interpretive Example

Program Participation	SCHOOL					DISTRICT					STATE			
	Students No.	%	Scaled Score Read	Writ	Math	Students No.	%	Scaled Score Read	Writ	Math	Students %	Scaled Score Read	Writ	Math
All Students	101	100%	305	313	297	1595	100%	275	277	274	100%	258	260	261
Program Participants (Students may be served by more than one program)	29	29%	357	344	337	522	33%	251	252	263	43%	218	223	230
ESEA Title I	0	0%	---	---	---	119	7%	238	244	263	25%	201	208	215
State Compensatory Education - EIA	0	0%	---	---	---	7	0%	229	186	223	14%	199	204	215
ESEA Title VII	0	0%	---	---	---	47	3%	223	224	235	2%	206	209	229
State Bilingual - EIA	6	6%	263	297	324	78	5%	222	227	245	7%	193	197	219
Miller-Unruh Reading	0	0%	---	---	---	211	13%	201	214	223	5%	227	231	234
Migrant Education	0	0%	---	---	---	0	0%	---	---	---	2%	185	190	210
Gifted and Talented	22	22%	427	389	367	127	8%	399	360	382	4%	393	372	380
Special Education - Resource Specialist	2	2%	---	---	---	70	4%	186	190	193	5%	170	179	188
Special Education - DIS	0	0%	---	---	---	48	3%	241	231	238	2%	223	228	233
Non-Program Participants	72	71%	286	303	286	951	60%	289	293	280	53%	294	294	288
Non-Response	0	0%	---	---	---	122	8%	295	309	294	4%	284	284	283

USING SURVEY RESULTS

FULL REPORT:	
Part I	Content Area Summary
Part II	Program Diagnostic Displays
Part III	Student Subgroup Results
Part IV	Using Survey Results
Part V	Interpretive Supplement and Conversion Tables



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Linking Results to Instruction

One fundamental purpose underlying the development of the *Survey of Basic Skills: Grade 3* was that the information yielded from assessment results be as helpful as possible to school personnel in evaluating and improving their school programs. This section of the report has been prepared with that purpose in mind.

There are many reasons why instructional leaders use CAP results to improve school programs. Among the most important are the following:

- The skills tested on CAP tests are central to the curriculum and textbooks used in California public schools. The state curriculum *Frameworks* serve as a common basis for developing local curriculum, selecting state adopted textbooks, and defining the skills tested by CAP.
- Both the third- and sixth-grade tests reflect an emphasis on thinking skills such as reading comprehension, writing process skills, and problem solving in mathematics, as suggested in the respective state curriculum *Frameworks*.
- The scaled score allows meaningful comparisons to be made over time between content areas, across grade levels, and among subgroups of students within a school.
- Results are given on a great number of well-defined skills, which greatly facilitates identification of areas of need.

The following material has been prepared for use at several different levels. **Classroom teachers** may want to use parts of this process to help build priorities into their instructional programs for the future. **Principals** may find this material useful in helping their faculties arrive at a consensus of where improvements are needed. **District curriculum specialists** may elect to do an extensive study of skill areas tested by CAP and their relationship to the district's curriculum, instructional materials, and staff development.

The general strategy for translating CAP results into action involves three steps:

Step 1: Content Area Analysis

This step is designed to give an overall picture of your school results for both third and sixth grades over a three-year period. This information may form the basis for the further exploration into the Skill Area Analysis described in Step 2.

Step 2: Skill Area Analysis

This step provides a detailed analysis of the skill areas assessed. An example of how the process can be accomplished is displayed. Lists of suggested factors, issues, and questions to be considered in reference to each skill are given. The purpose of this process is to help identify areas that may need additional attention, and then to verify these observations with information from other sources. Questions that deal with curriculum and instruction may suggest some possible changes in your program. Major skill area descriptions can be found on page 19.

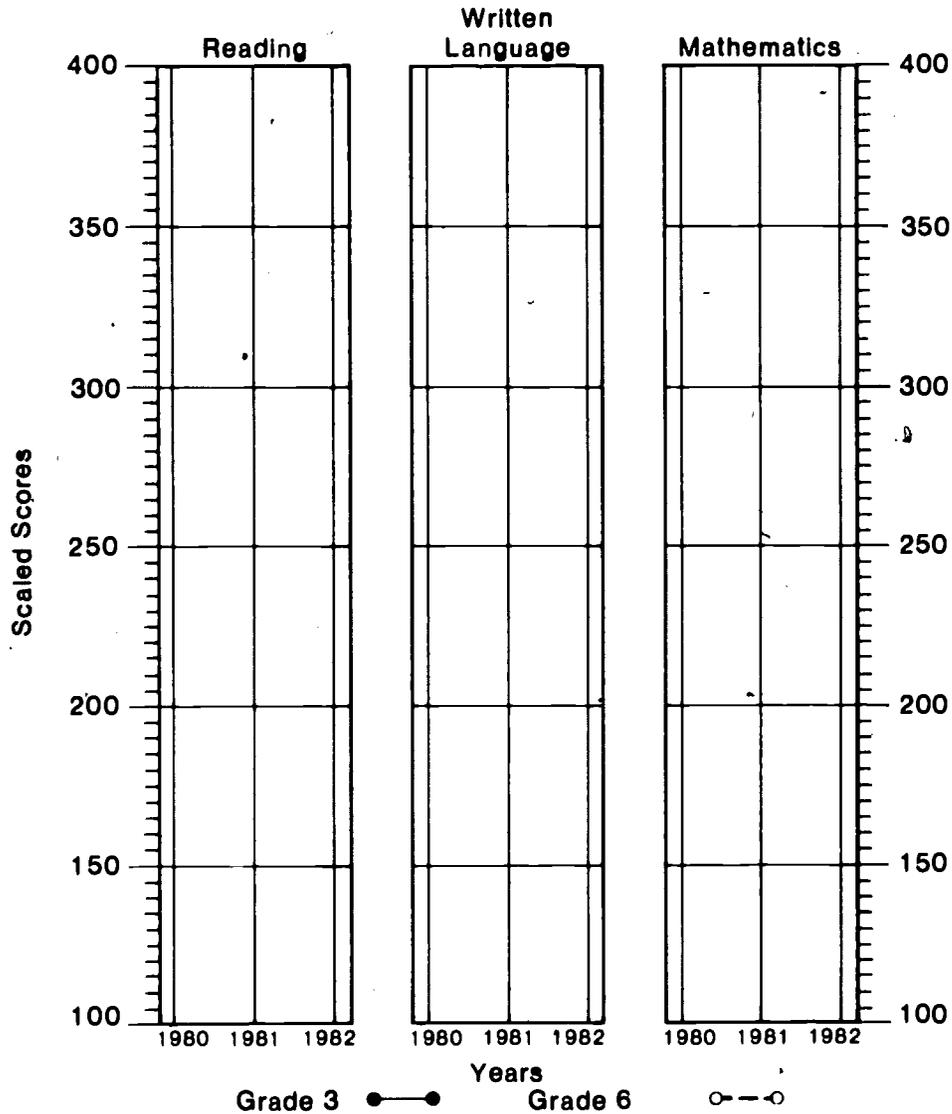
Step 3: Developing a Plan of Action

The great diversity of programs, methods, and materials in California schools does not allow simple solutions that may be written on a standard form. The skills tested by CAP are important skills, but they should never be thought of as the program for a school. When changes need to be made, they must be made in the context of the entire program. A discussion of some of the important considerations for a "plan of action" and a list of useful publications conclude this section of the school report.

Step 1: Content Area Analysis

The completion of the graph and tables on this page will help you analyze (1) scaled score trends for grades 3 and 6 and (2) your school's relationship to its comparison score band. Data for completing the graph and tables will be found on page 1 of the grades 3 and 6 school reports.

Three-Year Trend Analysis



Comparison Score Band Analysis

Sample: Reading

Grade	1980	1981	1982
3	well-above	slightly above	within
6	below	slightly below	well-below

Reading

Grade	1980	1981	1982
3			
6			

Written Language

Grade	1980	1981	1982
3			
6			

Mathematics

Grade	1980	1981	1982
3			
6			

Do these tables and graphs point to a special need at a grade level or in a content area in your school?

Step 2: Skill Area Analysis

The purpose of Step 2 is to identify specific skills in need of attention. The process involves the association of each skill tested with a list of suggested factors, questions, and issues which are relevant to most instructional programs. Initially, areas of possible concern are identified by CAP data. This is followed by the verification of this information from other sources. Curriculum and instructional issues are considered before the development of a plan of action.

The lists of skills may be taken from the program diagnostic displays in this report or they may be ordered from CAP on forms designed for this analysis. There are two types of forms. The "Short Form" lists 21 major skills tested on the Grade 3 Survey and is intended for a brief analysis of CAP results. The "Long Form" has a complete listing of all 90 reporting categories.

The lists below suggest factors, questions and issues that may be useful in this analysis process. They are not intended to be complete listings of all possible considerations; you are encouraged to create your own.

CAP Information

- **Scaled Score - Current**
The scaled score for each skill area will be found on the program diagnostic displays.
- **Scaled Score - Previous**
The third-grade scaled scores for 1980 and 1981 will be found in your School Reports.
- **Relative Strength (RS) and Relative Weakness (RW) - Current**
Relative strengths and relative weaknesses may be found on the program diagnostic displays.
- **Relative Strength (RS) and Relative Weakness (RW) - Previous**
Relative strengths and relative weaknesses for grade 3 in 1980 and 1981 will be found in the last column on the right of the program diagnostic displays.
- **Third-Grade/Sixth-Grade Link**
This information is preprinted on CAP's prepared forms to show the skill areas that are tested at both grades 3 and 6. (For further detail, you may refer to the *Rationale and Content* documents.)

Other Sources of Information

- **Commercial Test Results**
Results of commercially-prepared tests
- **Proficiency Test Results**
Results of locally-developed proficiency tests
- **Teacher-made Test Results**
Comparisons teachers may wish to make between their own tests and CAP results

- **Teacher Judgments**
Areas that teachers feel need further attention based upon all the evidence and upon their judgment of how it applies to their particular situation
Another possibility would be to have teachers indicate where they feel strengths and weaknesses exist *before* seeing current test results.
- **Curriculum Specialist Judgments**
Areas that curriculum specialists or resource teachers feel need further attention on a schoolwide or district basis
- **School Review Results**
Results from recent school reviews that lend themselves to this kind of outline
- **State Curriculum Handbooks**
Did the results of the review processes recommended in the *Handbooks* indicate special needs in this skill?

Curriculum and Instruction

- **Inclusion in District Curriculum Guide**
Has this skill been included in your district curriculum guide?
- **Degree of Emphasis**
To what degree is this skill area emphasized in your program? (G-Great, S-Some, L-Little)
- **Application**
Are opportunities provided for students to apply this skill on a regular basis in a variety of contexts?
- **Practice**
Do students have an opportunity to practice skills learned in earlier grades?
- **Level of Mastery**
What level of mastery do you expect from students at this grade? (M-Mastery, D-Developmental, E-Exploratory)
- **Dependent or Independent Skill**
Is this skill one that depends on continuous development and used on a daily basis, or is this skill one that is relatively independent? (D-Dependent, I-Independent)
- **Time on Task**
Is enough time spent on instruction in this skill?
- **Inclusion in Instructional Materials**
Is this skill adequately covered in your instructional materials?
- **Sequence and Articulation**
Has the sequence of your instructional materials been followed to get to the higher-level skills?
- **Teaching Methods**
Should a change in teaching methods for this skill be considered?
- **Staff Development**
Is there a need for additional staff development in this area?

SAMPLE

CAP Skill Area Analysis, Grade 3 - Short Form

	CAP Information		Other Sources of Information				Curriculum & Instruction			
Mathematics	x	281								
Counting and place value	x	287					G		M	
Operations	x	278				✓	G		M	
The nature of numbers and properties	x	300	RS				S		M	Sec.
Geometry	x	251	RW	✓		✓	S	✓	D	
Measurement	x	291					S		D	
Patterns and graphs	x	272					L		E	Chang
Problem analysis and models	x	286		✓	✓	✓	S	✓	D	Incr. No

Illustrative Example

The CAP analysis process is illustrated here using the Mathematics section of the "Short Form" for grade 3. This form is intended to be flexible. Use only the factors, questions, or issues listed above that are important to you, or make up your own if some of these do not apply. It is not intended that every blank space be filled on the form. Concentrate on those skills that have consistent patterns and are verifiable. It will be necessary to define the meaning of any special symbols or numbers you use in this table.

Third-Grade/Sixth-Grade Link
 Scaled Score (RS) and (RW)
 Commercial Test Results
 Proficiency Test Results
 Teacher-made Test Results
 School Judgments
 State Review Results
 Degree of Emphasis
 Application
 Level of Mastery
 Time on Task
 Incl. in Instructional Materials
 Teaching Methods

(✓) area of need

The following analysis forms are available from CAP:

"CAP Skill Area Analysis, Grade 3, Short Form" includes the 19 major skill areas tested: 4 in Reading, 8 in Written Language and 7 in Mathematics.

Please use the order blank on page 17.

"CAP Skill Area Analysis, Grade 3, Long Form" includes all 90 reporting categories: 27 in Reading, 34 in Written Language and 29 in Mathematics.

Step 3: Developing a Plan of Action

It is beyond the scope of this report to make specific recommendations about how to improve your school program for a particular skill. The foregoing materials have been prepared to help you identify the strengths and weaknesses in your school program. While developing a plan of action you may wish to consider the following points:

- Do not overlook your strengths. They may serve as the best available models for program improvement in your particular situation.
- Skills must be taught in meaningful contexts. Although well-defined skills lend themselves easily to rote learning activities, there is general agreement that this kind of instruction is mostly ineffective. While considering particular skills in need of improvement, it is very important to look at other skills with which they are closely associated. For example, suppose the scaled score for details and sequence on the written language test is a relative weakness. Plans for improvement must be made in relation to the major skill area of paragraph construction and the applications of these skills in the writing process.
- A plan to improve instruction using CAP results must involve more than just the third- and sixth-grade teachers. Most of the skills tested on the CAP tests have a continued development through the curriculum. First- and second-grade teachers initiate the exploration and development of skills tested on the third-grade test. Fourth-grade teachers may find third-grade results valuable in their planning. Obviously, much of what is tested on the sixth-grade test is closely related to fifth-grade work.

There are many resources available from the State Department of Education which have been prepared to help with program planning. The order blank on the next page lists materials that are especially appropriate for use with CAP results.

CAP ORDER FORM

Mail this portion of the page to:

California Aseasment Program
 California State Dept. of Education
 721 Capitol Mall
 Sacramento, CA 95814
 Phone: (916) 322-2200

Forms listing the CAP skill areas for use in the analysis of content area and program diagnoatic information are available from the California Aseasment Program.

Please send the following analysis worksheets.
 (There is no charge.)

Title	Quantity	
	Gr. 3	Gr. 6
CAP Skill Area Analysis (Short Form)	_____	_____
CAP Skill Area Analysis (Long Form)	_____	_____

 Name _____
 Position _____
 Address _____
 City _____ Zip _____
 Telephone _____

If you are interested in obtaining information about CAP workshops planned in your area, please mark this box.

STATE PUBLICATIONS ORDER FORM

Mail this portion of the page to

Publications Sales
 State Department of Education
 P O Box 271
 Sacramento, CA 95802
 Phone (916) 445-1260

The resource publications listed here are available from the State Department of Education. These may prove helpful in analyzing your instructional program.

Please send the following documents:

Title	Price	Quantity	Total
Reading Framework for California Public Schools (1980)	1.75		
English Language Framework for California Public Schools (1976)	1.50		
Mathematics Framework for California Public Schools, with 1980 Addendum (1982)	2.00		
Science Framework for California Public Schools (1978)	1.65		
History, Social Science Framework for California Public Schools (1981)	2.25		
Handbook for Planning an Effective Reading Program (1979)	1.50		
Handbook for Planning an Effective Writing Program (1982)	2.00		
Handbook for Planning an Effective Mathematics Program (1982)	2.00		
Science Education for the 1980s, A Planning and Assessment Handbook (1982)	2.00		
Survey of Basic Skills Grade 3 - Rationale and Content (1980)	1.50		
Survey of Basic Skills Grade 6 - Rationale and Content (1982)	2.00		
Student Achievement in California Schools: 1981-82 Annual Report (1982)	2.00		

Total amount for publications \$ _____
 Plus sales tax for California purchasers _____
TOTAL \$ _____

Make checks payable to California State Department of Education. Remittance or purchase order must accompany this order form. Purchase orders without checks are accepted only from government agencies in California.

Name _____
 Address _____
 City _____ State _____ Zip _____

Content Area Descriptions — Grade 3

Reading

The reading section of the *Survey* contains items from six major skill areas: phonics, structural analysis, vocabulary, literal comprehension, inferential comprehension, and study-locational skills.

All of the reading questions are derived from a reading selection so that pupils are never asked to deal with reading skills apart from the context of a passage. The primary emphasis of the reading section of the test is comprehension.

- **Phonics** items assess the ability to match the sounds associated with the letters (vowels and consonants) occurring in one word from a reading passage with those occurring in another word.
- **Structural analysis** items assess the ability to recognize the meaning of common prefixes and suffixes, to recognize the base form of a word with an inflectional suffix added (for example: "trimmed" vs. "trim"), to recognize the association between an irregular verb form and its infinitive (for example, "taught" vs. "teach"), to recognize the words represented by a contraction, and to identify the component words of a compound word.
- **Vocabulary** items assess the ability to identify synonyms, antonyms, and definitions of words used in a reading passage, and the ability to use the context of the passage to identify the meaning of a multiple meaning word (for example, "saw," "run," and "bark").
- **Literal comprehension** items assess the ability to answer literal questions including sequence, details (explicitly derived from one, two, or three sentences in the reading passage), and pronoun references (Jack is a boy. He is a good reader. . . . Question: Who is a good reader? Answer: Jack).
- **Inferential comprehension** items assess the ability to identify the main idea of a story, infer a cause-and-effect relationship, and draw conclusions from details, from overall meaning, and about characters.
- **Study-locational** items assess the ability to use a pictured Table of Contents to find the page on which a given story appears, and to arrange words in alphabetical order.

Written Language

The written language section of the *Survey* contains items from eight skill areas: word forms, standard English usage, language choices, sentence recognition, paragraphs, capitalization, punctuation, and spelling.

- **Word form** items assess the ability to form words with prefixes and suffixes, irregular noun plurals (for example, "geese," "children," and "shelves"), and contractions.
- **Standard English usage** items assess the ability to use verbs and pronouns, and to achieve agreement in number between subject and verb, and between a noun determiner (for example, "this," "these," "that") and the noun it modifies.
- **Language choice** items assess the ability to select words which appeal to a given sense (for example, a word such as "buzzing" would be associated with the sense of sound), and to select the most specific word in a list of related words (for example, the word "hamburger" would be identified as more exact than "food" or "thing").
- **Sentence recognition** items test the ability to form a complete sentence by supplying a needed subject or verb, and to discriminate between questions and statements.
- **Paragraph** items assess the ability 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, and necessary sequential elements.
- **Capitalization** items require pupils to select words (such as names, places and holidays) which are correctly capitalized.
- **Punctuation** items require pupils to use periods, question marks, commas, and apostrophes correctly.
- **Spelling** items assess the awareness of predictably spelled words and words with suffixes. A few familiar spelling demons are also included among the spelling items in addition to several homophones (for example, "bear" and "bare").

Mathematics

The mathematics section of the *Survey* contains items from seven skill areas: counting and place value, operations, the nature of numbers and properties, geometry, measurement, patterns and graphs, and problem analysis and models.

- **Counting and place value** items assess the ability to find ordinal positions, read and write numbers in standard and expanded forms, count, and recognize place values.
- **Operations** items assess basic facts and operations in addition, subtraction, and multiplication, and basic facts in division.
- **The nature of numbers and properties** items assess the ability to recognize patterns of numbers, use the commutative and associative properties to find equivalent expressions, find the product of a number and zero, recognize odd and even numbers, and use =, <, and > signs correctly.
- **Geometry** items require pupils to recognize two- and three-dimensional geometric shapes, parallel lines, right angles, diameters, and diagonals.
- **Measurement** items require pupils to use standard and non-standard units to measure lengths of pictured objects, estimate length, convert from one unit to another within the same system, and to compute the perimeter of a quadrilateral. The items involve both U.S. Customary and metric units although the emphasis is on metric. Included in this skill area are items requiring pupils to read a clock, a thermometer, a calendar, and a scale, and to find the area or volume from pictured shapes.
- **Patterns and graphs** items require pupils to find missing numbers or patterns, find the function rule, and read a simple bar or picture graph.
- **Problem analysis and models** items require pupils to read stories, to find the given facts, missing information, or the question being asked, and to match a mathematical sentence or a picture with the correct statement.

Included in each of the skill areas described above are items stated as word problems which involve applications of the skill.

INTERPRETIVE SUPPLEMENT AND CONVERSION TABLES

FULL REPORT:

- Part I Content Area Summary
- Part II Program Diagnostic Displays
- Part III Student Subgroup Results
- Part IV Using Survey Results
- Part V Interpretive Supplement and Conversion Tables



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California Assessment Program

INTRODUCTION

Parts I, II and III of the school report are discussed in greater detail in this section. Also included are state percentile rank tables for comparing school (or district) content area scores and background factors with all other schools or districts in California.

A scaled score system for reporting the results from *Survey of Basic Skills* tests is now being used in grades three and six. It was introduced first in grade three, and was developed in conjunction with the new third-grade *Survey* first administered in 1980. Scaled scores have three noteworthy advantages. They permit comparisons from year to year, among content areas, and across grade levels.

The scaled scores range from approximately 100 to 400; however, few of the school- or district-level scores go below 150 or over 350. The achievement for the average (mean) third- and sixth-grade student was set to a scaled score of 250 in 1980. The particular ranges of numbers used for the scaled scores were selected to avoid decimals, negative numbers, and confusion with percent correct scores and percentile ranks. Scaled scores are designed to be a baseline measure which can reflect the progress of a school or school district over a period of years, irrespective of changes to the test or the progress of other schools or districts.

In the past, the chief vehicle for reporting CAP results to schools and districts has been the percent correct score (the total number of questions answered correctly divided by the total number of questions attempted). This type of score is still in use in the grade 12 *Survey*. The percent correct scores are useful (as long as the test remains unchanged) in comparing scores across years, but unfortunately such scores do not lend themselves very well to other kinds of comparisons.

PART I. CONTENT AREA SUMMARY

School and district scores and comparison score bands are provided on page 1 of the *Survey* report. Scores are shown for the current year and two previous years. Grade 3 scores for 1981-82 may now be compared with two previous years allowing comparison of third-grade *Survey* results for three years. Score bands are also shown graphically. Computer messages are included to assist in interpretation.

Scaled scores allow comparison of a school's performance in reading to that in written language or in mathematics. Since the average or mean score for both the grade 3 and grade 6 *Surveys* has been set at 250, it is now possible to compare results across grade levels.

Comparison Score Bands

Comparison score bands take into consideration the conditions in which your school operates, such as characteristics of the community. The comparison score band, therefore, enables you to compare your school's scores with those of schools that have reported a set of background characteristics similar to those listed for your school. It does not suggest where you *should* score, only where schools with a set of background factors similar to yours *did* score. School and district comparison score bands are also shown graphically on page 1.

Comparison score bands are calculated from the school background factors listed in the Background Factor Summary. Each comparison score band represents the middle 50 percent of the range of scores that would be obtained by schools reporting background factors similar to yours. If your school score falls above the comparison score band, your school is in the upper 25 percent of the schools having similar reported background factors. Conversely, if your score falls below the comparison score band, your school is in the lower 25 percent of the schools having similar reported background factors.

Background Factor Summary

The numerical data for the four background factors which were used in calculating the comparison score bands are shown on page 2. Included are comparative background factor data for a three-year period. Educators wishing to compare their school's background factor data with those of other schools should use Table 1 (Table 2 for district results). The tables, which can be found at the end of Part V, provide a convenient method of converting the numerical data for 1981-82 into statewide percentile ranks. (The percentile ranks for previous years can be found in the *Interpretive Supplements* for those years.) It should be noted that a higher percentile rank indicates only the relative standing of a school in terms of a background factor. (Percentile ranks are discussed at the end of this section.) The following paragraphs explain briefly how each background factor is determined.

Entry Level Test. The first factor reported is the mean score obtained in the fall of 1981 by the first-grade students in the school. The test includes items measuring the learning skills of immediate recall, letter recognition, auditory discrimination, visual discrimination, and language development.

The selection of skills assessed by the *Entry Level Test* was based on the need to know what level of skills children have when they enter the first grade as well as the need to account for initial differences in readiness when analyzing subsequent student achievement in the third grade. A high score on the *Entry Level Test* indicates that a school's entering first-graders tend to have a greater readiness for learning than those from schools with lower scores.

Since the *Entry Level Test* is no longer administered, it will not be a background factor in future reports.

Socioeconomic index. The socioeconomic index is an indicator of the occupations of the parents of third-grade students. On the back of each student's test booklet, the teacher identified from the following list the occupational category that corresponded most closely to the occupation of the student's father, mother, or guardian.

- 1 — ● Unknown
- 1 — ● Unskilled employees (and welfare)
- 2 — ● Skilled and semiskilled employees
- 3 — ● Semiprofessionals, clerical and sales workers, and technicians
- 3 — ● Executives, professionals, and managers

The first two categories were assigned a value of 1; the third, a value of 2; and the last two, a value of 3. The socioeconomic index is the average (mean) of these values for all third-grade students in the school. A high value indicates that the school serves a community with a large percentage of people engaged in professional and semiprofessional occupations.

Percent AFDC. The AFDC figure is the percent of students whose families are receiving assistance under the Aid to Families with Dependent Children Program. Late in 1981 each district completed a questionnaire in which it was asked to give the enrollment of each school in the district and the number of students in each school whose families were receiving AFDC assistance as of October 1981.

For each school, the number of students from AFDC families in the school attendance area was divided by the sum of the public and private school enrollment to yield a percent AFDC figure. The district AFDC value presented on the profile was calculated by weighting the percent AFDC figure for each school by the number of students tested in the school.

Percent LES/NES. The percent LES/NES is the percent of limited- or non-English-speaking students. The figure was derived from data filled in on each student's *Survey of Basic Skills: Grade 3*. Teachers were asked to classify each student according to four language proficiency categories:

1. English only
2. Fluent English and a second language
3. Limited English and a second language
4. Non-English speaking

The percent LES/NES students is the percentage of students belonging to categories 3 and 4.

Student Score Distributions

The Student Score Distributions block shows a profile of the scores for your school. The statewide distribution of student scores is divided into four equal groups by the state quartiles (Q₁, Q₂, Q₃). Each quartile marks off, respectively, the lowest quarter of scores, the next highest quarter, and so on. The percentage of your students scoring in each of these four statewide groups is presented for each content area. (No student score distributions are reported for schools or districts which tested fewer than 15 students.)

A "perfectly average" California school would have 25 percent of its students in each of the four quarters. A high-scoring school probably will have more than 25 percent of its students scoring in each of the two highest quarters. Similarly, a low-scoring school will be more strongly represented in the lowest two quarters. The following examples show the distribution of scores for two schools with similar means but with different distributions of scores.

Content Area	Percentage of Students in Each Quarter of the State Student Distribution			
	Below Q ₁	Between Q ₁ and Q ₂	Between Q ₂ and Q ₃	Above Q ₃
Reading	15%	35%	35%	15%

Figure 1

The distribution of scores for the school represented by Figure 1 shows that fewer than 25 percent of the students scored in the lowest quartile.

Content Area	Percentage of Students in Each Quarter of the State Student Distribution			
	Below Q ₁	Between Q ₁ and Q ₂	Between Q ₂ and Q ₃	Above Q ₃
Reading	30%	20%	20%	30%

Figure 2

School 1, represented by Figure 1, has approximately the same scaled score as the school represented in Figure 2. However, this mean score is based upon a different distribution of student scores; only 15 percent of the students were below Q_1 in School 1, whereas 30 percent of the student scores in School 2 were below Q_1 . The same is also true about Q_3 ; 15 percent of the students were above Q_3 in School 1 as contrasted with 30 percent of the students in School 2. School 1 has a relatively homogeneous population, whereas School 2 has a more diverse population of students.

In this manner, the student score distributions provide additional information about the achievement of students in your school, information which may have implications for your educational program.

PROGRAM DIAGNOSTIC DISPLAYS

In the Program Diagnostic Displays, scaled scores play a vital role in permitting comparison of performance among the different skill areas in reading, written language, and mathematics. The feature that makes scaled scores superior to many other scores for these comparisons is that there is no maximum value (or artificial ceiling) or minimum value (artificial floor). That is, a truly high-scoring school that has a scaled score in mathematics of 400 could have a scaled score of well above 400 in geometry, which would show superior performance in that skill area. A finite scale, with a minimum and maximum, masks such exceptional performance at either end of the scale. (Page 3 of the report contains a detailed explanation of the Program Diagnostic Displays.)

Immediately following the program diagnostic displays is a section that contains responses to attitudinal questions regarding the basic skills. Students were asked to indicate how much they like reading, writing stories, and mathematics. School, district and state results are displayed, and the number and percent of students in each category are shown.

SUBGROUP RESULTS

The subgroup results provide additional information on the performance of third-grade students tested last spring. Test scores have been calculated for subgroups within the classifications of sex, socioeconomic status, English language fluency, mobility, and specially funded programs. The number and percent of students in each subgroup are shown. School, district, and state results are displayed.

When any subgroup is composed of a small number of students, caution should be used in making further generalizations from their performance. When a small number of students is tested, a few very high or low scores will greatly influence the average score, no matter how long the test is.

There is also the likelihood that the scores next year for the new set of students classified as belonging to a subgroup will be different. Because the number and type of students in a subgroup fluctuate from year to year, it is advisable to look at other sources of information and to study results for previous years before drawing any firm conclusions.

CONVERSION TABLES

Although scaled scores have many positive features and uses as outlined above, they do not answer the question, "How does my school compare to other schools in California?" This question can be answered by examining the school and district norms tables (Tables 1 and 2, respectively) at the end of this section.

School Percentile Ranks and Student Percentile Ranks

Questions sometimes arise when a school's percentile score, as reported by the California Assessment Program, differs from its percentile score on a publisher's standardized test, even though both tests were administered to the same students. A typical question might be stated this way:

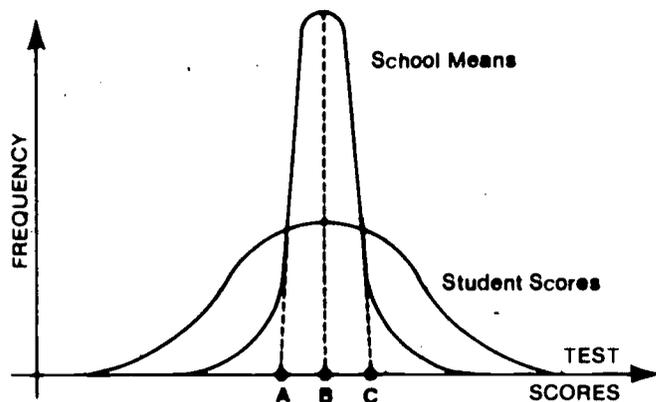
"At our school, we gave a commercially-prepared, nationally-normed test. Looking in the publisher's norm charts, we found that the score of our average (usually median) student was at the 39th percentile, but our school's California Assessment Program score was at the 17th percentile. Why do we get different results for CAP and for our own testing program?"

Several factors might account for the apparent discrepancy, such as variations in content assessed by the two tests. However, such variations are not likely to result in major differences in percentiles. In most cases, the differences result from the fact that the CAP percentile ranks are based on the distribution of school scores, and publishers' percentile ranks are based upon a distribution of student scores. Individual students should be compared with other students, and schools should be compared with other schools. When considering the test results for groups, such as schools and districts, it is appropriate to use group percentile ranks. The American Psychological Association's *Standards for Educational and Psychological Tests** clearly states that "... it is inappropriate to evaluate schools by using norms developed for the evaluation for individuals."

The difference between the two percentile ranks can be explained by a brief look at statistics. School scores (means) tend to be closer to the overall mean than do the scores of individual students. This is because school scores themselves are aggregates, and aggregates of scores are less varied than individual student scores. Figure 3 illustrates a distribution of student scores and school mean scores. Student scores are spread across a wider range of possible scores because there is a greater variability among actual scores. But school scores are more clustered near the mean. Thus, the same score will convert to a different percentile rank depending on whether it is compared with student or school norms.

*Frederick B. Davis, Chair of a joint committee of the American Psychological Association, American Educational Research Association, and the National Council of Measurement in Education, *Standards for Educational and Psychological Tests*. Washington, D.C.: American Psychological Association, 1974.

Figure 3 shows, for example, that a percentile rank of 39 based upon student norms is equivalent to a percentile rank of 17 based on a distribution of school mean scores. Thus, we can see that the two different percentile ranks, 39 and 17, represent the same level of student achievement reported on different scales.



- a. School Percentile Rank 17 30 89
- b. Student Percentile Rank 39 49 81

Figure 3. Comparison of School and Student Percentile Ranks based upon two hypothetical distributions.

Annually Computed Percentile Ranks

This question is sometimes asked by school personnel:

"Why does the California Assessment Program calculate and publish new percentile rank norms each year rather than using fixed norms?"

Current-year norms enable you to answer the question, "How did the achievement of students in our school compare with the achievement of students in other schools in California this year?" Achievement in the current year is being evaluated, not the achievement this year compared to the achievement of all schools in California two or three years ago. While norms do not change dramatically from year to year, the norms developed for the current year of testing are the correct ones to use.

The current-year norms used by the state are sometimes contrasted with the norms that publishers may use for as long as ten years. Commercial test publishers are not able to revise their norms each year because of the cost of doing so and the near impossibility of obtaining a representative sample each year.

Percentile ranks are designed for status comparisons. The question about whether the students are achieving at a higher or lower level in reading than in previous years can be answered by looking at the scaled scores.

Percent Correct Conversion Tables

Percent correct scores have one principal advantage: They represent a simple statistic which concretely describes how students performed on the test. Sometimes such information might be useful in setting priorities about which skill areas should receive attention. Tables 3, 4, and 5 provide conversions between scaled scores and percent correct scores to provide the reader with such information. This conversion process will help to determine the actual difficulty level of a skill area and help to relate school results to the statewide findings described in *Student Achievement in California Public Schools, 1981-82 Annual Report*.

TABLE 1 - SCHOOL NORMS - MAY 1982 (N=4,485) - PERCENTILE RANKS FOR SCALED SCORES AND BACKGROUND FACTORS

State Percentile Ranks	Reading	Written Language	Mathematics	Entry Level Test	Socio-economic Index	Percent AFDC	Percent LES/NEB Pupils	State Percentile Ranks
95	367-468	369-535	374-491	31.92-35.00	2.95-3.00	61.1-100.0	57.1-100.0	95
98	356-366	355-368	362-373	31.61-31.91	2.90-2.94	53.4-61.0	50.9-57.0	98
97	348-355	347-354	353-361	31.43-31.60	2.87-2.89	47.0-53.3	46.2-50.8	97
96	343-347	341-346	344-352	31.31-31.42	2.83-2.86	43.8-46.9	41.4-46.1	96
95	338-342	337-340	339-343	31.15-31.30	2.80-2.82	40.5-43.7	38.6-41.3	95
94	334-337	332-336	333-338	31.01-31.14	2.77-2.79	38.0-40.4	36.3-38.5	94
93	331-333	329-331	330-332	30.91-31.00	2.74-2.76	36.3-37.9	33.6-36.2	93
92	327-330	326-328	326-329	30.82-30.90	2.71-2.73	34.6-36.2	32.0-33.5	92
91	324-326	323-325	323-325	30.74-30.81	2.69-2.70	33.1-34.5	30.0-31.9	91
90	321-323	320-322	320-322	30.68-30.73	2.67-2.68	31.4-33.0	28.6-29.9	90
89	319-320	317-319	317-319	30.58-30.67	2.64-2.66	30.4-31.4	26.8-28.5	89
88	317-318	315-316	315-316	30.51-30.57	2.61-2.63	29.0-30.3	25.5-26.7	88
87	315-316	313-314	312-314	30.44-30.50	2.59-2.60	28.1-28.9	23.9-25.4	87
86	313-314	310-312	310-311	30.37-30.43	2.57-2.58	27.0-28.0	22.4-23.8	86
85	311-312	309	308-309	30.32-30.36	2.55-2.56	26.1-26.9	21.3-22.3	85
84	308-310	307-308	306-307	30.25-30.31	2.53-2.54	25.1-26.0	20.2-21.2	84
83	306-307	305-306	305	30.18-30.24	2.52	24.4-25.0	19.1-20.1	83
82	305	303-304	303-304	30.13-30.17	2.50-2.51	23.7-24.3	17.9-19.0	82
81	302-304	301-302	301-302	30.07-30.12	2.49	23.1-23.6	16.9-17.8	81
80	301	300	300	30.01-30.06	2.47-2.48	22.6-23.0	16.7-16.8	80
79	300	298-299	298-299	29.98-30.00	2.45-2.46	22.1-22.5	15.5-16.2	79
78	298-299	296-297	296-297	29.92-29.97	2.43-2.44	21.6-22.0	14.9-15.4	78
77	297	295	294-295	29.86-29.91	2.41-2.42	21.0-21.5	14.3-14.8	77
76	295-296	294	293	29.82-29.85	2.40	20.5-20.9	13.6-14.2	76
75	294	292-293	291-292	29.76-29.81	2.38-2.39	20.1-20.4	13.0-13.5	75
74	293	291	290	29.72-29.75	2.37	19.6-20.0	12.4-12.9	74
73	291-292	290	288-289	29.66-29.71	2.35-2.36	19.1-19.5	11.8-12.3	73
72	290	289	287	29.62-29.65	2.34	18.7-19.0	11.3-11.7	72
71	288-289	288	286	29.57-29.61	2.33	18.2-18.6	10.9-11.2	71
70	287	286-287	285	29.51-29.56	2.32	17.8-18.1	10.4-10.8	70
69	286	285	283-284	29.46-29.50	2.30-2.31	17.4-17.7	10.1-10.3	69
68	284-285	283-284	282	29.41-29.45	2.29	17.0-17.3	9.6-10.0	68
67	283	282	281	29.36-29.40	2.27-2.28	16.6-16.9	9.1-9.5	67
66	282	281	280	29.31-29.35	2.26	16.3-16.5	8.7-9.0	66
65	281	280	279	29.26-29.30	2.25	16.0-16.2	8.3-8.6	65
64	279-280	279	278	29.21-29.25	2.24	15.6-15.9	8.0-8.2	64
63	278	278	276-277	29.15-29.20	2.22-2.23	15.2-15.5	7.7-7.9	63
62	277	276-277	275	29.11-29.14	2.21	14.8-15.1	7.2-7.6	62
61	275-276	275	274	29.04-29.10	2.20	14.5-14.7	6.9-7.1	61
60	274	274	273	29.00-29.03	2.19	14.1-14.4	6.6-6.8	60
59	272-273	273	272	28.93-28.99	2.18	13.8-14.0	6.2-6.5	59
58	271	272	270-271	28.88-28.92	2.17	13.5-13.7	5.9-6.1	58
57	270	271	269	28.82-28.87	2.16	13.3-13.4	5.6-5.8	57
56	268-269	270	268	28.77-28.81	2.15	12.9-13.2	5.3-5.5	56
55	267	269	267	28.72-28.76	2.14	12.7-12.8	5.1-5.2	55
54	266	267-268	-	28.66-28.71	2.13	12.4-12.6	4.9-5.0	54
53	265	266	266	28.59-28.65	2.12	12.1-12.3	4.6-4.8	53
52	264	265	265	28.51-28.58	2.10-2.11	11.9-12.0	4.3-4.5	52
51	263	264	264	28.45-28.50	2.09	11.7-11.8	4.1-4.2	51
50	262	263	263	28.38-28.44	2.08	11.4-11.6	3.8-4.0	50

TABLE 1 - SCHOOL NORMS - Continued

State Percentile Rank	Reading	Written Language	Mathematics	Entry Level Test	Socio-economic Index	Percent AFDC	Percent LES/NES Pupil	State Percentile Rank
49	261	262	262	28.31-28.37	2.07	11.1-11.3	3.6-3.7	49
48	259-260	261	260-261	28.23-28.30	2.06	10.8-11.0	3.5	48
47	258	260	259	28.16-28.22	2.05	10.6-10.7	3.3-3.4	47
46	257	259	258	28.08-28.15	2.04	10.4-10.5	3.1-3.2	46
45	256	258	-	28.01-28.07	2.02-2.03	10.1-10.3	2.9-3.0	45
44	255	257	256-257	27.96-28.00	2.01	9.9-10.0	2.8	44
43	253-254	256	255	27.90-27.95	-	9.6-9.8	2.6-2.7	43
42	252	255	254	27.84-27.89	2.00	9.4-9.5	2.4-2.5	42
41	251	253-254	253	27.76-27.83	1.99	9.1-9.3	2.2-2.3	41
40	250	252	-	27.69-27.75	1.98	8.9-9.0	2.1	40
39	249	251	252	27.62-27.68	1.96-1.97	8.7-8.8	2.0	39
38	248	250	251	27.54-27.61	1.95	8.4-8.6	1.8-1.9	38
37	247	249	250	27.45-27.53	1.94	8.3	1.7	37
36	245-246	248	248-249	27.37-27.44	1.93	7.9-8.2	1.6	36
35	244	247	247	27.28-27.36	1.91-1.92	7.7-7.8	1.5	35
34	243	246	246	27.15-27.27	1.90	7.4-7.6	1.3-1.4	34
33	241-242	245	245	27.06-27.14	1.89	7.1-7.3	1.2	33
32	240	243-244	244	26.98-27.05	1.87-1.88	6.9-7.0	0.8-1.1	32
31	239	242	242-243	26.87-26.97	1.86	6.6-6.8	0.6-0.7	31
30	237-238	241	241	26.75-26.86	1.85	6.3-6.5	-	30
29	236	240	240	26.63-26.74	1.83-1.84	6.1-6.2	-	29
28	235	239	239	26.52-26.62	1.82	5.8-6.0	-	28
27	234	237-238	238	26.43-26.51	1.80-1.81	5.6-5.7	-	27
26	232-233	236	237	26.28-26.42	1.79	5.3-5.5	-	26
25	231	235	235-236	26.17-26.27	1.77-1.78	5.1-5.2	-	25
24	229-230	233-234	234	26.03-26.16	1.75-1.76	4.8-5.0	-	24
23	227-228	232	233	25.90-26.02	1.74	4.5-4.7	-	23
22	226	230-231	232	25.76-25.89	1.72-1.73	4.2-4.4	-	22
21	224-225	229	231	25.54-25.75	1.71	4.0-4.1	-	21
20	222-223	227-228	230	25.37-25.53	1.69-1.70	3.7-3.9	-	20
19	221	225-226	228-229	25.22-25.36	1.68	3.4-3.6	-	19
18	219-220	223-224	227	25.03-25.21	1.65-1.67	3.2-3.3	-	18
17	217-218	221-222	226	24.88-25.02	1.64	2.9-3.1	-	17
16	215-216	220	223-225	24.69-24.87	1.62-1.63	2.7-2.8	-	16
15	214	218-219	222	24.50-24.68	1.60-1.61	2.4-2.6	-	15
14	211-213	216-217	220-221	24.23-24.49	1.57-1.59	2.2-2.3	-	14
13	210	214-215	218-219	24.00-24.22	1.56	2.0-2.1	-	13
12	207-209	212-213	217	23.74-23.99	1.53-1.55	1.7-1.9	-	12
11	205-206	211	214-216	23.46-23.73	1.51-1.52	1.5-1.6	-	11
10	203-204	209-210	212-213	23.15-23.45	1.49-1.50	1.3-1.4	-	10
9	201-202	206-208	210-211	22.80-23.14	1.47-1.48	1.1-1.2	-	9
8	198-200	203-205	208-209	22.45-22.79	1.44-1.46	0.9-1.0	-	8
7	195-197	201-202	205-207	22.07-22.44	1.41-1.43	0.7-0.8	-	7
6	191-194	197-200	202-204	21.50-22.06	1.39-1.40	0.5-0.6	-	6
5	188-190	193-196	198-201	20.94-21.49	1.35-1.38	0.3-0.4	-	5
4	183-187	189-192	194-197	20.31-20.93	1.31-1.34	0.1-0.2	-	4
3	178-182	185-188	189-193	19.30-20.30	1.25-1.30	-	-	3
2	171-177	179-184	181-188	17.80-19.29	1.16-1.24	-	-	2
1	134-170	137-178	122-180	10.25-17.79	1.00-1.15	0.0	0.0	1

TABLE 2 — DISTRICT NORMS — MAY 1982 (N=921) — PERCENTILE RANKS FOR SCALED SCORES AND BACKGROUND FACTORS

State Percentile Ranks	Reading	Written Language	Mathematics	Entry Level Test	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Ranks
99	358-438	360-398	369-436	32.33-34.50	2.96-3.00	36.0-82.6	41.7-100.0	99
98	347-357	348-359	356-368	32.03-32.32	2.90-2.95	32.6-35.9	36.1-41.6	98
97	343-346	344-347	350-355	31.72-32.02	2.85-2.89	30.5-32.5	33.3-36.0	97
96	341-342	338-343	341-349	31.55-31.71	2.80-2.84	28.6-30.4	30.4-33.2	96
95	335-340	335-337	336-340	31.42-31.54	2.71-2.79	27.2-28.5	26.9-30.3	95
94	333-334	331-334	332-335	31.28-31.41	2.68-2.70	26.6-27.1	25.0-26.8	94
93	330-332	329-330	327-331	31.14-31.27	2.65-2.67	25.8-26.5	22.9-24.9	93
92	327-329	324-328	323-326	31.00-31.13	2.62-2.64	25.1-25.7	22.1-22.8	92
91	325-326	319-323	320-322	30.88-30.99	2.58-2.61	23.8-25.0	21.3-22.0	91
90	323-324	316-318	318-319	30.79-30.87	2.55-2.57	23.4-23.7	19.6-21.2	90
89	321-322	314-315	316-317	30.67-30.78	2.51-2.54	22.2-23.3	18.6-19.5	89
88	319-320	313	313-315	30.63-30.66	2.50	21.7-22.1	17.6-18.5	88
87	318	311-312	310-312	30.56-30.62	2.48-2.49	21.4-21.6	16.9-17.5	87
86	315-317	309-310	308-309	30.46-30.55	2.46-2.47	20.8-21.3	16.1-16.8	86
85	314	305-308	307	30.39-30.45	2.44-2.45	20.4-20.7	15.2-16.0	85
84	311-313	304	305-306	30.31-30.38	2.43	20.0-20.3	13.7-15.1	84
83	309-310	301-303	303-304	30.27-30.30	2.41-2.42	19.2-19.9	13.4-13.6	83
82	306-308	299-300	301-302	30.19-30.26	2.39-2.40	18.7-19.1	12.7-13.3	82
81	302-305	297-298	300	30.15-30.18	2.37-2.38	18.3-18.6	12.1-12.6	81
80	301	295-296	298-299	30.10-30.14	2.35-2.36	17.9-18.2	11.7-12.0	80
79	299-300	294	297	30.04-30.09	2.34	17.7-17.8	11.3-11.6	79
78	298	292-293	296	30.00-30.03	-	17.4-17.6	10.6-11.2	78
77	296-297	291	294-295	29.94-29.99	2.33	17.2-17.3	10.1-10.5	77
76	295	290	293	29.90-29.93	2.31-2.32	16.8-17.1	9.6-10.0	76
75	293-294	289	291-292	29.82-29.89	2.30	16.6-16.7	9.3-9.5	75
74	291-292	287-288	289-290	29.80-29.81	2.29	16.3-16.5	9.0-9.2	74
73	290	286	288	29.77-29.79	2.28	16.1-16.2	8.4-8.9	73
72	289	285	286-287	29.73-29.76	2.26-2.27	15.9-16.0	8.0-8.3	72
71	288	284	285	29.70-29.72	2.25	15.6-15.8	7.7-7.9	71
70	287	283	-	29.66-29.69	2.24	15.2-15.5	7.3-7.6	70
69	286	282	284	29.62-29.65	2.23	14.9-15.1	7.1-7.2	69
68	285	281	283	29.59-29.61	2.22	14.6-14.8	6.8-7.0	68
67	284	280	282	29.56-29.58	2.21	14.4-14.5	6.6-6.7	67
66	283	-	281	29.51-29.55	2.20	14.2-14.3	6.4-6.5	66
65	-	279	280	29.48-29.50	2.19	13.9-14.1	6.2-6.3	65
64	282	278	279	29.42-29.47	2.18	13.7-13.8	5.9-6.1	64
63	281	277	278	29.40-29.41	2.17	13.5-13.6	5.7-5.8	63
62	280	276	277	29.36-29.39	2.16	13.3-13.4	5.4-5.6	62
61	279	-	276	29.33-29.35	2.15	13.2	5.2-5.3	61
60	278	275	275	29.27-29.32	-	13.0-13.1	4.8-5.1	60
59	277	274	274	29.21-29.26	2.14	12.9	4.7	59
58	276	272-273	273	29.16-29.20	2.13	12.6-12.8	4.5-4.6	58
57	274-275	-	271-272	29.10-29.15	2.12	12.5	4.2-4.4	57
56	273	271	270	29.04-29.09	2.11	12.2-12.4	4.0-4.1	56
55	272	270	-	29.01-29.03	2.09-2.10	12.0-12.1	3.8-3.9	55
54	271	-	269	28.95-29.00	2.08	11.7-11.9	3.6-3.7	54
53	270	269	268	28.91-28.94	2.07	11.6	3.4-3.5	53
52	268-269	268	267	28.88-28.90	2.06	11.3-11.5	3.1-3.3	52
51	267	266-267	266	28.81-28.87	2.05	11.1-11.2	2.9-3.0	51
50	265-266	265	265	28.76-28.80	2.04	10.9-11.0	2.7-2.8	50

TABLE 2 — DISTRICT NORMS — Continued

State Percentile Rank	Reading	Written Language	Mathematics	Entry Level Test	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Rank
49	264	264	264	28.69-28.75	2.03	10.6-10.8	2.5-2.6	49
48	-	263	263	28.65-28.68	2.01-2.02	10.4-10.5	2.3-2.4	48
47	263	262	262	28.59-28.64	-	10.3	2.1-2.2	47
46	262	-	261	28.51-28.58	-	10.1-10.2	2.0	46
45	261	261	-	28.45-28.50	2.00	9.8-10.0	1.9	45
44	260	260	260	28.41-28.44	-	9.7	1.7-1.8	44
43	-	-	259	28.33-28.40	-	9.4-9.6	1.4-1.6	43
42	258-259	259	258	28.27-28.32	1.99	9.3	1.2-1.3	42
41	257	258	257	28.21-28.26	1.98	9.1-9.2	1.1	41
40	256	257	-	28.16-28.20	1.96-1.97	8.9-9.0	0.9-1.0	40
39	255	256	256	28.10-28.15	1.95	8.6-8.8	0.7-0.8	39
38	-	255	255	28.05-28.09	1.93-1.94	8.4-8.5	0.5-0.6	38
37	254	-	254	28.01-28.04	1.92	8.2-8.3	0.2-0.4	37
36	253	254	253	27.93-28.00	1.90-1.91	8.0-8.1	-	36
35	252	253	252	27.88-27.92	1.89	7.8-7.9	-	35
34	251	252	-	27.82-27.87	1.88	7.6-7.7	-	34
33	250	251	251	27.73-27.81	1.87	7.4-7.5	-	33
32	249	250	250	27.66-27.72	-	7.1-7.3	-	32
31	248	249	249	27.57-27.65	1.85-1.86	7.0	-	31
30	247	248	-	27.44-27.56	1.84	6.8-6.9	-	30
29	246	247	248	27.36-27.43	1.83	6.5-6.7	-	29
28	245	246	247	27.24-27.35	1.82	6.3-6.4	-	28
27	244	245	246	27.12-27.23	1.81	5.9-6.2	-	27
26	242-243	244	244-245	27.05-27.11	1.80	5.8	-	26
25	241	243	243	26.98-27.04	1.79	5.7	-	25
24	240	242	242	26.82-26.97	1.78	5.6	-	24
23	239	241	241	26.68-26.81	1.76-1.77	5.2-5.5	-	23
22	237-238	240	240	26.58-26.67	-	5.1	-	22
21	235-236	238-239	238-239	26.51-26.57	1.75	4.8-5.0	-	21
20	234	237	236-237	26.42-26.50	1.73-1.74	4.4-4.7	-	20
19	232-233	235-236	235	26.29-26.41	1.72	4.3	-	19
18	231	234	234	26.22-26.28	1.71	4.1-4.2	-	18
17	229-230	232-233	233	26.10-26.21	1.69-1.70	3.9-4.0	-	17
16	226-228	229-231	232	26.00-26.09	1.67-1.68	3.7-3.8	-	16
15	224-225	227-228	231	25.85-25.99	1.64-1.66	3.2-3.6	-	15
14	223	226	229-230	25.70-25.84	1.63	2.8-3.1	-	14
13	221-222	224-225	228	25.46-25.69	1.61-1.62	2.6-2.7	-	13
12	220	223	226-227	25.20-25.45	1.60	2.3-2.5	-	12
11	217-219	221-222	224-225	25.04-25.19	1.57-1.59	2.1-2.2	-	11
10	215-216	219-220	222-223	24.94-25.03	1.56	1.9-2.0	-	10
9	213-214	216-218	220-221	24.70-24.93	1.51-1.55	1.6-1.8	-	9
8	208-212	214-215	219	24.47-24.69	1.45-1.50	1.2-1.5	-	8
7	205-207	212-213	217-218	23.97-24.46	1.43-1.44	0.8-1.1	-	7
6	204	210-211	213-216	23.47-23.96	1.39-1.42	0.4-0.7	-	6
5	200-203	206-209	209-212	23.11-23.46	1.37-1.38	0.1-0.3	-	5
4	196-199	203-205	205-208	22.68-23.10	1.33-1.36	-	-	4
3	192-195	199-202	200-204	21.95-22.67	1.21-1.32	-	-	3
2	187-191	190-198	191-199	20.69-21.94	1.11-1.20	-	-	2
1	145-186	143-189	150-190	15.67-20.68	1.00-1.10	0.0	0.0	1

Table 3
Conversion Between Percent Correct and Scaled Scores for
Reading Skill Areas

Skill Area	Scaled Score																																								Percent Correct Score
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400										
Word Identification	28	31	35	38	42	46	50	53	57	61	64	68	71	74	76	79	81	83	85	87	88	89	91	92	93	94	94	95	96	96	96										
Phonics	29	32	36	40	44	48	52	56	60	63	67	70	73	76	79	81	84	85	87	89	90	91	92	93	94	95	96	96	97	97	97										
Vowels	28	31	35	38	42	46	50	54	58	62	65	69	72	75	78	80	82	84	86	88	89	90	92	93	93	94	95	95	96	96	97										
Consonants	30	34	37	41	45	49	53	57	61	65	68	72	75	78	80	83	85	87	89	90	91	92	93	94	95	96	96	97	97	98	98										
Structural analysis	27	30	33	37	40	44	48	51	55	58	62	65	68	71	74	76	79	81	83	84	86	88	89	90	91	92	93	94	94	95	96										
Prefixes, suffixes, and roots	26	28	31	34	37	40	43	46	49	53	56	59	62	65	68	71	73	75	78	80	82	83	85	87	88	89	90	91	92	93	94										
Contractions and compound words	29	33	37	41	45	50	54	59	63	67	71	74	77	80	83	85	87	89	90	92	93	94	95	95	96	97	97	97	98	98	98										
Vocabulary	20	23	25	28	30	33	36	39	42	45	48	52	55	58	61	64	66	69	71	74	76	78	80	82	84	85	86	88	89	90	91										
Recognizing word meanings	23	26	28	31	34	38	41	44	48	51	55	58	61	64	67	70	73	75	78	80	82	83	85	87	88	89	90	91	92	93	94										
Using context	17	19	21	23	25	28	30	33	36	38	41	44	47	50	53	56	59	62	64	67	70	72	74	76	78	80	82	84	85	87	88										
Comprehension	25	27	30	32	35	38	41	44	47	50	53	56	59	62	64	67	70	72	74	76	78	80	82	83	85	86	87	89	90	90	91										
Literal	26	28	31	33	36	39	41	44	47	50	53	56	59	61	64	66	69	71	73	75	77	79	81	82	84	85	86	88	89	90	91										
Details	25	27	30	32	35	37	40	43	46	48	51	54	57	59	62	65	67	69	72	74	76	78	79	81	82	84	85	86	88	89	90										
From a single sentence	25	28	30	32	35	37	40	43	46	48	51	54	57	59	62	65	67	70	72	74	76	78	80	82	83	85	86	87	88	89	90										
From two or three sentences	25	27	29	32	34	37	40	43	46	48	51	54	57	60	62	65	67	69	71	73	75	77	79	80	82	83	84	85	86	87	88										
Pronoun references	28	31	33	36	39	42	46	49	52	55	58	61	64	67	70	73	75	77	79	81	83	85	86	88	89	90	91	92	93	93	94										
Sequence	25	28	30	32	35	37	40	43	45	48	51	54	56	59	62	64	67	69	71	73	75	77	79	80	82	83	85	86	87	88	89										
Inferential	24	26	29	32	34	37	40	43	47	50	53	56	59	62	65	68	70	73	75	77	79	81	83	84	85	87	88	89	90	91	92										
Main ideas	27	29	32	35	38	41	44	48	51	54	57	60	63	66	68	71	73	76	78	80	82	83	85	86	87	89	90	91	92	92	93										
Cause and effect	25	27	30	32	35	38	41	44	47	50	54	57	60	63	65	68	71	73	75	78	80	81	83	85	85	88	89	90	91	92	93										
Drawing conclusions	22	24	27	29	32	35	38	41	44	47	51	54	57	60	63	66	68	71	73	75	78	79	81	83	85	86	87	88	89	90	91										
About characters	25	27	30	33	37	40	44	47	51	54	57	61	64	67	70	72	75	77	79	81	83	85	86	87	88	90	91	91	92	93	94										
From details	19	21	23	25	27	29	32	34	37	40	42	45	48	51	54	57	60	62	65	68	70	72	75	77	79	80	82	84	85	86	88										
From overall meaning	21	24	26	28	31	34	37	40	43	47	50	53	56	60	63	66	68	71	74	76	78	80	82	84	86	87	88	90	91	92	92										
Study locational	33	38	42	47	52	57	61	66	70	73	77	80	82	85	87	89	90	91	92	93	94	95	96	96	97	97	97	98	98	98	98										
Alphabetizing	35	39	43	47	51	55	59	63	66	70	73	75	78	80	82	84	86	87	89	90	91	92	93	94	94	95	96	96	97	97	97										
Table of contents	32	37	42	47	53	58	63	68	73	77	81	84	87	89	91	93	94	95	96	97	97	98	98	99	99	99	99	99	99	100	100	100									
TOTAL READING	28	30	33	36	39	42	45	48	51	54	57	60	63	66	68	71	73	76	78	80	82	84	85	87	88	89	90	91	92	93	94										

EXAMPLE: Our school received a scaled score of 240 in the skill area of vocabulary. What percent of all of the vocabulary questions on the test did our students answer correctly?

ANSWER: Look across the row of scaled scores at the very top of the chart until you come to 240. Now follow down the column below 240 until you come to the intersection of the vocabulary row. Here you will find the number 61, which indicates that your students correctly answered 61 percent of the questions on the test related to vocabulary.

Table 4

Conversion Between Percent Correct and Scaled Scores for
Written Language Skill Areas

Skill Area	Scaled Score																																				Percent Correct Score
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400						
Word forms	26	29	32	36	39	43	47	51	55	59	62	66	69	72	75	77	79	81	83	85	87	88	89	90	91	92	93	94	94	95	96						
Prefixes	28	31	35	38	42	46	50	54	59	62	66	70	73	76	79	82	84	86	88	90	91	92	93	94	95	96	96	97	97	98	98						
Inflectional suffixes	27	30	34	37	41	45	49	53	57	61	65	68	71	74	76	78	80	82	84	85	87	88	89	90	91	91	92	93	93	94	94						
Derivational suffixes	25	28	32	35	39	43	47	52	56	60	64	67	71	74	76	79	81	83	85	87	88	89	91	92	93	93	94	95	95	96	96						
Irregular noun plurals	22	24	27	29	32	35	38	41	45	48	51	55	58	61	64	66	69	72	74	76	78	80	82	83	85	86	87	88	90	91	91						
Contractions	29	32	35	39	43	46	50	54	58	62	65	69	72	75	78	80	83	85	87	88	90	91	92	93	94	95	96	96	97	97	97						
Standard English usage	30	33	37	40	43	47	51	54	57	61	64	66	69	72	74	76	78	80	81	83	84	85	86	87	88	89	90	90	91	92	92						
Irregular verbs	31	35	38	41	45	48	52	55	59	62	65	68	71	74	76	79	81	83	84	85	87	89	90	91	92	93	94	94	95	95	96						
Pronouns	34	37	41	44	48	51	55	58	61	63	66	68	70	72	73	75	76	77	78	79	80	81	82	82	83	84	84	85	86	86	87						
Subject-verb agreement	24	27	30	33	36	40	44	47	51	54	57	60	63	66	69	71	73	75	77	79	80	82	83	84	85	86	87	88	89	90	90						
Noun determiners	32	35	38	42	45	49	52	56	60	63	66	70	73	75	78	80	82	84	85	87	89	90	91	92	93	94	94	95	95	96	96						
Language choices	24	27	29	32	35	38	41	44	47	50	53	56	59	62	65	68	70	72	75	77	79	81	82	84	85	87	88	89	90	91	92						
Sensory words	28	31	34	37	40	43	47	50	54	57	60	63	66	69	72	74	76	79	81	82	84	86	87	88	89	90	91	92	93	94	94						
Specific words	21	23	25	28	30	33	35	38	41	44	47	50	53	55	58	61	64	66	69	71	73	75	77	79	81	83	84	86	87	88	89						
Sentence recognition	33	36	39	43	46	50	53	57	61	64	67	70	73	76	78	81	83	85	85	88	89	90	91	92	93	94	95	95	96	96	97						
Statements and questions	31	34	37	40	43	46	49	53	56	59	62	65	68	71	73	76	78	80	82	84	86	87	88	90	91	92	93	93	94	95	95						
Complete sentences	33	36	40	43	47	51	54	58	62	65	68	71	74	77	79	82	84	86	87	89	90	91	92	93	94	95	95	96	96	97	97						
Supplying verbs	31	35	38	42	46	49	53	57	61	64	67	70	73	76	79	81	83	85	87	88	90	91	92	93	94	94	95	95	96	97	97						
Supplying subjects	34	38	41	45	48	52	56	59	63	66	69	72	75	78	80	82	84	86	88	89	91	92	93	94	94	95	96	96	97	97	97						
Paragraphs	28	31	33	36	39	42	45	48	51	54	57	60	63	66	69	71	73	76	78	80	81	83	85	86	87	88	89	90	91	92	93						
Topic sentences	28	31	33	36	39	42	45	48	51	54	57	59	62	65	67	70	72	74	76	78	80	82	83	85	86	87	88	89	90	91	92						
Details and sequence	28	31	33	36	39	42	46	49	52	55	58	61	64	67	70	72	75	77	79	81	83	84	86	87	88	90	91	92	92	93	94						
Capitalization	37	41	45	50	55	59	64	68	72	76	79	82	85	87	89	91	92	93	94	95	96	97	97	98	98	98	99	99	99	99	99						
Persons	40	44	49	53	58	63	68	72	77	80	84	86	89	91	92	94	95	96	96	97	97	98	98	98	99	99	99	99	99	99	100						
Places	36	41	45	50	54	59	63	67	71	75	78	81	84	86	88	90	91	93	94	95	96	96	97	97	98	98	98	99	99	99	99						
Days and months	34	38	42	47	51	56	60	65	69	73	76	79	82	85	87	89	91	92	93	94	95	96	96	97	97	98	98	98	99	99	99						
Punctuation	28	31	34	37	40	43	46	50	53	56	59	63	65	68	71	74	76	78	80	82	84	85	87	88	89	91	91	92	93	94	94						
Periods and questions marks	31	34	38	41	45	48	52	56	59	63	66	69	72	75	77	80	82	84	86	87	89	90	91	92	93	94	95	95	96	96	97						
Commas	21	24	26	28	31	33	36	39	42	45	48	51	54	58	61	63	66	69	71	74	76	78	80	82	83	85	86	88	89	90	91						
Apostrophes	32	35	38	41	44	48	51	54	58	61	64	67	70	73	75	78	80	82	84	85	87	88	89	91	92	92	93	94	95	95	96						
Spelling	37	39	42	45	48	50	53	56	58	61	63	66	68	70	72	74	76	78	79	81	82	84	85	86	87	88	89	90	90	91	92						
Predictable words	40	43	47	50	53	56	60	63	66	68	71	74	76	78	80	82	84	85	87	88	89	90	91	92	93	94	94	95	96	96	96						
Words with suffixes	26	27	29	31	32	34	36	38	40	42	44	47	49	51	53	56	58	60	62	64	67	69	70	72	74	76	77	78	80	81	82						
Demons and homophones	38	40	43	45	47	50	52	54	57	59	61	63	65	67	69	71	73	75	76	78	79	80	82	83	84	85	86	87	87	88	89						
TOTAL WRITTEN LANGUAGE	34	36	38	42	45	48	51	54	57	60	63	66	68	71	73	76	78	80	82	83	85	87	88	89	90	91	92	93	94	94	95						

NOTE: Scaled scores are shown at ten-point intervals. It may be necessary to interpolate to arrive at an accurate percent correct figure.

Table 5
Conversion Between Percent Correct and Scaled Scores for
Mathematics Skill Areas

Skill Area	Scaled Score																																				Percent Correct Score
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400						
Counting and place value	36	39	42	45	49	52	56	59	62	66	69	72	74	77	79	81	83	85	87	88	90	91	92	93	94	94	95	96	96	97	97						
Skills	37	40	43	46	50	53	56	60	63	66	69	72	75	77	80	82	84	86	87	89	90	91	92	93	94	95	95	96	96	97	97						
Applications	34	37	40	44	47	51	54	58	61	65	68	71	74	76	79	81	83	85	86	88	89	91	92	93	93	94	95	95	96	96	97						
Operations	37	39	42	44	47	49	52	55	57	60	62	65	67	69	72	74	76	78	80	81	83	84	86	87	88	89	90	91	92	93	93						
Basic facts	53	56	59	62	64	67	69	72	74	76	79	81	83	84	86	87	89	90	91	92	93	94	94	95	96	96	97	97	97	98	98						
Addition	49	52	55	58	60	63	65	68	70	73	75	77	79	81	82	84	85	87	88	89	90	91	92	93	94	94	95	95	96	96	97						
Subtraction	34	37	39	41	43	46	48	51	53	56	59	61	64	66	69	71	73	75	77	79	81	83	84	85	87	88	89	90	91	92	93						
Multiplication	26	28	31	33	35	38	41	43	46	49	52	54	57	60	62	65	67	70	72	74	76	78	79	81	82	84	85	86	87	88	89						
Applications	28	30	32	35	37	40	42	45	48	51	54	56	59	62	64	67	69	71	74	76	78	79	81	83	84	86	87	88	89	90	91						
Basic facts	28	31	33	36	38	41	44	47	50	53	55	58	61	64	67	69	72	74	76	78	80	82	84	85	87	88	89	90	91	92	93						
Addition/subtraction	36	39	41	44	47	50	53	56	59	62	64	67	70	72	74	77	79	80	82	84	85	87	88	89	90	91	92	93	94	94	95						
Multiplication	16	18	20	22	24	25	28	30	33	35	38	40	43	45	49	52	54	57	60	62	65	67	70	72	74	76	78	80	82	83	85						
Nature of numbers and properties	39	41	44	46	49	52	54	57	60	63	65	68	70	73	75	77	79	81	83	84	86	87	88	89	90	91	92	93	93	94	95						
Properties and relationships	36	38	41	44	47	50	53	56	59	62	65	68	70	73	75	78	80	82	84	85	87	88	89	90	91	92	93	94	94	95	95						
Money and fractions	48	50	52	54	57	59	61	64	66	68	71	73	75	78	80	82	83	85	87	88	89	90	91	92	93	93	94	95	95	95	96						
Applications	33	36	38	41	44	46	49	52	55	58	60	63	65	68	70	72	74	76	78	80	82	83	85	86	87	88	89	90	91	92	93						
Geometry	33	36	39	42	46	49	52	55	58	61	64	67	69	72	74	76	78	80	81	83	84	85	87	88	89	90	91	91	92	93	93						
Skills	36	39	42	45	49	52	55	58	61	64	66	69	71	73	75	77	79	81	82	83	85	86	87	88	89	90	90	91	92	92	93						
Applications	28	31	33	37	40	43	46	50	53	56	59	63	65	68	71	73	76	78	80	82	83	85	86	88	89	90	91	92	93	93	94						
Measurement	32	35	38	41	43	46	50	53	56	59	62	65	67	70	72	75	77	79	81	83	85	86	88	89	90	91	92	93	94	94	95						
Linear measures	30	33	35	38	40	43	46	49	52	55	57	60	63	66	68	71	73	76	78	80	82	83	85	87	88	89	90	91	92	93	94						
Other measures	37	40	43	45	49	52	56	59	62	65	68	70	73	76	78	80	82	84	86	87	89	90	91	92	93	94	94	95	96	96	97						
Applications	28	31	34	37	40	43	46	49	52	56	59	62	65	68	70	73	75	78	80	82	83	85	86	88	89	90	91	92	93	93	94						
Patterns and graphs	32	34	37	41	44	47	50	54	57	60	63	66	68	71	73	76	78	80	81	83	84	86	87	88	89	90	91	92	93	93	94						
Skills	28	30	32	34	36	39	41	44	46	49	52	54	57	59	62	64	67	69	71	73	75	77	79	80	82	83	85	86	87	88	89						
Applications	36	39	43	47	51	55	59	63	67	71	74	77	80	83	85	87	89	90	92	93	94	95	95	96	97	97	98	98	98	98	99						
Problem solving	31	33	36	39	42	45	48	51	54	57	60	63	66	69	71	73	76	78	80	81	83	85	86	87	88	90	91	91	92	93	94						
Analysis and models	33	35	37	40	42	45	48	50	53	56	58	61	64	66	69	71	74	76	78	80	82	83	85	86	88	89	90	91	92	92	93						
Applications	31	33	36	39	42	45	48	51	54	58	61	63	66	69	71	74	76	78	80	82	83	85	86	87	89	90	91	92	92	93	94						
TOTAL MATHEMATICS	34	37	40	43	46	48	51	54	57	60	63	65	68	70	73	75	77	79	81	83	84	86	87	88	89	90	91	92	93	94	94	61					

NOTE: Scaled scores are shown at ten-point intervals. It may be necessary to interpolate to arrive at an accurate percent correct figure.

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Survey of Basic Skills: Grade 6 — 1982

SCHOOL REPORT for:

JOHN M. GOMES ELEMENTARY

DISTRICT: FREMONT UNIFIED

COUNTY: ALAMEDA

CDS: 01 61176 6066468



California Assessment Program

California State Department of Education
Wilson Hills, Superintendent of Public Instruction, Sacramento, 1982

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INTRODUCTION TO THE REPORT

New Test Introduced in 1982

Last spring every public elementary school with a sixth grade participated in CAP's completely revised *Survey of Basic Skills*. The former grade 6 *Survey* was in use for seven years, and during that time important shifts occurred in curriculum emphasis. The state curriculum frameworks for reading, written language, and mathematics were revised significantly during the past seven years. This updating process led to the development of a comprehensive new test that provides results in over 100 skill areas.

How the New Test Differs from the Former Test

In reading, a much greater emphasis is placed on higher level comprehension and thinking skills. About two-thirds of the test deals with inferential, interpretive, and critical/applicative comprehension. A great deal of attention also is given to content area reading. Comprehension and vocabulary results are reported in science, social studies, and literature.

In written language, the new test emphasizes writing process skills that deal with substantive choices and decisions in writing. There is a new category of questions called "Judging Student Writing," in which students are asked to think about strengths and weaknesses in actual writing samples produced by children.

In mathematics, more emphasis is placed on problem solving and applications. A variety of problem-solving skills such as problem formulation, analysis and strategy, interpretation and solution are assessed. Most of the reporting categories have a skills component and an applications component.

Scaled Scores

As with the introduction of the new third grade test in 1980, the new grade 6 *Survey* results are reported in scaled scores. All scores for this year and the two previous years have been converted to scaled scores. Scaled scores have three noteworthy advantages. They permit comparisons from year to year, among content areas, and across grade levels.

How the Survey Report is Organized

This report begins with an overview of school and district achievement and progresses to more detailed information related to performance in specific skill areas and scores for different groups of students. The report also includes interpretive materials.

Part I – Content Area Summary

This section includes the following information: school and district scaled scores for 1982 and two previous years, comparison score bands for schools and districts, a summary of background factors, and pupil score distributions. (A statewide view of achievement is provided in the publication entitled *Student Achievement in California Schools – Annual Report, 1981-82* which is sent to every school district in the fall.)

Part II – Program Diagnostic Displays

The program diagnostic displays provide information about performance in the skill areas that are tested in reading, written language, and mathematics.

Part III – Student Subgroup Results

Subgroup results provide scores for different groups of students according to sex, mobility, socioeconomic status, English language fluency, and specially funded programs.

Part IV – Using Survey Results

This section suggests a procedure for using CAP results. Included are content area descriptions that provide an overview of the skills tested in the new *Survey*. Detailed descriptions of the skills assessed can be found in a companion document, *Survey of Basic Skills: Grade 6, Rationale and Content*. A copy of this document was sent to each school in the spring of 1982.

Part V – Interpretive Supplement and Conversion Tables

This part of the *Survey* report provides additional information and guidelines for interpretation of Part I results. Also included are tables for comparing school and district achievement to statewide results and for the conversion of scaled scores to percent correct figures.



Survey of Basic Skills: Grade 6 — 1982

California Assessment Program

Part I - CONTENT AREA SUMMARY

School	JOHN M. GOMES ELEMENTARY
District	FREMONT UNIFIED
County	ALAMEDA

Students Tested	125	NES	0	Total	125
-----------------	-----	-----	---	-------	-----

Scaled scores allow you to compare scores from year-to-year

For example, your scaled score for Reading is higher than the previous year's score of 293.

Scaled scores also allow you to compare scores between content areas.

For example, your Reading score of 308 is higher than your score of 304 for Written Language.

The bands indicate typical performance of schools or districts which, statistically, are like yours.

For example, in Reading, the scores for schools like yours range from 278 to 307.

You can compare your school scores to district scores.

For example, your school's score of 308 for Reading is higher than the district score.

A. SCHOOL SCORES

Content Areas	Years	Scaled Scores	Comparison Score Bands	Your scaled score is shown as a diamond (◊) and the comparison score band as a line (—).						
				100	150	200	250	300	350	400
Reading	1979-80	287	273-300							
	1980-81	293	274-305							
	1981-82	308	278-307							
Written Language	1979-80	292	266-294							
	1980-81	287	270-298							
	1981-82	304	276-298							
Mathematics	1979-80	298	265-297							
	1980-81	310	266-298							
	1981-82	317	280-306							

B. DISTRICT SCORES

Content Areas	Years	Scaled Scores	Comparison Score Bands	100 150 200 250 300 350 400						
				100	150	200	250	300	350	400
Reading	1979-80	267	256-271							
	1980-81	273	264-281							
	1981-82	268	268-286							
Written Language	1979-80	260	253-271							
	1980-81	260	263-278							
	1981-82	278	269-281							
Mathematics	1979-80	259	252-270							
	1980-81	258	258-281							
	1981-82	268	272-284							

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

C. BACKGROUND FACTOR SUMMARY

Three background factors were used to calculate the comparison score bands. They are described in detail in Part V, and tables for comparing your background factors to those of other schools and districts can also be found in Part V of the report.

Interpretive Examples

You can observe changes over the years in background factor values.

Your school's socioeconomic index of 2.75 is higher than the previous year's index of 2.66.

School and district values can be compared to the values of other schools and districts (see the school/district norms tables in Part V).

According to the school norms table, your school's socioeconomic index of 2.75 is higher than 94 percent of the schools in the state.

	Years	Socioeconomic Index	Percent AFDC	Percent LES NES
School	1979-80	2.75	0.3	3.5
	1980-81	2.66	1.1	1.0
	1981-82	2.75	1.2	3.2
District	1979-80	2.27	4.4	2.9
	1980-81	2.38	5.4	2.4
	1981-82	2.38	5.9	3.2

D. STUDENT SCORE DISTRIBUTIONS

The statewide distribution of student scores is divided into four equal groups by the state quartiles (Q_1 , Q_2 , Q_3). Each quartile marks off, respectively, the lowest quarter of scores, the next highest quarter, and so on. The percentages of your students scoring in each of these four statewide groups are presented for each content area. (No student score distributions are reported for schools or districts testing fewer than 15 students.)

Interpretive Example

You can observe changes that occur in proportions of students in any quarter:

In Reading, 44 percent of your students scored in the highest quarter of the state's distribution. This proportion is higher than the proportion that scored in this quarter in the previous year.

Content Areas	Years	Percentage of Students in Each Quarter of the State Student Distribution			
		Below Q_1	Between Q_1 and Q_2	Between Q_2 and Q_3	Above Q_3
Reading	1979-80	12%	23%	30%	35%
	1980-81	11%	26%	25%	38%
	1981-82	7%	20%	29%	44%
Written Language	1979-80	10%	21%	31%	38%
	1980-81	12%	21%	33%	34%
	1981-82	8%	17%	31%	44%
Mathematics	1979-80	10%	19%	27%	44%
	1980-81	6%	17%	28%	49%
	1981-82	7%	15%	30%	48%

Part II – PROGRAM DIAGNOSTIC DISPLAYS

Part I of this report is primarily concerned with overall results and comparisons over time and among content areas. The Program Diagnostic Displays on the following pages show performance on the specific skills within reading, written language, and mathematics. This information can be helpful in making judgments about program strengths and weaknesses and planning improvements. The diagram below will help you interpret the displays.

The Program Diagnostic Displays, when studied along with the resource documents indicated in the analysis process in Part IV, may assist school personnel in linking results to instruction. Chief among the recommended resources are *Survey of Basic Skills: Grade 6, Rationale and Content*, state frameworks, and the curriculum handbooks such as *Planning an Effective Writing Program*.

1. Total Score

Your total score for reading is printed in the box at the top of the display and shown graphically as a bold vertical line

2. Interpretive Examples

These statements are generated by a computer and tailored to your school results

3. Skill Areas

The skill areas for reading are listed here. Major skill areas are described in Part IV and illustrated in detail in *Survey of Basic Skills Grade 6, Rationale and Content*

4. Skill Area Score

Your scaled score for each skill area is shown here

5. Standard Error

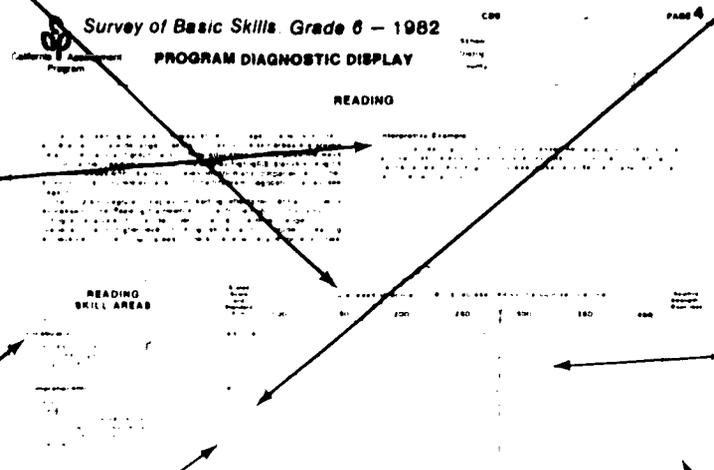
The standard error tells how many score points you should "allow" for uncontrolled variations in the testing situation. It is a statistic, which when added to and subtracted from your scaled score, gives a range which can reasonably be expected to contain your "true" score.

6. Skill Area Bars

Each skill area score, plus and minus the standard error, is displayed graphically as a shaded bar. When the bar is entirely to the right of the total score (the vertical line), that skill area is identified as a relative strength. When the bar is entirely to the left of the total score, it is identified as a relative weakness. If the bar overlaps the total reading score, it is neither a relative strength nor a weakness.

7. Relative Strengths and Weaknesses

Relative strengths and weaknesses are identified here (RS = Relative Strength, RW = Relative Weakness)





Survey of Basic Skills: Grade 6 — 1982

PROGRAM DIAGNOSTIC DISPLAY

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

READING

The total reading score which was shown on page 1 reflects student achievement on a wide range of skills. Scores for the skill areas are shown here numerically and graphically to help educators identify possible ways to improve their reading programs. This display highlights relative strengths and weaknesses within a school. It does not show any comparisons to other schools. For a complete explanation of the Program Diagnostic Display, see page 3.

The program diagnostic display for reading reflects two central concerns expressed in the *Reading Framework for California Public Schools* by providing an analysis of 1) student performance on a broad range of comprehension and higher-level thinking skills, and 2) student reading achievement in the content areas of literature, science, and social studies.

Interpretive Example

Your total Reading score of 308 is expressed below as a bold vertical line, and each skill area score is displayed as a shaded bar. Your score in Vocabulary is identified as neither a relative strength nor a weakness because the shaded bar overlaps the vertical line.

Under Reading in the Content Areas, your school's score for Comprehension of Literature is neither a relative strength nor a weakness because the shaded bar overlaps the vertical line.

See Part IV for an illustrative description of the Reading skill areas tested.

READING SKILL AREAS	Scaled Score and Standard Error	Your total Reading score of 308 is represented by the bold vertical line.							Relative Strength/Weakness
		100	150	200	250	300	350	400	
Vocabulary	305 ±18								
Prefixes, suffixes, and roots	301 ±30								
Word meanings	314 ±20								
Using context	289 ±28								
Comprehension	304 ±11								
Literal	305 ±19								
Details	310 ±26								
From a single sentence	321 ±39								
From two or three sentences	301 ±32								
Pronoun references	315 ±34								
Sequence	285 ±30								
Inferential	299 ±13								
Main ideas	320 ±35								
Cause and effect	241 ±24								
Following organization	334 ±31								
Putting information together	307 ±29								
Predicting outcomes	288 ±27								
Comparisons and contrasts	318 ±31								
Conclusions from details	270 ±26								
Conclusions from overall meaning	315 ±34								

7



RW 70

RW

Comprehension, continued

Interpretive

Analyzing character	300 ±17
Identifying setting	305 ±30
Summarizing plot	283 ±33
Understanding dialogue	314 ±37
Sensing mood	262 ±28
Figurative language	355 ±41
	275 ±32

Critical/applicative

Author and author's attitude	319 ±18
Author's purpose	366 ±43
Separating fact from opinion	301 ±27
Applications to a different context	334 ±31
	288 ±30

Study-Locational Skills

Reference materials & parts of a book	322 ±29
Maps, graphs, & charts	350 ±48
	295 ±30

INTERPRET	
CHARACTER	
SETTING	
PLOT	
MOOD	
FIGURATIVE LANGUAGE	
CRITICAL &	
AUTHOR & ATTITUDE	
AUTHOR'S PURPOSE	
FACT & OPINION	
APPLIC. DIFFER.	
STUDY-LOCATIONAL	
REFERENCES & PARTS OF BOOK	
MAPS, GRAPHS, CH	

RW
RS
RW

RS

READING IN THE CONTENT AREAS

312 ±9

READS

Word Meanings

314 ±20

WORD MEANING

In reading and literature	278 ±29
In science	300 ±33
In social studies	362 ±40

READING AND LIFE	
SCIENCE	
SOCIAL STUDIES	

RW
RS

Comprehension of Literature Passages

309 ±16

LITERATURE

Literal	320 ±34
Inferential	312 ±25
Interpretive	307 ±18
Critical/applicative	294 ±33

LITERATURE	
LITERATURE	
INFERENTIAL	
INTERPRETIVE	
CRITICAL APPLICATIVE	

Comprehension of Science Passages

313 ±16

SCIENCE P

Literal	267 ±25
Inferential	330 ±19
Critical/applicative	307 ±23

LITERATURE	
INFERENTIAL	
CRITICAL APPLICATIVE	

RW
RS

Comprehension of Social Studies Passages

313 ±17

SOCIAL STUD

Literal	332 ±30
Inferential	278 ±18
Interpretive	299 ±32
Critical/applicative	357 ±31

INFERENTIAL	
INTERPRETIVE	
CRITICAL APPLICATIVE	

RW
RS



Survey of Basic Skills: Grade 6 — 1982

California Assessment Program

PROGRAM DIAGNOSTIC DISPLAY

CDS 01 61176 8086468

PAGE 6

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

WRITTEN LANGUAGE

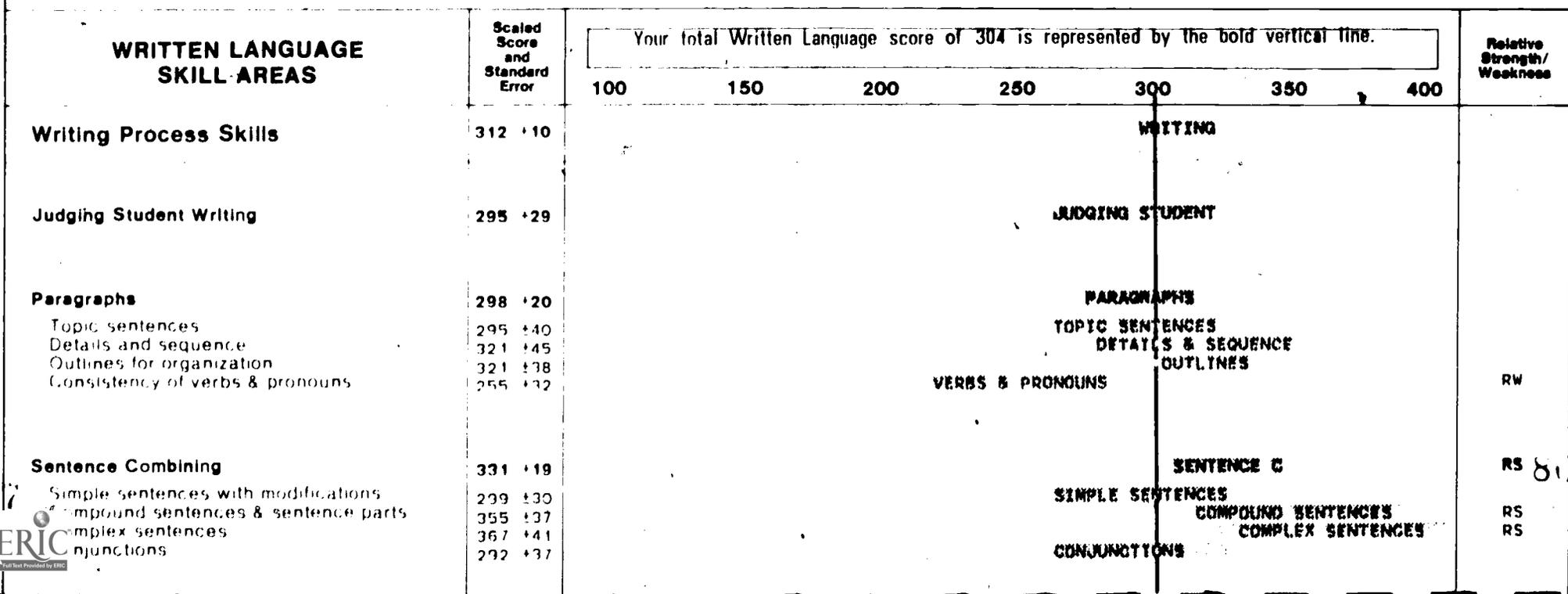
The total written language score which was shown on page 1 reflects student achievement on a wide range of skills. Scores for the skill areas are shown here numerically and graphically to help educators identify possible ways to improve their written language programs. This display highlights relative strengths and weaknesses within a school. It does not show any comparisons to other schools. For a complete explanation of the Program Diagnostic Display, see page 3.

The program diagnostic display for written language reflects two areas of concern expressed in the *English Language Framework* by providing an analysis of 1) writing process skills which deal primarily with matters of judgment in writing, and 2) supporting skills dealing primarily with matters of correctness in the conventions of writing.

Interpretive Example

Your total Written Language score of 304 is expressed below as a bold vertical line, and each skill area score is displayed as a shaded bar. Your score in Sentence Recognition is identified as neither a relative strength nor a weakness because the shaded bar overlaps the vertical line.

See Part IV for an illustrative description of the Written Language skill areas tested.



<p>Sentence Recognition 304 ±20</p> <p>Supplying subjects 277 ±36</p> <p>Supplying verbs 276 ±31</p> <p>Forming complete sentences 354 ±34</p> <p>Language Choices 321 ±25</p> <p>Sensory words 338 ±52</p> <p>Specific words and sentences 331 ±36</p> <p>Achieving tone through word choices 293 ±36</p>			<p>SENTENCE RE</p> <p>SUBJECTS</p> <p>VERBS</p> <p>COMPLETE SENTENCES</p> <p>LANGUAGE CHOIC</p> <p>SENSORY WORDS</p> <p>SPECIFIC WORDS & SE</p> <p>TONE</p>	<p>RS</p>
<p>Supporting Skills 294 ±11</p>			<p>SUPPOR</p>	
<p>Standard English Usage 279 ±15</p> <p>Irregular verbs 279 ±31</p> <p>Pronouns 307 ±34</p> <p>Subject-verb agreement 277 ±32</p> <p>Noun determiners 275 ±39</p> <p>Double negatives 257 ±27</p> <p>Word Forms 288 ±20</p> <p>Suffixes 284 ±38</p> <p>Irregular noun plurals 313 ±33</p> <p>Contractions 271 ±33</p> <p>Spelling 304 ±18</p> <p>Predictable words 327 ±36</p> <p>Words with suffixes 310 ±35</p> <p>Demons 291 ±37</p> <p>Homophones 276 ±35</p> <p>Capitalization and Punctuation 312 ±25</p> <p>Capitalization 329 ±38</p> <p>Punctuation 295 ±33</p>			<p>STAND E</p> <p>IRREGULAR VERBS</p> <p>PRONOUNS</p> <p>SUBJ-VERB AGREEM</p> <p>NOUN DETERMINERS</p> <p>DOUBLE NEGATIV</p> <p>WORD FORMS</p> <p>SUFFIXES</p> <p>IRREG. NOUN PLURA</p> <p>CONTRACTIONS</p> <p>SPELLING</p> <p>PREDICTABLE WORDS</p> <p>WORDS WITH SUFFIXE</p> <p>DEMONS</p> <p>HOMOPHONES</p> <p>CAPITALIZATIO</p> <p>CAPITALIZATION</p> <p>PUNCTUATION</p>	<p>RW</p> <p>RW</p> <p>RW</p>

100

150

200

250

200

300

350



Survey of Basic Skills: Grade 6 — 1982

California Assessment Program

PROGRAM DIAGNOSTIC DISPLAY

CDS 01 61176 6066468

PAGE 8

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

MATHEMATICS

The total mathematics score, as shown on page 1, reflects student achievement on a wide range of skills. Scores for the skill areas are shown here numerically and graphically to help educators identify possible ways to improve their mathematics programs. This display highlights relative strengths and weaknesses within a school. It does not show any comparisons to other schools. For a complete explanation of the Program Diagnostic Display, see page 3.

The questions on the Survey and the reporting of scores reflect a central concern of the *Mathematics Framework* that Problem Solving/Applications serve as an umbrella for all mathematics strands. As shown below, there are nine primary skill areas, most of which are broken down into skills and applications components. The score in "Solution of problems" under Problem Solving is an aggregation of scores for all application categories as well as the category entitled, "Tables, Graphs, and Integrated Applications."

Interpretive Example

Your total Mathematics score of 317 is expressed below as a bold vertical line, and each skill area score is displayed as a shaded bar. Your score in Counting and Place Value is identified as a relative strength (RS) because the shaded bar appears entirely to the right of the vertical line.

See Part IV for an illustrative description of the Mathematics skill areas tested.

MATHEMATICS SKILL AREAS	Scaled Score and Standard Error	Your total Mathematics score of 317 is represented by the bold vertical line.							Relative Strength/Weakness
		100	150	200	250	300	350	400	
Counting, Numeration, and Place Value	357 +21								RS
Skills	367 +28								RS
Counting and numeration	331 +27								
Place value	421 +56								RS
Applications	339 +31								
Nature of Numbers and Properties	311 +18								
Skills	314 +20								
Ordering and properties	321 +33								
Classification of numbers	308 +26								
Applications	303 +28								
Operations	313 +10								
Skills	305 +12								
Addition subtraction, whole numbers	219 +25								
Multiplication of whole numbers	332 +43								
Division of whole numbers	347 +40								
Addition/subtraction of decimals	309 +25								
Operations (+, -, ×, ÷) on fractions	315 +23								
Percents, equivalent fractions/decimals	300 +30								
Multiplication/division of decimals	317 +26								

Applications	329 +17	APPLICATIONS 1-STEP WHOLE 1-STEP RATIONAL 2 OR MORE STEPS	RS
One step, whole numbers	288 +31		
One step, rational numbers	364 +28		
Two or more steps	316 +28		
Expressions and Coordinate Graphs	311 ±18	EXPRESSION SKILLS EXPRESSIONS & EQ GRAPHS & FUNCTI APPLICATIONS	
Skills	309 +21		
Expressions and equations	315 +30		
Graphs and function tables	300 +30		
Applications	316 +33		
Geometry	349 +21	GEOMETRY SKILLS SHAPES & TERMINOLO RELATIONSHIPS APPLICATIONS	RS
Skills	356 +27		
Shapes and terminology	317 +34		
Relationships	394 +41		
Applications	339 +32		
Measurement	303 ±15	MEASUREM SKILLS METRIC UNITS U.S. CUSTOMARY UNIT PERIMETER, ARE APPLICATIONS	RW
Skills	292 +17		
Metric units	311 +26		
U.S. customary units	300 +37		
Perimeter, area, and volume	255 +27		
Applications	332 +27		
Probability and Statistics	301 +21	PROBABILITY PROBABILITY STATISTICS	
Probability	310 +28		
Statistics	292 +30		
Tables, Graphs, and Integrated Applications	301 ±20	TABLES, GRA TABLES & GRAPHS INTEGRATED APP	
Tables and graphs	303 +30		
Integrated applications	298 +28		
Problem Solving	321 +11	PROBLE FORMULATION ANALYSIS & STRA INTERPRETATION, SOLUTIO	
Formulation	314 +31		
Analysis and strategy	325 +28		
Interpretation	286 +32		
Solution of problems	324 +11		



Survey of Basic Skills: Grade 6 - 1982

California Assessment Program

Part III - SUBGROUP RESULTS

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

Subgroup results allow you to observe the performance of different groups of students in the school, district, and state. The results are based upon the information provided by teachers and students in response to questions in the Pupil Information Section of each test booklet. The scaled score is not

provided for a category if there are fewer than 5 students in the category. Statewide scores are provided in each table so that subgroup scores may readily be compared to the scores of all students.

Table A. BOYS AND GIRLS

This table displays the scores of students by sex. Students indicated this information on their test booklets.

Interpretive Example

In your school, boys scored 312 in Reading and girls scored 310. At the state level, boys scored 249 in Reading and girls scored 256.

Sex	SCHOOL					DISTRICT					STATE			
	Students No.	Scaled Score			Math	Students No.	%	Scaled Score			Students %	Scaled Score		
		Read	Writ					Read	Writ	Math		Read	Writ	Math
All Students	189	268	278	268	189	100%	268	278	268	100%	254	257	258	
Boys	99	264	267	268	99	47%	264	267	268	50%	249	244	257	
Girls	90	310	310	316	90	53%	270	288	264	49%	256	263	256	

Table B. MOBILITY

This table displays scores for students according to the grade at which they were first enrolled in the school. Students reported this information on their test booklets.

Interpretive Example

Students who first enrolled in your school at kindergarten scored 328 in Reading, and those who first enrolled at grade 6 scored 257.

Grade First Enrolled	SCHOOL					DISTRICT					STATE			
	Students No.	Scaled Score			Math	Students No.	%	Scaled Score			Students %	Scaled Score		
		Read	Writ					Read	Writ	Math		Read	Writ	Math
All Students	189	268	278	268	189	100%	268	278	268	100%	254	257	258	
K	46	328	316	336	51%	27%	272	285	272	25%	261	261	264	
1	14	296	317	328	11%	6%	296	291	290	6%	267	264	265	
2	9	297	294	338	19%	10%	274	282	265	6%	265	263	263	
3	16	290	261	281	26%	14%	266	275	273	8%	259	258	260	
4	19	316	323	329	31%	16%	271	285	272	12%	254	255	257	
5	16	274	293	288	22%	12%	272	279	256	13%	250	250	254	
6	5	257	279	311	2%	1%	256	259	248	2%	248	248	251	



SUBGROUP RESULTS, Continued

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

Table C. SOCIOECONOMIC STATUS

This table displays scores of students according to parent occupational categories. Teachers marked the category which corresponded to the occupation of the student's father, mother, or guardian.

Interpretive Example

At your school, 19 percent of the students have parents or guardians who are employed in skilled or semiskilled occupations. In your district, the percent of students in this category is 42.

Occupational Category	SCHOOL					DISTRICT					STATE			
	Students		Scaled Score			Students		Scaled Score			Students		Scaled Score	
	No.	%	Read	Writ	Math	No.	%	Read	Writ	Math	%	Read	Writ	Math
All Students	125	100%	308	304	317	1883	100%	268	278	269	100%	254	257	258
Professional	51	41%	358	328	360	357	19%	326	320	277	16%	318	305	313
Semiprofessional	11	9%	314	326	317	531	28%	277	282	277	19%	281	277	279
Skilled Semiskilled	24	19%	262	266	269	799	42%	254	268	251	37%	246	249	250
Unskilled	3	2%				138	7%	225	244	222	18%	204	214	215
Unknown	0	0%				38	2%	229	249	239	6%	217	222	222

Table D. ENGLISH LANGUAGE FLUENCY

This table displays scores for students in terms of English Language fluency. Teachers indicated this information on each test booklet. Data presented here do not include non-English speaking (NES) students. However, the number of NES students is shown for your information.

Interpretive Example

At your school, "English only" students scored 310 in Reading, and at the district level, students in this category scored 269.

Level of Fluency	SCHOOL					DISTRICT					STATE			
	Students		Scaled Score			Students		Scaled Score			Students		Scaled Score	
	No.	%	Read	Writ	Math	No.	%	Read	Writ	Math	%	Read	Writ	Math
All Students	125	100%	308	304	317	1891	100%	268	278	268	100%	254	257	258
English only	112	90%	310	306	315	1659	88%	269	278	267	77%	264	262	264
Fluent English plus 2nd language	3	2%	367	400	403	171	9%	276	295	280	17%	229	234	239
Limited English plus 2nd language	4	3%				53	3%	208	226	204	4%	156	171	193
Non-English speaking	0	0%				8	0%				2%			

SUBGROUP RESULTS, Continued

School JOHN M. GOMES ELEMENTARY
 District FREMONT UNIFIED
 County ALAMEDA

Table E. SPECIALLY FUNDED PROGRAMS

This table displays the numbers, percents, and scores of students according to their participation in specially funded programs as coded by teachers. Some students have been served by more than one program, therefore, the sum of the students in individual programs may exceed the number of program participants.

Interpretive Example

Program Participation	SCHOOL					DISTRICT					STATE			
	Students No	%	Scaled Score Read	Writ	Math	Students No	%	Scaled Score Read	Writ	Math	Students %	Scaled Score Read	Writ	Math
All Students	125	100%	308	304	317	1883	100%	268	278	268	100%	254	257	258
Program Participants (Students may be served by more than one program)	125	100%	308	304	317	463	25%	283	288	283	35%	220	226	231
ESEA Title I	5	4%	245	262	279	110	6%	239	235	226	20%	191	203	202
State Compensatory Education - EIA	0	0%	---	---	---	3	0%	---	---	---	8%	187	199	200
ESEA Title VII	0	0%	---	---	---	20	1%	268	238	222	1%	189	200	212
State Bilingual - EIA	5	4%	245	262	279	69	4%	236	251	236	4%	175	187	201
Miller-Unruh Reading	0	0%	---	---	---	15	1%	192	211	210	1%	200	213	212
Migrant Education	0	0%	---	---	---	1	0%	---	---	---	1%	182	194	200
Gifted and Talented	44	35%	389	383	400	216	11%	373	367	367	7%	387	357	373
Special Education Resource Specialist	0	0%	---	---	---	66	4%	194	205	197	4%	170	185	180
Special Education DIS	0	0%	---	---	---	0	0%	212	207	220	1%	198	207	208
Non-Program Participants	0	0%	---	---	---	1260	67%	267	276	263	59%	274	270	272
Non-Response	0	0%	---	---	---	154	8%	253	276	258	6%	265	262	263

USING SURVEY RESULTS

FULL REPORT:	
Part I	Content Area Summary
Part II	Program Diagnostic Displays
Part III	Student Subgroup Results
Part IV	Using Survey Results
Part V	Interpretive Supplement and Conversion Tables

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California Assessment Program

Linking Results to Instruction

One fundamental purpose underlying the development of the *Survey of Basic Skills: Grade 6* was that the information yielded from assessment results be as helpful as possible to school personnel in evaluating and improving their school programs. This section of the report has been prepared with that purpose in mind.

- There are many reasons why instructional leaders use CAP results to improve school programs. Among the most important are the following:

- The skills tested on CAP tests are central to the curriculum and textbooks used in California public schools. The state curriculum *Frameworks* serve as a common basis for developing local curriculum, selecting state adopted textbooks, and defining the skills tested by CAP.
- Both the third- and sixth-grade tests reflect an emphasis on thinking skills such as reading comprehension, writing process skills, and problem solving in mathematics, as suggested in the respective state curriculum *Frameworks*.
- The scaled score allows meaningful comparisons to be made over time between content areas, across grade levels, and among subgroups of students within a school.
- Results are given on a great number of well-defined skills, which greatly facilitates identification of areas of need.

The following material has been prepared for use at several different levels. **Classroom teachers** may want to use parts of this process to help build priorities into their instructional programs for the future. **Principals** may find this material useful in helping their faculties arrive at a consensus of where improvements are needed. **District curriculum specialists** may elect to do an extensive study of skill areas tested by CAP and their relationship to the district's curriculum, instructional materials, and staff development.

The general strategy for translating CAP results into action involves three steps:

Step 1: Content Area Analysis

This step is designed to give an overall picture of your school's results for both third and sixth grades over a three-year period. This information may form the basis for the further exploration into the Skill Area Analysis described in Step 2.

Step 2: Skill Area Analysis

This step provides a detailed analysis of the skill areas assessed. An example of how the process can be accomplished is displayed. Lists of suggested factors, issues, and questions to be considered in reference to each skill are given. The purpose of this process is to help identify areas that may need additional attention, and then to verify these observations with information from other sources. Questions that deal with curriculum and instruction may suggest some possible changes in your program. Major skill area descriptions can be found on pages 21, 22, and 23.

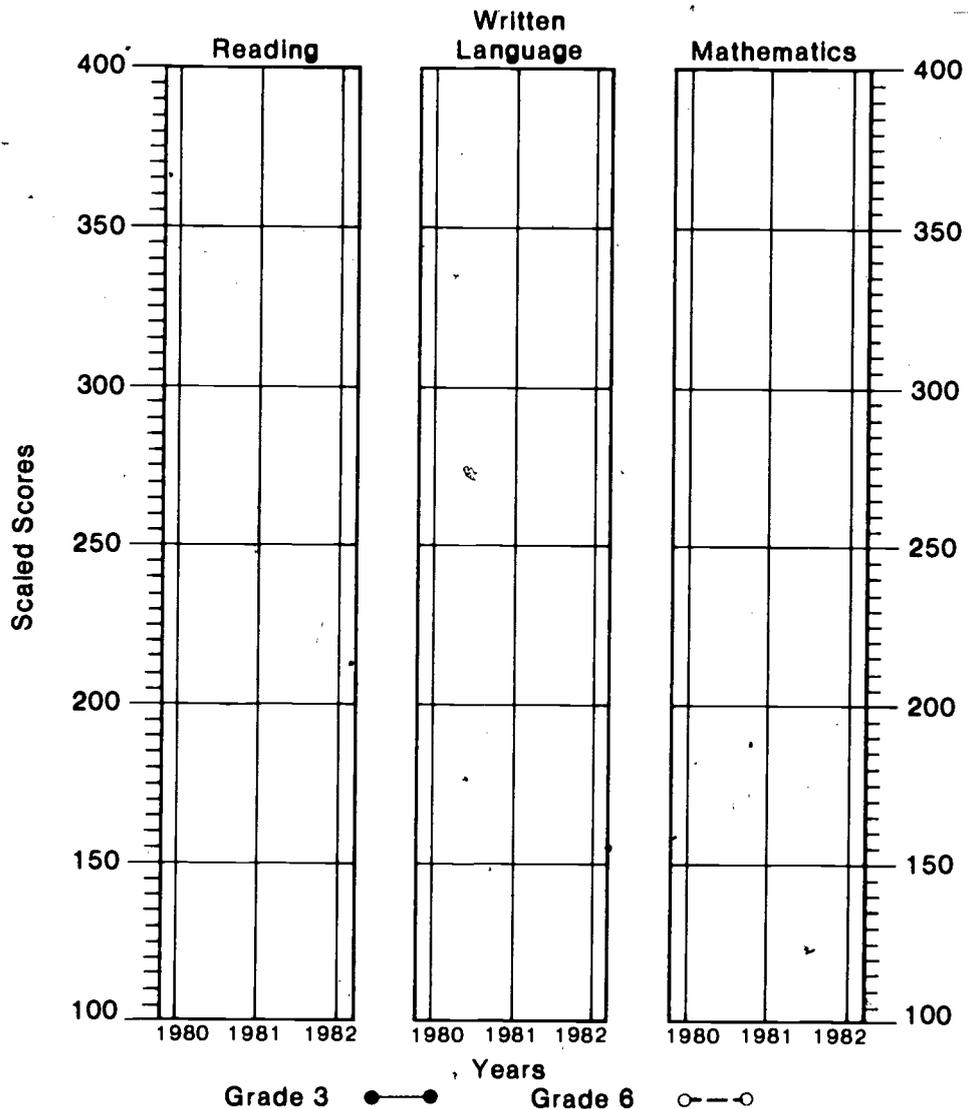
Step 3: Developing a Plan of Action

The great diversity of programs, methods, and materials in California schools does not allow simple solutions that may be written on a standard form. The skills tested by CAP are important skills, but they should never be thought of as the program for a school. When changes need to be made, they must be made in the context of the entire program. A discussion of some of the important considerations for a "plan of action" and a list of useful publications conclude this section of the school report.

Step 1: Content Area Analysis

The completion of the graph and tables on this page will help you analyze (1) scaled score trends for grades 3 and 6 and (2) your school's relationship to its comparison score band. Data for completing the graph and tables will be found on page 1 of the grades 3 and 6 school reports.

Three-Year Trend Analysis



Comparison Score Band Analysis

Sample: Reading

Grade	1980	1981	1982
3	well-above	slightly above	within
6	below	slightly below	well-below

Reading

Grade	1980	1981	1982
3			
6			

Written Language

Grade	1980	1981	1982
3			
6			

Mathematics

Grade	1980	1981	1982
3			
6			

Do these tables and graphs point to a special need at a grade level or in a content area in your school?

Step 2: Skill Area Analysis

The purpose of Step 2 is to identify specific skills in need of attention. The process involves the association of each skill tested with a list of suggested factors, questions, and issues which are relevant to most instructional programs. Initially, areas of possible concern are identified by CAP data. This is followed by the verification of this information from other sources. Curriculum and instructional issues are considered before the development of a plan of action.

The lists of skills may be taken from the program diagnostic displays in this report or they may be ordered from CAP on forms designed for this analysis. There are two types of forms. The "Short Form" lists 32 major skills tested on the Grade 6 Survey and is intended for a brief analysis of CAP results. The "Long Form" has a complete listing of all 140 reporting categories.

The lists below suggest factors, questions and issues that may be useful in this analysis process. They are not intended to be complete listings of all possible considerations; you are encouraged to create your own.

CAP Information

- **Scaled Score**
The scaled score for each skill area will be found on the program diagnostic displays.
- **Relative Strength (RS) and Relative Weakness (RW)**
Relative strengths and relative weaknesses may be found on the program diagnostic displays.
- **Third-Grade/Sixth-Grade Link**
This information is preprinted on CAP's prepared forms to show the skill areas that are tested at both grades 3 and 6. (For further detail, you may refer to the *Rationale and Content* documents.)

Other Sources of Information

- **Commercial Test Results**
Results of commercially-prepared tests
- **Proficiency Test Results**
Results of locally-developed proficiency tests
- **Teacher-made Test Results**
Comparisons teachers may wish to make between their own tests and CAP results
- **Teacher Judgments**
Areas that teachers feel need further attention based upon all the evidence and upon their judgment of how it applies to their particular situation
Another possibility would be to have teachers indicate where they feel strengths and weaknesses exist *before* seeing current test results.

- **Curriculum Specialist Judgments**
Areas that curriculum specialists or resource teachers feel need further attention on a schoolwide or district basis
- **School Review Results**
Results from recent school reviews that lend themselves to this kind of outline
- **State Curriculum Handbooks**
Did the results of the review processes recommended in the *Handbooks* indicate special needs in this skill?

Curriculum and Instruction

- **Inclusion in District Curriculum Guide**
Has this skill been included in your district curriculum guide?
- **Degree of Emphasis**
To what degree is this skill area emphasized in your program? (G-Great, S-Some, L-Little)
- **Application**
Are opportunities provided for students to apply this skill on a regular basis in a variety of contexts?
- **Practice**
Do students have an opportunity to practice skills learned in earlier grades?
- **Level of Mastery**
What level of mastery do you expect from students at this grade? (M-Mastery, D-Developmental, E-Exploratory)
- **Dependent or Independent Skill**
Is this skill one that depends on continuous development and used on a daily basis, or is this skill one that is relatively independent? (D-Dependent, I-Independent)
- **Time on Task**
Is enough time spent on instruction in this skill?
- **Inclusion in Instructional Materials**
Is this skill adequately covered in your instructional materials?
- **Sequence and Articulation**
Has the sequence of your instructional materials been followed to get to the higher-level skills?
- **Teaching Methods**
Should a change in teaching methods for this skill be considered?
- **Staff Development**
Is there a need for additional staff development in this area?

SAMPLE
CAP Skill Area Analysis, Grade 6 - Short Form

Mathematics	CAP Information		Other sources of Information					Curriculum & Instruction						
	X	Score	RS	RW	Proficiency Test Results	Teacher-made Test Results	School Judgments	State Review Results	Degree of Emphasis	Application	Level of Mastery	Time on Task	Incl. in Instructional Materials	Teaching Methods
Counting Numeration and Place Value	X	281												
Nature of Numbers and Properties	X	287												
Operations	X	278												
Expressions, Equat & Coord Graphs	X	300	RS											
Geometry	X	279												
Measurement	X	251		RW	✓		✓		✓					No
Probability and Statistics	X	291												
Tables, Graphs and Integ App	X	283												
Problem Solving	X	272												
	X	286												

Illustrative Example

The CAP analysis process is illustrated here using the Mathematics section of the "Short Form" for grade 6. This form is intended to be flexible. Use only the factors, questions, or issues listed above that are important to you, or make up your own if some of these do not apply. It is not intended that every blank space be filled on the form. Concentrate on those skills that have consistent patterns and are verifiable. It will be necessary to define the meaning of any special symbols or numbers you use in this table.

Third Grade Sixth Grade Link
Scaled score (RS) and (RW)

Commercial Test Results
Proficiency Test Results
Teacher-made Test Results
School Judgments
State Review Results
Degree of Emphasis
Application
Level of Mastery
Time on Task
Incl. in Instructional Materials
Teaching Methods

(✓) area of need

The following analysis forms are available from CAP:
"CAP Skill Area Analysis, Grade 6, Short Form" includes the 32 major skill areas tested: 12 in Reading, 11 in Written Language and 9 in Mathematics. Please use the order blank on page 19.
"CAP Skill Area Analysis, Grade 6, Long Form" includes all 140 reporting categories: 52 in Reading, 39 in Written Language and 49 in Mathematics.

Step 3: Developing a Plan of Action

It is beyond the scope of this report to make specific recommendations about how to improve your school program for a particular skill. The foregoing materials have been prepared to help you identify the strengths and weaknesses in your school program. While developing a plan of action you may wish to consider the following points:

- Do not overlook your strengths. They may serve as the best available models for program improvement in your particular situation.
- Skills must be taught in meaningful contexts. Although well-defined skills lend themselves easily to rote learning activities, there is general agreement that this kind of instruction is mostly ineffective. While considering particular skills in need of improvement, it is very important to look at other skills with which they are closely associated. For example, suppose the scaled score for details and sequence on the written language test is a relative weakness. Plans for improvement must be made in relation to the major skill area of paragraph construction and the applications of these skills in the writing process.
- A plan to improve instruction using CAP results must involve more than just the third- and sixth-grade teachers. Most of the skills tested on the CAP tests have a continued development through the curriculum. First- and second-grade teachers initiate the exploration and development of skills tested on the third-grade test. Fourth-grade teachers may find third-grade results valuable in their planning. Obviously, much of what is tested on the sixth-grade test is closely related to fifth-grade work.

There are many resources available from the State Department of Education which have been prepared to help with program planning. The order blank on the next page lists materials that are especially appropriate for use with CAP results.

CAP ORDER FORM

Mail this portion of the page to:

California Assessment Program
 California State Dept. of Education
 721 Capitol Mall
 Sacramento, CA 95814
 Phone: (916) 322-2200

Please send the following analysis worksheets.
 (There is no charge.)

Title	Quantity	
	Gr. 3	Gr. 6
CAP Skill Area Analysis (Short Form)	_____	_____
CAP Skill Area Analysis (Long Form)	_____	_____

Name _____
 Position _____
 Address _____
 City _____ Zip _____
 Telephone _____

Forms listing the CAP skill areas for use in the analysis of content area and program diagnostic information are available from the California Assessment Program.

If you are interested in obtaining information about CAP workshops planned in your area, please mark this box.

STATE PUBLICATIONS ORDER FORM

Mail this portion of the page to

Publications Sales
 State Department of Education
 P O Box 271
 Sacramento, CA 95802
 Phone (916) 445-1260

Please send the following documents.

Title	Price	Quantity	Total
Reading Framework for California Public Schools (1980)	1 75		
English Language Framework for California Public Schools (1976)	1 50		
Mathematics Framework for California Public Schools, with 1980 Addendum (1982)	2 00		
Science Framework for California Public Schools (1978)	1 65		
History, Social Science Framework for California Public Schools (1981)	2 25		
Handbook for Planning an Effective Reading Program (1979)	1 50		
Handbook for Planning an Effective Writing Program (1982)	2 00		
Handbook for Planning an Effective Mathematics Program (1982)	2 00		
Science Education for the 1980s, A Planning and Assessment Handbook (1982)	2 00		
Survey of Basic Skills Grade 3 - Rationale and Content (1980)	1 50		
Survey of Basic Skills Grade 6 - Rationale and Content (1982)	2 00		
Student Achievement in California Schools, 1981-82 Annual Report (1982)	2 00		

Total amount for publications \$ _____
 Plus sales tax for California purchasers \$ _____
TOTAL \$ _____

Make checks payable to California State Department of Education. Remittance or purchase order must accompany this order form. Purchase orders without checks are accepted only from government agencies in California.

Name _____
 Address _____
 City _____ State _____ Zip _____



Content Area Descriptions – Grade 6

Reading

The reading section of the *Survey* contains items from six major skill areas: vocabulary, literal comprehension, inferential comprehension, interpretive comprehension, critical/applicative comprehension and study-locational skills.

All of the reading questions, except for study-locational skills, are derived from a reading selection so that pupils are never asked to deal with reading skills apart from the context of a passage. The primary emphasis of the reading section of the test is comprehension, especially higher-level comprehension and thinking skills, the importance of which is stated in the following excerpt from the *Reading Framework for California Public Schools*, (Sacramento: California State Dept. of Education, 1980):

Classroom instruction historically has emphasized student responses 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.

The passages were drawn from typical classroom textbooks and everyday reading materials in the areas of literature, science, and social studies in order to reflect the tradition of teaching reading in the content areas at the intermediate level. As is stated in the *Framework*, "In order for students to comprehend written materials used in the content areas of the curriculum, they should receive instruction in the reading-thinking skills."

A description of the major skill areas, as they will be reported, follows below.

- **Vocabulary** items assess the ability to identify meanings of words used in a passage. Test words cover core science, social studies, as well as general vocabulary, and will be broken out as such on the school reports. Vocabulary items also assess understanding of common roots, prefixes and suffixes and the ability to use the context of the passage to identify the meaning of a multiple meaning word (for example, "saw," "run," and "bark").
- **Literal comprehension** items assess the ability to answer literal questions including sequence, details (explicitly derived from one, two, or three sentences in the reading passage), and pronoun references (Jack is a boy. He is a good reader. . . . Question: Who is a good reader? Answer: Jack).
- **Inferential comprehension** items assess the ability to identify main ideas, infer cause and effect relationships, follow the organization of a passage by supplying missing points of an outline, putting information together from different parts of a passage, predicting logical outcomes, making comparisons and contrasts, drawing conclusions from details, and drawing conclusions from overall meaning.
- **Interpretive comprehension** items apply primarily to the literature passages as they assess the ability to analyze characters, infer setting, summarize plot, interpret dialogue, sense mood, and understand figurative language.
- **Critical/applicative** items assess the ability to detect the author, author's attitude and author's purpose, separate fact from opinion, and make applications to a different context.

- **Study-locational** items cover a broad range of skills including finding and using parts of a book, identifying appropriate reference materials for particular purposes, using dictionary entries to select definitions appropriate to a given context, and using maps, graphs, and charts.

Written Language

The written language section of the revised *Survey of Basic Skills: Grade 6* reflects more comprehensively the goals and philosophy stated in the *English Language Framework* and the new writing handbook *Planning an Effective Writing Program*. The written language section contains items from nine skill areas. Five of these, classified as "Writing Process Skills," deal primarily with choices, decisions, and matters of judgment in writing. The five skill areas include: judging student writing, paragraphs, sentence combining, sentence recognition, and language choices. The other four skill areas, termed "Supporting Skills," deal with matters of correctness such as usage and mechanics. These include: standard English usage, word forms, spelling, punctuation and capitalization. Each of these skill areas is explained briefly below:

- **Judging student writing** items assess the ability to identify from corrected samples of student writing particular *strengths*, such as: recognizing effective use of detail; unified paragraphs in which all the sentences support the topic sentence; letters which successfully communicate a message; and imaginative ideas, as well as *weaknesses*, such as: recognizing repetitious paragraphs; 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 assess the ability 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, necessary sequential elements, details selected according to an outline, and verbs or pronouns grammatically consistent with the rest of the paragraph.

- **Sentence combining** items assess the ability to form effective sentences from a set of simple sentences. The effective sentences presented as the correct answers include (1) simple sentences with modification and interrupters (such as appositives), (2) compound sentences or sentences with compound parts, and (3) complex sentences. Another cluster of items assesses the ability to use conjunctions by (1) requiring the choice of a sentence which follows logically from another given statement and conjunction (e.g., I like cake, but _____), and (2) requiring the choice of a conjunction in a sentence (e.g., I like cake, _____ I don't like pie.)
- **Sentence recognition** items test the ability 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 ability to select effective or appropriate words for particular purposes, including the following: (1) specific words or sentences which will provide the most detailed or exact information (for example, the word "apple" would be identified as more exact than "fruit" or "food"); (2) words which appeal to a given sense (for example, a word such as "buzzing" or "screeching" would be associated with the sense of sound); and (3) words which will achieve a particular tone or feeling (for example, "stingy" is associated with a more negative feeling than "thrifty").
- **Standard English usage** items assess the ability to use verbs and pronouns, to avoid double negatives, and to achieve agreement in number between subject and verb, and between a noun determiner (for example, "this," "these," "that") and the noun it modifies.
- **Word form** items assess the ability to form words with suffixes, irregular noun plurals (for example, "geese," "children," and "shelves") and contractions.
- **Punctuation and capitalization** items require pupils 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.
- **Spelling** items assess the ability to spell predictable words (that is, words that can be taught in word families or groups following similar, generalizable patterns); words with predictably-spelled suffixes; demons; and homophones (such as "to," "too," and "two").

Mathematics

The content and scope of the mathematics section of the new *Survey* is based upon responses to a district survey of the classroom instruction, and the recommendations made in the *Addendum to the Mathematics Framework for California Public Schools* (Sacramento: California State Department of Education, 1981). Although all the skills included on the older version of the test are still assessed, the scope of the new test has been expanded by adding an applications component to each of the mathematics skills. Also, in the new version of the test, an entirely new skill of Problem Solving has been added in accordance with the recommendations in the new *Framework*. The nine major skill areas assessed on the *Survey* are as follows:

- **Counting, numeration, and place value** items assess the ability to solve word problems and show skills in counting; exponents, reading and writing whole numbers, decimals, and fractions; identifying fractional parts of shapes; identifying place values of a digit in a whole number or decimal; recognizing a number in expanded notation; and rounding whole numbers or decimals.
- **Nature of numbers and properties** items assess the ability to solve word problems and show skills in recognizing greater than ($>$) and less than ($<$) symbols; finding a missing number on a number line; finding least or greatest whole numbers, decimals, or fractions; identifying odd, even, and primes; finding numbers divisible by 2, 3, or 5; finding factors or prime factors of a number; finding least common multiple (LCM) or greatest common factor (GCF) of two or three numbers; using commutative and distributive properties; and knowing the results when zero is added to a number, or zero is multiplied with a number (properties of zero).
- **Operations** items assess the ability to solve word problems and show skills in identification of terms such as sum, difference, more than, product, factor, divisor, and quotient; perform operations of addition, subtraction, multiplication, and division on whole numbers, decimals, and fractions; recognizing fractions as decimals or percents; and finding percent of a number.
- **Expressions, equations, and coordinate graphs** items assess the ability to solve word problems and show skills in evaluating simple algebraic expressions, identifying points on a coordinate plane, completing a table or ordered pair of numbers, solving a simple equation, and translating an algebraic sentence into English phrases.
- **Geometry** items assess the ability to solve word problems and show skills in identifying simple geometric shapes in 2 and 3 dimensions; recognizing line segment, ray, radius, diameter, types of angles and triangles, parallel and perpendicular lines, similar or congruent figures; measuring angles with a protractor; and recognizing simple spatial relationships.
- **Measurement** items assess the ability to solve word problems and show skills in selecting appropriate unit to measure certain length, area, volume, or mass; finding approximate length or volume of an object; converting days into hours or minutes; recognizing meter, centimeter, and millimeter relationships; and using a given conversion table for interconversion of units of length, volume, or mass; identifying basic formulas for diameter of a circle, area, etc.; and calculating perimeter, area, volume, and circumference of a circle. Most of the questions are in metric units; however, a very small number of items on U.S. Customary units are also included.
- **Probability and statistics** items assess the ability to solve word problems and show skills in selecting the probability of a given event including the probability of events that are certain to occur or certain not to occur (1 or zero probability); calculating mean, the difference between lowest and highest numbers (range), the numbers that occur most often (mode), and the number that occurs in the middle when ordered (median).
- **Tables, graphs, and integrated applications** items assess the ability in a situation where several skills are presented in combination. For example, reading a circle graph item may involve skills in geometry, measurement, and operations. The questions involve reading and interpreting tables, line graphs, bar graphs, circle graphs, and picto-graphs; reading and interpreting information from signs (e.g., road sign), schedules, labels (e.g., food label), and forms (e.g., bank deposit slip).
- **Problem solving** items assess the ability in problem formulation, problem analysis and strategy, and interpretation of results. **Problem formulation** questions require students to formulate a reasonable mathematical problem for a given situation or translate the situation as a mathematical sentence, equation, diagram, graph, or table. **Analysis and strategy** questions require students to read the question and find what is given, unknown, extraneous, or what is being asked. They are also required to formulate models like number sentences and be able to see alternate strategies in solving the problem. They should also know the guess-and-check strategy and use logical reasoning to solve non-routine problems. **Interpretation of results** items require students to check for the correctness of the solution in context of the original problem or be able to see that the solutions to a problem are reasonable.

INTERPRETIVE SUPPLEMENT AND CONVERSION TABLES

FULL REPORT:

- Part I Content Area Summary
- Part II Program Diagnostic Displays
- Part III Student Subgroup Results
- Part IV Using Survey Results
- Part V Interpretive Supplement and Conversion Tables



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California Assessment Program

INTRODUCTION

Parts I, II and III of the school report are discussed in greater detail in this section. Also included are state percentile rank tables for comparing school (or district) content area scores and background factors with all other schools or districts in California.

A scaled score system for reporting the results from *Survey of Basic Skills* tests is now being used in grades three and six. It was introduced first in grade three, and was developed in conjunction with the new third-grade *Survey* first administered in 1980. Scaled scores have three noteworthy advantages. They permit comparisons from year to year, among content areas, and across grade levels.

The scaled scores range from approximately 100 to 400; however, few of the school- or district-level scores go below 150 or over 350. The achievement for the average (mean) third- and sixth-grade student was set to a scaled score of 250 in 1980. The particular ranges of numbers used for the scaled scores were selected to avoid decimals, negative numbers, and confusion with percent correct scores and percentile ranks. Scaled scores are designed to be a baseline measure which can reflect the progress of a school or school district over a period of years, irrespective of changes to the test or the progress of other schools or districts.

In the past, the chief vehicle for reporting CAP results to schools and districts has been the percent correct score (the total number of questions answered correctly divided by the total number of questions attempted). This type of score is still in use in the grade 12 *Survey*. The percent correct scores are useful (as long as the test remains unchanged) in comparing scores across years, but unfortunately such scores do not lend themselves very well to other kinds of comparisons.

PART I. CONTENT AREA SUMMARY

School and district scores and comparison score bands are provided on page 1 of the *Survey* report. Scores are shown for the current year and two previous years. Grade 6 Scores from the previously used sixth-grade *Survey* have been converted to scaled scores. This linkage is possible because students in a sample of schools took both tests for an equating study in the spring of 1982. Scores and comparison score bands are also shown graphically. Computer messages are included to assist in interpretation.

Scaled scores allow comparison of a school's performance in reading to that in written language or in mathematics. Since the average or mean score for both the grade 3 and grade 6 *Surveys* has been set at 250, it is now possible to compare results across grade levels.

Comparison Score Bands

Comparison score bands take into consideration the conditions in which your school operates, such as characteristics of the community. The comparison score band, therefore, enables you to compare your school's scores with those of schools that have reported a set of background characteristics similar to those listed for your school. It does not suggest where you *should* score, only where schools with a set of background factors similar to yours *did* score. School and district comparison score bands are also shown graphically on page 1.

Comparison score bands are calculated from the school background factors listed in the Background Factor Summary. Each comparison score band represents the middle 50 percent of the range of scores that would be obtained by schools reporting background factors similar to yours. If your school score falls above the comparison score band, your school is in the upper 25 percent of the schools having similar reported background factors. Conversely, if your score falls below the comparison score band, your school is in the lower 25 percent of the schools having similar reported background factors.

Background Factor Summary

The numerical data for the three background factors which were used in calculating the comparison score bands are shown on page 2. Included are comparative background factor data for a three-year period. Educators wishing to compare their school's background factor data with those of other schools should use Table 1 (Table 2 for district results). The tables, which can be found at the end of Part V, provide a convenient method of converting the numerical data for 1981-82 into statewide percentile ranks. (The percentile ranks for previous years can be found in the *Interpretive Supplements* for those years.) It should be noted that a higher percentile rank indicates only the relative standing of a school in terms of a background factor. (Percentile ranks are discussed at the end of this section.) The following paragraphs explain briefly how each background factor is determined.

Socioeconomic index. The socioeconomic index is an indicator of the occupations of the parents of sixth-grade students. On the back of each student's test booklet, the teacher identified from the following list the occupational category that corresponded most closely to the occupation of the student's father, mother, or guardian:

- 1 — ● Unknown
- 1 — ● Unskilled employees (and welfare)
- 2 — ● Skilled and semiskilled employees
- 3 — ● Semiprofessionals, clerical and sales workers, and technicians
- 3 — ● Executives, professionals, and managers

The first two categories were assigned a value of 1; the third, a value of 2; and the last two, a value of 3. The socioeconomic index is the average (mean) of these values for all sixth-grade students in the school. A high value indicates that the school serves a community with a large percentage of people engaged in professional and semiprofessional occupations.

Percent AFDC. The AFDC figure is the percent of students whose families are receiving assistance under the Aid to Families with Dependent Children Program. Late in 1981 each district completed a questionnaire in which it was asked to give the enrollment of each school in the district and the number of students in each school whose families were receiving AFDC assistance as of October 1981.

For each school, the number of students from AFDC families in the school attendance area was divided by the sum of the public and private school enrollment to yield a percent AFDC figure. The district AFDC value presented on the profile was calculated by weighting the percent AFDC figure for each school by the number of students tested in the school.

Percent LES/NES. The percent LES/NES is the percent of limited- or non-English-speaking students. The figure was derived from data filled in on each student's *Survey of Basic Skills: Grade 6*. Teachers were asked to classify each student according to four language proficiency categories:

1. English only
2. Fluent English and a second language
3. Limited English and a second language
4. Non-English speaking

The percent LES/NES students is the percentage of students belonging to categories 3 and 4.

Student Score Distributions

The Student Score Distributions block shows a profile of the scores for your school. The statewide distribution of student scores is divided into four equal groups by the state quartiles (Q₁, Q₂, Q₃). Each quartile marks off, respectively, the lowest quarter of scores, the next highest quarter, and so on. The percentage of your students scoring in each of these four statewide groups is presented for each content area. (No student score distributions are reported for schools or districts which tested fewer than 15 students.)

A "perfectly average" California school would have 25 percent of its students in each of the four quarters. A high-scoring school probably will have more than 25 percent of its students scoring in each of the two highest quarters. Similarly, a low-scoring school will be more strongly represented in the lowest two quarters. The following examples show the distribution of scores for two schools with similar means but with different distributions of scores.

Content Area	Percentage of Students in Each Quarter of the State Student Distribution			
	Below Q ₁	Between Q ₁ and Q ₂	Between Q ₂ and Q ₃	Above Q ₃
Reading	15%	35%	35%	15%

Figure 1

The distribution of scores for the school represented by Figure 1 shows that fewer than 25 percent of the students scored in the lowest quartile.

Content Area	Percentage of Students in Each Quarter of the State Student Distribution			
	Below Q ₁	Between Q ₁ and Q ₂	Between Q ₂ and Q ₃	Above Q ₃
Reading	30%	20%	20%	30%

Figure 2

School 1, represented by Figure 1, has approximately the same scaled score as the school represented in Figure 2. However, this mean score is based upon a different distribution of student scores; only 15 percent of the students were below Q_1 in School 1, whereas 30 percent of the student scores in School 2 were below Q_1 . The same is also true about Q_3 ; 15 percent of the students were above Q_3 in School 1 as contrasted with 30 percent of the students in School 2. School 1 has a relatively homogeneous population, whereas School 2 has a more diverse population of students.

In this manner, the student score distributions provide additional information about the achievement of students in your school, information which may have implications for your educational program.

PROGRAM DIAGNOSTIC DISPLAYS

In the Program Diagnostic Displays, scaled scores play a vital role in permitting comparison of performance among the different skill areas in reading, written language, and mathematics. The feature that makes scaled scores superior to many other scores for these comparisons is that there is no maximum value (or artificial ceiling) or minimum value (artificial floor). That is, a truly high-scoring school that has a scaled score in mathematics of 400 could have a scaled score of well above 400 in geometry, which would show superior performance in that skill area. A finite scale, with a minimum and maximum, masks such exceptional performance at either end of the scale. (Page 3 of the report contains a detailed explanation of the Program Diagnostic Displays.)

SUBGROUP RESULTS

The subgroup results provide additional information on the performance of sixth-grade students tested last spring. Test scores have been calculated for subgroups within the classifications of sex, socioeconomic status, English language fluency, mobility, and specially funded programs. The number and percent of students in each subgroup are shown. School, district, and state results are displayed.

When any subgroup is composed of a small number of students, caution should be used in making further generalizations from their performance. When a small number of students is tested, a few very high or low scores will greatly influence the average score, no matter how long the test is.

There is also the likelihood that the scores next year for the new set of students classified as belonging to a subgroup will be different. Because the number and type of students in a subgroup fluctuate from year to year, it is advisable to look at other sources of information and to study results for previous years before drawing any firm conclusions.

CONVERSION TABLES

Although scaled scores have many positive features and uses as outlined above, they do not answer the question, "How does my school compare to other schools in California?" This question can be answered by examining the school and district norms tables (Tables 1 and 2, respectively) at the end of this section.

School Percentile Ranks and Student Percentile Ranks

Questions sometimes arise when a school's percentile score, as reported by the California Assessment Program, differs from its percentile score on a publisher's standardized test, even though both tests were administered to the same students. A typical question might be stated this way:

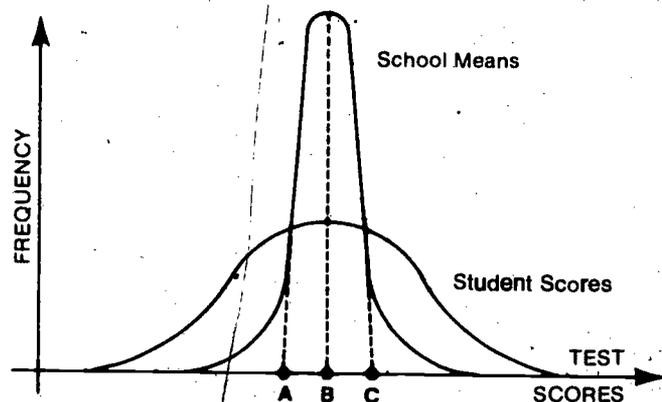
"At our school, we gave a commercially-prepared, nationally-normed test. Looking in the publisher's norm charts, we found that the score of our average (usually median) student was at the 39th percentile, but our school's California Assessment Program score was at the 17th percentile. Why do we get different results for CAP and for our own testing program?"

Several factors might account for the apparent discrepancy, such as variations in content assessed by the two tests. However, such variations are not likely to result in major differences in percentiles. In most cases, the differences result from the fact that the CAP percentile ranks are based on the distribution of school scores, and publishers' percentile ranks are based upon a distribution of student scores. Individual students should be compared with other students, and schools should be compared with other schools. When considering the test results for groups, such as schools and districts, it is appropriate to use group percentile ranks. The American Psychological Association's *Standards for Educational and Psychological Tests** clearly states that "... It is inappropriate to evaluate schools by using norms developed for the evaluation for individuals."

The difference between the two percentile ranks can be explained by a brief look at statistics. School scores (means) tend to be closer to the overall mean than do the scores of individual students. This is because school scores themselves are aggregates, and aggregates of scores are less varied than individual student scores. Figure 3 illustrates a distribution of student scores and school mean scores. Student scores are spread across a wider range of possible scores because there is a greater variability among actual scores. But school scores are more clustered near the mean. Thus, the same score will convert to a different percentile rank depending on whether it is compared with student or school norms.

*Frederick B. Davis, Chair of a joint committee of the American Psychological Association, American Educational Research Association, and the National Council of Measurement in Education, *Standards for Educational and Psychological Tests*. Washington, D.C.: American Psychological Association, 1974.

Figure 3 shows, for example, that a percentile rank of 39 based upon student norms is equivalent to a percentile rank of 17 based on a distribution of school mean scores. Thus, we can see that the two different percentile ranks, 39 and 17, represent the same level of student achievement reported on different scales.



- a. School Percentile Rank 17 30 89
 b. Student Percentile Rank 39 49 81

Figure 3. Comparison of School and Student Percentile Ranks based upon two hypothetical distributions.

Annually Computed Percentile Ranks

This question is sometimes asked by school personnel:

"Why does the California Assessment Program calculate and publish new percentile rank norms each year rather than using fixed norms?"

Current-year norms enable you to answer the question, "How did the achievement of students in our school compare with the achievement of students in other schools in California this year?" Achievement in the current year is being evaluated, not the achievement this year compared to the achievement of all schools in California two or three years ago. While norms do not change dramatically from year to year, the norms developed for the current year of testing are the correct ones to use.

The current-year norms used by the state are sometimes contrasted with the norms that publishers may use for as long as ten years. Commercial test publishers are not able to revise their norms each year because of the cost of doing so and the near impossibility of obtaining a representative sample each year.

Percentile ranks are designed for status comparisons. The question about whether the students are achieving at a higher or lower level in reading than in previous years can be answered by looking at the scaled scores.

Percent Correct Conversion Tables

Percent correct scores have one principal advantage: They represent a simple statistic which concretely describes how students performed on the test. Sometimes such information might be useful in setting priorities about which skill areas should receive attention. Tables 3, 4, and 5 provide conversions between scaled scores and percent correct scores to provide the reader with such information. This conversion process will help to determine the actual difficulty level of a skill area and help to relate school results to the statewide findings described in *Student Achievement in California Public Schools, 1981-82 Annual Report*.

TABLE 1 — SCHOOL NORMS — MAY 1982 (N=4,084) — PERCENTILE RANKS FOR SCALED SCORES AND BACKGROUND FACTORS

State Percentile Ranks	Reading	Written Language	Mathematics	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Ranks
99	352-517	334-488	345-429	2.94-3.00	63.4-100.0	38.8-81.3	99
98	339-351	326-333	337-344	2.90-2.93	55.1-63.3	32.8-38.7	98
97	333-338	319-325	331-336	2.86-2.89	48.9-55.0	28.4-32.7	97
96	326-332	315-318	325-330	2.82-2.85	45.1-48.8	25.3-28.3	96
95	323-325	312-314	320-324	2.79-2.81	41.3-45.0	23.1-25.2	95
94	319-322	308-311	316-319	2.75-2.78	38.2-41.2	21.4-23.0	94
93	315-318	305-307	312-315	2.72-2.74	36.3-38.1	20.0-21.3	93
92	312-314	302-304	309-311	2.70-2.71	34.5-36.2	18.3-19.9	92
91	309-311	300-301	307-308	2.68-2.69	33.0-34.4	17.0-18.2	91
90	307-308	299	305-306	2.65-2.67	31.7-32.9	15.9-16.9	90
89	304-306	297-298	303-304	2.63-2.64	30.1-31.6	14.9-15.8	89
88	302-303	296	301-302	2.61-2.62	28.9-30.0	14.0-14.8	88
87	300-301	294-295	299-300	2.59-2.60	27.9-28.8	13.3-13.9	87
86	298-299	293	297-298	2.57-2.58	26.9-27.8	12.5-13.2	86
85	296-297	291-292	295-296	2.56	25.9-26.8	11.8-12.4	85
84	295	289-290	293-294	2.54-2.55	24.9-25.8	11.2-11.7	84
83	293-294	288	292	2.52-2.53	24.1-24.8	10.7-11.1	83
82	292	287	290-291	2.50-2.51	23.5-24.0	10.2-10.6	82
81	290-291	285-286	289	2.49	22.8-23.4	9.7-10.1	81
80	289	284	287-288	2.47-2.48	22.4-22.7	9.2-9.6	80
79	287-288	283	286	2.46	21.9-22.3	8.8-9.1	79
78	286	282	285	2.44-2.45	21.2-21.8	8.4-8.7	78
77	285	281	284	2.42-2.43	20.6-21.1	8.0-8.3	77
76	284	280	283	2.41	20.1-20.5	7.7-7.9	76
75	282-283	279	282	2.40	19.6-20.0	7.2-7.6	75
74	281	278	281	2.39	19.1-19.5	6.9-7.1	74
73	280	277	280	2.37-2.38	18.7-19.0	6.6-6.8	73
72	278-279	276	279	2.36	18.2-18.6	6.3-6.5	72
71	277	275	278	2.34-2.35	17.7-18.1	6.0-6.2	71
70	-	-	277	2.33	17.3-17.6	5.7-5.9	70
69	275-276	274	276	2.32	16.9-17.2	5.5-5.6	69
68	274	273	275	2.30-2.31	16.6-16.8	5.2-5.4	68
67	273	272	274	2.29	16.2-16.5	5.0-5.1	67
66	272	271	273	2.27-2.28	15.9-16.1	4.7-4.9	66
65	271	270	272	2.26	15.6-15.8	4.4-4.6	65
64	-	-	271	2.25	15.2-15.5	4.2-4.3	64
63	270	269	270	2.24	14.7-15.1	4.0-4.1	63
62	269	268	269	2.23	14.4-14.6	3.8-3.9	62
61	268	267	268	2.22	14.0-14.3	3.6-3.7	61
60	267	266	267	2.21	13.7-13.9	3.5	60
59	266	265	-	2.20	13.4-13.6	3.3-3.4	59
58	264-265	-	266	2.19	13.1-13.3	3.2	58
57	263	264	265	2.18	12.8-13.0	3.0-3.1	57
56	-	263	264	2.17	12.6-12.7	2.9	56
55	262	262	263	2.15-2.16	12.3-12.5	2.7-2.8	55
54	260-261	261	-	2.14	12.1-12.2	2.6	54
53	259	260	262	2.13	11.8-12.0	2.4-2.5	53
52	258	-	261	2.12	11.6-11.7	2.3	52
51	257	259	260	2.11	11.2-11.5	2.2	51
50	256	258	-	2.10	11.0-11.1	2.0-2.1	50

TABLE 1 - SCHOOL NORMS - Continued

State Percentile Ranks	Reading	Written Language	Mathematics	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Ranks
49	255	257	259	2.09	10.7-10.9	-	49
48	-	256	258	2.08	10.5-10.6	1.9	48
47	254	-	257	2.06-2.07	10.3-10.4	1.8	47
46	253	255	256	2.05	10.0-10.2	1.7	46
45	252	254	255	2.04	9.8-9.9	1.6	45
44	251	253	254	2.02-2.03	9.5-9.7	1.5	44
43	250	-	253	2.01	9.3-9.4	1.4	43
42	249	252	252	-	9.0-9.2	1.3	42
41	248	251	-	2.00	8.8-8.9	1.2	41
40	247	250	251	1.99	8.5-8.7	1.1	40
39	246	249	250	1.97-1.98	8.3-8.4	1.0	39
38	245	-	249	1.96	8.1-8.2	0.9	38
37	244	248	248	1.95	7.8-8.0	0.8	37
36	243	247	247	1.94	7.6-7.7	0.3-0.7	36
35	242	246	246	1.93	7.3-7.5	-	35
34	241	245	244-245	1.91-1.92	7.0-7.2	-	34
33	240	244	-	1.90	6.7-6.9	-	33
32	238-239	-	242-243	1.89	6.4-6.6	-	32
31	237	243	241	1.87-1.88	6.2-6.3	-	31
30	236	242	240	1.86	6.0-6.1	-	30
29	235	241	239	1.85	5.8-5.9	-	29
28	233-234	240	238	1.84	5.5-5.7	-	28
27	232	239	237	1.82-1.83	5.3-5.4	-	27
26	231	238	236	1.81	5.1-5.2	-	26
25	230	237	235	1.79-1.80	4.8-5.0	-	25
24	228-229	236	234	1.78	4.5-4.7	-	24
23	227	235	233	1.77	4.2-4.4	-	23
22	226	233-234	231-232	1.75-1.76	4.0-4.1	-	22
21	224-225	232	230	1.74	3.8-3.9	-	21
20	223	231	229	1.72-1.73	3.5-3.7	-	20
19	222	229-230	227-228	1.70-1.71	3.3-3.4	-	19
18	220-221	228	226	1.68-1.69	3.0-3.2	-	18
17	218-219	227	225	1.67	2.8-2.9	-	17
16	216-217	225-226	223-224	1.65-1.66	2.6-2.7	-	16
15	215	223-224	222	1.63-1.64	2.4-2.5	-	15
14	213-214	222	221	1.61-1.62	2.1-2.3	-	14
13	210-212	220-221	219-220	1.59-1.60	1.9-2.0	-	13
12	208-209	219	217-218	1.57-1.58	1.7-1.8	-	12
11	205-207	217-218	215-216	1.55-1.56	1.5-1.6	-	11
10	203-204	215-216	213-214	1.52-1.54	1.3-1.4	-	10
9	201-202	213-214	210-212	1.49-1.51	1.0-1.2	-	9
8	198-200	211-212	208-209	1.46-1.48	0.8-0.9	-	8
7	194-197	209-210	205-207	1.43-1.45	0.6-0.7	-	7
6	192-193	207-208	202-204	1.40-1.42	0.4-0.5	-	6
5	188-191	203-206	199-201	1.35-1.39	0.3	-	5
4	184-187	200-202	195-198	1.30-1.34	0.1-0.2	-	4
3	180-183	196-199	191-194	1.25-1.29	-	-	3
2	173-179	192-195	184-190	1.17-1.24	-	-	2
1	125-172	156-191	152-183	1.00-1.16	0.0	0.0	1

TABLE 2 - DISTRICT NORMS - MAY 1982 (N=916) - PERCENTILE RANKS FOR SCALED SCORES AND BACKGROUND FACTORS

State Percentile Ranks	Reading	Written Language	Mathematics	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Ranks
99	371-427	336-423	353-428	2.94-3.00	35.7-74.2	33.3-81.3	99
98	348-370	331-335	344-352	2.88-2.93	31.6-35.6	24.5-33.2	98
97	341-347	320-330	335-343	2.81-2.87	30.0-31.5	22.7-24.4	97
96	334-340	316-319	326-334	2.77-2.80	28.5-29.9	20.1-22.6	96
95	328-333	312-315	319-325	2.70-2.76	27.2-28.4	18.2-20.0	95
94	325-327	306-311	314-318	2.67-2.69	26.1-27.1	16.3-18.1	94
93	321-324	304-305	311-313	2.65-2.66	25.2-26.0	15.1-16.2	93
92	317-320	301-303	308-310	2.60-2.64	23.8-25.1	13.8-15.0	92
91	312-316	298-300	304-307	2.56-2.59	23.3-23.7	12.7-13.7	91
90	308-311	295-297	303	2.53-2.55	22.5-23.2	11.8-12.6	90
89	306-307	294	301-302	2.51-2.52	21.9-22.4	11.3-11.7	89
88	304-305	292-293	298-300	2.50	21.3-21.8	10.2-11.2	88
87	302-303	290-291	296-297	2.48-2.49	20.5-21.2	9.7-10.1	87
86	300-301	288-289	294-295	2.46-2.47	20.1-20.4	9.3-9.6	86
85	298-299	287	292-293	2.44-2.45	19.4-20.0	8.8-9.2	85
84	296-297	285-286	291	2.41-2.43	19.0-19.3	8.3-8.7	84
83	295	284	289-290	2.40	18.4-18.9	8.0-8.2	83
82	294	283	288	2.39	18.1-18.3	7.8-7.9	82
81	292-293	282	286-287	2.38	17.8-18.0	7.2-7.7	81
80	291	281	285	2.37	17.3-17.7	6.7-7.1	80
79	289-290	280	284	2.35-2.36	17.1-17.2	6.4-6.6	79
78	288	279	282-283	2.34	16.8-17.0	6.0-6.3	78
77	287	278	281	2.32-2.33	16.6-16.7	5.7-5.9	77
76	285-286	-	280	2.31	16.3-16.5	5.6	76
75	284	277	-	2.30	16.1-16.2	5.3-5.5	75
74	283	276	279	2.29	15.8-16.0	5.1-5.2	74
73	282	-	278	2.28	15.5-15.7	4.8-5.0	73
72	281	275	277	2.26-2.27	15.2-15.4	4.6-4.7	72
71	280	-	276	2.25	14.7-15.1	4.5	71
70	279	274	275	2.24	14.4-14.6	4.3-4.4	70
69	278	273	-	2.22-2.23	14.2-14.3	4.1-4.2	69
68	277	-	274	2.21	14.0-14.1	3.9-4.0	68
67	276	272	273	-	13.7-13.9	3.6-3.7	67
66	275	-	272	2.20	13.5-13.6	3.4-3.5	66
65	-	271	271	2.19	13.4	3.2-3.3	65
64	274	-	-	2.18	13.1-13.3	3.1	64
63	273	270	270	2.17	13.0	2.9-3.0	63
62	272	269	-	2.16	12.7-12.9	2.7-2.8	62
61	271	268	269	2.15	12.5-12.6	2.6	61
60	-	-	268	2.14	12.3-12.4	2.5	60
59	270	267	-	2.13	12.2	2.3-2.4	59
58	269	266	267	-	11.9-12.1	2.2	58
57	268	-	-	2.12	11.7-11.8	2.1	57
56	267	265	266	2.11	11.6	2.0	56
55	266	264	265	2.10	11.1-11.5	1.9	55
54	265	-	-	2.09	10.9-11.0	1.8	54
53	264	263	264	2.08	10.7-10.8	1.6-1.7	53
52	263	262	263	-	10.5-10.6	1.5	52
51	262	261	-	2.07	10.3-10.4	1.4	51
50	261	-	262	2.05-2.06	10.2	-	50

TABLE 2 — DISTRICT NORMS — Continued

State Percentile Rank	Reading	Written Language	Mathematics	Socio-economic Index	Percent AFDC	Percent LES/NES Pupils	State Percentile Rank
49	260	260	-	-	10.0-10.1	1.3	49
48	259	-	261	2.04	9.8-9.9	1.2	48
47	-	259	260	2.03	9.6-9.7	1.1	47
46	258	258	-	2.02	9.3-9.5	1.0	46
45	257	-	259	2.01	9.1-9.2	0.9	45
44	256	257	258	-	9.0	0.8	44
43	255	-	-	-	8.8-8.9	-	43
42	254	256	257	2.00	8.6-8.7	0.7	42
41	-	255	256	-	8.4-8.5	0.5-0.6	41
40	253	254	255	1.99	8.2-8.3	0.4	40
39	252	-	-	1.98	8.0-8.1	0.2-0.3	39
38	251	253	254	1.97	7.8-7.9	-	38
37	250	-	252-253	1.96	7.6-7.7	-	37
36	249	252	251	1.95	7.4-7.5	-	36
35	-	251	250	1.94	7.1-7.3	-	35
34	248	250	249	1.93	6.9-7.0	-	34
33	247	249	248	1.92	6.8	-	33
32	246	-	247	1.90-1.91	6.5-6.7	-	32
31	245	248	246	-	6.3-6.4	-	31
30	244	247	245	1.89	6.1-6.2	-	30
29	243	246	244	1.88	5.9-6.0	-	29
28	242	-	243	1.86-1.87	5.8	-	28
27	241	245	242	-	5.7	-	27
26	240	244	241	1.84-1.85	5.5-5.6	-	26
25	238-239	243	240	1.83	5.2-5.4	-	25
24	237	-	238-239	1.81-1.82	5.0-5.1	-	24
23	236	242	237	1.80	4.8-4.9	-	23
22	235	240-241	236	1.79	4.5-4.7	-	22
21	234	239	235	1.77-1.78	4.4	-	21
20	232-233	238	234	1.76	4.2-4.3	-	20
19	231	237	-	1.74-1.75	4.1	-	19
18	229-230	236	233	1.72-1.73	3.8-4.0	-	18
17	228	235	231-232	1.71	3.5-3.7	-	17
16	227	234	230	1.69-1.70	3.2-3.4	-	16
15	226	233	229	1.67-1.68	2.8-3.1	-	15
14	224-225	231-232	228	1.65-1.66	2.6-2.7	-	14
13	223	229-230	227	1.63-1.64	2.4-2.5	-	13
12	221-222	228	225-226	1.61-1.62	2.2-2.3	-	12
11	219-220	227	223-224	1.59-1.60	1.9-2.1	-	11
10	216-218	225-226	222	1.56-1.58	1.7-1.8	-	10
9	214-215	223-224	220-221	1.51-1.55	1.5-1.6	-	9
8	212-213	221-222	219	1.47-1.50	1.4	-	8
7	209-211	219-220	216-218	1.43-1.46	0.8-1.3	-	7
6	205-208	217-218	213-215	1.40-1.42	0.3-0.7	-	6
5	202-204	213-216	210-212	1.34-1.39	0.1-0.2	-	5
4	199-201	206-212	207-209	1.30-1.33	-	-	4
3	190-198	203-205	201-206	1.25-1.29	-	-	3
2	186-189	196-202	195-200	1.21-1.24	-	-	2
1	158-185	179-195	168-194	1.00-1.20	0.0	0.0	1

Table 3

Conversion Between Percent Correct and Scaled Scores for
Reading Skill Areas

Skill Area	Scaled Score																																								Percent Correct Score
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400										
Vocabulary	28	31	33	36	39	42	46	48	51	55	58	60	63	66	68	71	73	76	77	79	81	82	83	85	86	87	88	89	90	90	91										
Prefixes, suffixes, and roots	28	30	33	36	38	40	43	46	49	52	55	57	60	63	66	67	70	72	74	76	77	78	80	81	82	83	84	85	86	87	88	89	90	90	91						
Word meanings	26	28	31	34	36	39	42	46	49	52	55	58	61	63	66	68	71	73	76	77	79	80	82	83	85	86	87	88	89	90	90	91									
Using context	33	36	40	43	47	50	54	57	60	63	66	69	72	76	77	79	81	83	85	86	88	89	90	91	92	93	94	95	96	96	97	98	98	99	99	100	100				
Comprehension	30	32	36	38	41	44	47	50	53	56	59	62	64	67	70	72	74	76	78	80	82	83	85	86	87	88	89	90	91	92	92										
Literal	34	37	40	43	46	50	53	56	59	62	65	68	71	73	76	78	80	82	83	85	86	87	88	89	90	91	92	93	93	94	95	95	96	96	97	97	98	98			
Details	36	39	43	46	49	53	56	59	63	66	69	72	74	77	79	81	83	85	87	88	90	91	92	93	94	94	95	96	96	97	97	98	98	99	99	100	100				
From a single sentence	38	38	41	46	48	52	56	59	62	66	69	72	74	77	79	81	83	85	87	88	90	91	92	93	94	94	95	96	96	97	97	98	98	99	99	100	100				
From two or three sentences	38	41	44	47	50	53	56	60	63	66	69	72	74	77	79	81	83	85	87	88	89	91	92	93	94	95	95	96	96	97	97	98	98	99	99	100	100				
Pronoun references	34	37	39	42	46	48	51	54	57	60	63	66	68	71	73	76	77	79	81	83	84	85	86	87	88	89	90	91	91	92	93	93	94	94	95	95	96	96			
Sequence	31	34	36	39	42	46	48	51	54	57	60	63	66	68	71	73	76	77	79	81	83	84	85	86	87	88	90	91	91	92	93	93	94	94	95	95	96	96			
Inferential	28	31	33	36	38	41	44	46	49	52	55	58	60	63	66	68	70	72	74	76	78	80	81	83	84	85	86	87	88	89	90	90	91	91	92	92	93	93			
Main ideas	38	37	40	42	46	48	50	53	56	59	62	64	67	69	72	74	76	78	80	82	83	85	86	86	89	90	91	92	92	93	94	94	95	95	96	96	97	97			
Cause and effect	34	36	39	42	46	48	51	54	57	60	63	66	69	72	74	77	79	81	83	84	85	86	87	88	89	90	91	92	93	94	94	95	95	96	96	97	97	98			
Following organization	22	24	26	28	30	32	35	37	40	42	46	47	50	53	56	58	60	63	66	67	70	72	74	76	78	79	81	82	84	85	86	86	87	88	88	89	89	90			
Putting information together	24	26	28	30	33	36	38	41	44	46	49	52	55	58	60	63	66	70	72	74	76	78	80	81	83	84	85	86	87	88	89	90	91	91	92	92	93	93			
Predicting outcomes	30	33	36	38	40	43	46	49	51	54	57	60	62	66	67	70	72	74	76	78	80	81	83	84	85	86	87	88	89	90	91	91	92	92	93	93	94	94			
Comparisons and contrasts	26	28	30	33	36	37	39	42	44	47	49	51	54	56	58	61	63	66	67	69	70	72	74	76	78	80	81	82	83	84	85	85	86	86	87	87	88	88			
Conclusions from details	26	28	31	33	36	39	41	44	47	50	53	56	58	61	63	66	70	72	74	76	78	79	80	82	83	84	85	86	87	88	88	89	89	90	90	91	91	92			
Conclusions from overall meaning	31	33	36	39	42	46	49	52	56	59	62	66	68	71	74	76	79	81	83	85	86	88	89	90	91	92	93	94	94	95	95	96	96	97	97	98	98	99			
Interpretive	31	34	37	40	43	46	50	53	56	60	63	66	69	71	74	76	78	80	82	84	85	86	87	88	89	90	91	92	93	93	94	94	95	95	96	96	97	97			
Analyzing character	32	36	38	41	46	48	51	54	58	61	64	67	69	72	74	77	79	81	83	84	85	86	87	88	89	90	91	92	93	94	94	95	95	96	96	97	97	98			
Identifying setting	36	39	42	46	48	51	54	58	61	64	67	70	73	76	77	80	82	84	85	86	87	88	89	90	91	92	93	94	94	95	95	96	96	97	97	98	98	99			
Summarizing plot	30	33	36	38	41	46	48	51	54	58	61	64	67	70	72	74	77	79	81	82	84	85	86	87	88	89	90	91	91	92	93	93	94	94	95	95	96	96			
Understanding dialogue	30	33	36	40	43	47	50	54	58	61	64	68	71	74	76	79	81	83	85	86	87	88	89	90	91	92	93	94	94	95	95	96	96	97	97	98	98	99			
Sensing mood	26	28	31	33	36	39	42	46	48	51	54	57	59	62	64	68	70	73	76	77	79	81	82	84	85	86	87	88	89	90	91	91	92	92	93	93	94	94			
Figurative language	31	34	37	41	44	48	51	54	58	61	64	67	70	72	74	77	79	81	83	84	85	86	87	88	89	90	91	91	92	93	93	94	94	95	95	96	96	97			
Critical/applicative	26	28	31	34	37	40	43	46	49	52	55	58	61	64	67	70	72	74	76	78	80	82	84	85	86	87	88	89	90	91	91	92	92	93	93	94	94	95			
Author and author's attitude	28	27	30	32	36	38	40	43	47	50	53	56	59	62	64	67	69	72	74	76	78	80	82	83	85	86	87	88	89	90	91	91	92	92	93	93	94	94			
Author's purpose	28	31	34	37	40	43	47	50	53	56	60	63	66	69	71	74	76	78	80	82	84	85	86	87	88	89	90	91	92	92	93	93	94	94	95	95	96	96			
Separating fact from opinion	22	24	27	30	33	36	39	42	46	49	52	55	58	62	64	68	70	73	76	78	80	82	83	85	86	87	88	89	90	91	91	92	92	93	93	94	94	95			
Applications to a different context	28	31	33	36	38	41	44	47	50	53	56	59	61	63	66	68	71	73	76	77	78	80	82	83	84	85	86	87	88	89	89	90	90	91	91	92	92	93			
Study/Locational Skills	37	40	43	46	49	52	55	58	61	64	67	70	72	76	77	79	81	83	85	86	88	89	90	91	92	93	94	94	95	95	96	96	97	97	98	98	99	99			
Reference materials & parts of a book	37	40	44	47	51	54	58	61	64	68	71	74	76	79	81	83	85	87	88	89	91	92	93	94	95	96	96	97	97	98	98	99	99	100	100	100	100	100			
Maps, graphs & charts	37	39	42	44	47	50	53	56	59	62	65	68	70	73	76	77	79	81	83	84	85	86	87	88	89	90	91	92	93	93	94	94	95	95	96	96	97	97			
Reading in the Content Areas	31	33	36	39	41	44	47	50	53	56	59	62	64	67	69	72	74	76	79	81	82	84	85	86	87	88	89	90	91	91	92	92	93	93	94	94	95	95			
Word Meanings	26	28	31	34	36	39	42	46	49	52	55	58	61	63	66	68	71	73	76	77	79	80	82	83	85	86	87	88	89	90	91	91	92	92	93	93	94	94			
In reading and literature	29	31	34	37	40	43	46	50	53	56	59	62	66	67	70	72	74	76	78	80	81	83	84	85	86	87	88	89	90	91	91	92	92	93	93	94	94	95			
In science	27	30	32	36	38	41	44	48	51	54	58	61	64	67	70	72	76	77	79	81	83	84	85	86	87	88	90	91	91	92	92	93	93	94	94	95	95				
In social studies	22	24	27	29	31	34	37	39	42	46	48	51	54	57	59	62	64	68	69	71	73	76	78	79	81	82	83	84	85	85	86	86	87	87	88	88	89				
Comprehension of Literature Passages	33	36	39	42	46	48	51	54	57	60	63	66	68	71	73	76	77	79	81	83	84	85	86	87	88	89	90	91	92	92	93	93	94	94	95	95	96	96			
Literal	34	37	40	44	47	51	54	58	61	64	68	71	74	76	79	81	83	85	86	87	88	89	90	92	93	94	95	95	96	96	97	97	98	98	99	99	100	100			
Inferential	32	34	37	40	42	46	48	51	54	57	60	63	66	68	71	73	76	77	79	81	82	84	85	86	87	88	89														

Table 4

Conversion Between Percent Correct and Scaled Scores for
Written Language Skill Areas

Skill Area	Scaled Score																																							
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400									
Writing Process Skills	32	34	37	40	43	46	49	52	55	58	60	63	66	68	71	73	75	77	79	80	82	83	85	86	87	88	89	90	91	92	92									
Judging Student Writing	37	39	41	44	46	48	51	53	56	58	61	63	65	67	69	71	73	75	77	79	80	81	83	84	85	86	87	88	89	90	91									
Paragraphs	32	35	38	41	44	47	51	54	58	61	64	67	70	73	75	77	79	81	83	84	86	87	88	89	90	91	92	92	93	93	94									
Topic Sentences	32	34	37	40	43	46	49	53	56	59	62	65	68	71	73	75	77	79	81	82	84	85	86	87	88	89	90	90	91	92	92									
Details and sequence	33	35	38	42	45	48	52	55	59	62	65	68	71	74	76	78	80	82	84	85	86	88	89	90	91	91	92	93	94	94	95									
Outlines for organization	28	31	34	36	39	42	45	48	52	55	58	61	64	66	69	72	74	76	79	80	82	84	86	87	88	89	90	91	92	93	94									
Consistency of verbs & pronouns	37	40	43	46	50	53	57	61	64	68	71	74	77	79	81	83	85	87	88	89	90	91	92	92	93	93	94	94	95	95	96									
Sentence Combining	29	31	33	35	38	40	43	46	48	51	54	56	59	61	64	66	69	71	73	75	77	79	80	82	83	85	86	87	88	89	90									
Simple sentences with modification	22	24	25	26	28	30	32	33	35	37	39	41	44	46	48	50	53	55	57	60	62	64	66	68	70	72	73	75	77	78	79									
Compound sentences & sentence parts	27	29	31	34	36	39	41	44	46	49	52	55	57	60	63	65	68	70	73	75	77	79	81	82	84	86	87	88	89	90	91									
Complex sentences	27	29	32	34	37	40	43	45	48	52	55	58	60	63	66	69	71	74	76	78	80	82	84	85	87	88	89	90	91	92	93									
Conjunctions	41	44	48	51	54	57	61	64	67	70	73	76	78	81	83	85	87	89	90	91	93	94	94	95	96	96	97	97	97	98	98									
Sentence Recognition	32	35	39	42	45	49	52	55	58	61	64	67	69	72	74	76	77	79	80	82	83	84	86	87	88	88	89	90	91	91	92									
Supplying subjects	37	41	46	51	56	61	65	70	74	78	81	84	87	89	91	92	93	95	95	96	97	97	98	98	98	99	99	99	99	99	99									
Supplying verbs	38	42	45	49	53	56	60	64	67	70	73	76	79	81	84	86	87	89	91	92	93	94	95	95	96	97	97	97	98	98	98									
Forming complete sentences	23	24	26	27	29	31	32	34	36	38	40	42	44	46	48	51	53	55	57	59	61	64	66	68	69	71	73	75	76	78	79									
Language Choices	31	34	37	39	42	46	49	52	55	58	61	65	68	70	73	76	78	80	82	84	85	87	88	89	90	91	92	93	94	94	95									
Sensory words	37	40	42	45	47	50	53	56	58	61	64	67	69	72	74	77	79	80	82	84	85	86	87	88	89	90	91	92	92	93	93									
Specific words and sentences	24	26	28	31	34	36	39	42	45	48	52	55	58	61	64	67	70	72	75	77	79	81	83	85	87	88	89	90	91	92	93									
Achieving tone through word choices	33	36	39	43	46	50	54	58	62	65	69	72	75	78	81	83	85	87	89	90	92	93	94	95	95	96	97	97	97	98	98									
Supporting Skills	34	37	39	42	45	48	51	54	57	60	63	65	68	70	72	74	76	78	80	81	83	84	85	87	88	89	89	90	91	92	92									
Standard English Usage	34	37	40	43	47	50	54	57	60	64	67	70	72	75	77	79	81	82	84	85	87	88	89	90	91	91	92	93	93	94	94									
Irregular verbs	30	33	36	39	42	46	49	53	56	60	63	67	70	73	76	78	81	83	85	87	88	90	91	92	93	94	95	95	96	96	97									
Pronouns	45	46	48	49	50	51	53	54	56	57	59	60	62	63	64	65	67	68	70	71	73	74	75	77	78	79	81	82	83	84	85									
Subject-verb agreement	29	31	34	37	40	44	47	50	54	57	60	63	66	68	71	73	75	77	79	81	82	84	85	86	87	88	89	89	90	91	91									
Noun determiners	38	42	47	51	56	61	66	70	75	79	82	85	88	90	92	93	95	96	96	97	98	98	98	99	99	99	99	99	100	100	100									
Double negatives	29	33	36	40	44	49	53	57	62	66	70	73	76	79	82	85	87	89	90	92	93	94	95	96	96	97	97	98	98	98	99									
Word Forms	31	34	36	39	43	46	49	52	56	59	62	65	68	70	73	75	77	79	81	83	84	85	87	88	89	90	91	91	92	93	93									
Suffixes	33	36	39	43	47	51	55	58	62	66	69	72	75	77	79	81	83	84	85	86	87	88	89	90	90	91	91	92	92	92	92									
Irregular noun plurals	24	26	29	32	35	38	41	45	48	52	55	59	62	65	68	71	74	77	79	81	83	85	87	88	90	91	92	93	94	95	95									
Contractions	35	38	41	43	46	49	51	54	57	59	62	64	67	69	71	73	75	77	79	81	82	83	85	86	87	88	89	90	91	92	92									
Spelling	35	37	40	42	45	47	50	52	55	57	60	62	65	67	69	71	73	75	77	79	80	82	83	84	85	87	88	88	89	90	91									
Predictable words	35	40	43	45	47	50	52	55	57	59	62	64	66	69	71	73	75	77	79	81	82	84	85	86	88	89	90	91	92	92	93									
Words with suffixes	30	32	34	36	38	41	43	45	48	50	53	55	57	60	62	64	66	68	70	72	73	75	76	78	79	80	81	82	83	84	85									
Demos	36	39	42	45	48	51	54	57	60	63	65	68	70	73	75	77	79	81	83	84	86	87	88	89	90	91	92	93	94	94	95									
Homophones	39	41	43	45	48	50	52	55	57	60	62	64	67	69	71	73	75	77	79	80	82	83	85	86	87	88	89	90	90	91	92									
Capitalization and Punctuation	37	39	41	43	46	48	51	53	56	58	60	63	65	67	69	71	73	75	77	78	80	81	82	84	85	86	87	88	89	89	90									
Capitalization	43	44	46	48	49	51	53	55	57	59	61	63	65	67	69	70	72	74	75	77	78	79	81	82	83	84	85	86	87	88	89									
Punctuation	31	33	36	39	42	45	48	51	54	57	60	63	65	68	70	73	75	77	79	80	82	83	84	86	87	88	89	89	90	91	92									
TOTAL WRITTEN LANGUAGE	33	35	38	41	44	47	50	53	56	59	61	64	67	69	71	74	76	78	79	81	82	84	85	86	87	88	89	90	91	92	92									

Percent Correct Score

NOTE: Scaled scores are shown at ten-point intervals. It may be necessary to interpolate to arrive at an accurate percent correct figure.

Table 5
Conversion Between Percent Correct and Scaled Scores for
Mathematics Skill Areas

Skill Area	Scaled Score																																							
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350	360	370	380	390	400									
Counting, Numeration, and Place Value	28	27	29	31	33	36	38	41	44	47	49	52	55	58	61	64	66	69	72	74	76	78	80	82	84	86	88	87	88	89	91	92								
Skills	28	30	32	34	36	38	41	43	46	49	51	54	57	60	63	66	68	71	73	76	78	80	82	83	86	87	88	89	91	92	93									
Counting and numeration	31	33	36	37	39	41	43	46	48	51	53	56	59	61	64	67	69	72	74	76	78	80	82	84	86	87	88	89	91	92	93									
Place value	22	24	27	29	31	34	37	40	42	45	48	51	54	57	60	63	66	69	72	74	77	79	81	83	86	88	89	90	91	92										
Applications	21	23	26	27	29	32	34	37	40	43	46	49	52	55	58	61	64	67	69	72	74	76	78	80	82	84	86	88	89	90										
Nature of Numbers and Properties	28	30	31	33	35	38	40	42	44	47	49	51	54	56	58	61	63	66	67	69	71	73	76	78	79	81	82	83	86	88										
Skills	28	30	32	34	36	38	40	42	44	47	49	51	54	56	58	60	63	66	67	69	71	72	74	76	77	79	80	82	83	84	88									
Ordering and properties	32	34	36	38	41	43	46	48	51	53	56	59	62	64	66	68	71	73	76	78	80	81	83	84	86	87	88	89	91	92	90									
Classification of numbers	25	26	28	30	32	34	36	38	40	43	46	47	49	52	54	56	58	60	62	64	66	68	70	72	75	78	76	78	79	80	81									
Applications	28	29	31	33	35	37	39	42	44	46	49	51	54	56	59	61	63	66	68	70	72	74	76	78	79	81	82	84	86	87	87									
Operations	26	28	30	32	34	36	39	41	44	46	49	51	54	56	59	61	64	66	68	71	73	76	77	78	80	82	83	84	86	87	88									
Skills	28	30	32	35	37	39	42	44	47	50	52	55	57	60	62	65	67	70	72	74	76	78	80	82	83	85	86	87	88	89	90									
Addition/Subtraction, whole numbers	43	45	48	51	53	56	59	61	64	66	69	71	73	75	77	79	81	83	84	85	87	88	89	90	91	92	92	93	94	94	95									
Multiplication of whole numbers	39	42	46	48	51	54	57	60	63	65	68	71	73	76	77	79	81	83	84	88	87	88	89	90	91	92	92	93	94	94	96									
Division of whole numbers	31	34	36	39	42	44	47	50	53	56	59	62	65	68	70	72	74	76	78	80	82	83	86	86	87	88	89	90	91	92	92									
Addition/Subtraction of decimals	23	26	27	28	30	32	34	37	39	41	44	46	49	51	54	57	60	62	66	67	70	72	74	77	78	80	82	84	86	86	88									
Multiplication/Division of decimals	20	21	23	25	26	28	30	32	34	36	39	41	44	46	49	52	54	57	60	62	65	68	70	73	76	77	79	81	83	84	86									
Operations (+, -, x, ÷) on fractions	16	18	19	21	23	25	27	29	31	34	37	39	42	45	48	51	54	58	61	64	66	69	72	74	77	79	81	83	84	86	87									
Percent, equivalent fractions/decimals	24	26	28	30	33	36	38	41	43	46	49	52	54	57	60	63	66	68	70	72	76	77	79	80	82	84	86	87	88	89	90									
Applications	21	23	25	26	28	30	33	36	37	39	42	44	47	49	52	54	56	59	61	63	66	68	70	72	75	78	77	78	80	81	83									
One step, whole numbers	28	31	33	35	38	41	43	46	49	52	55	58	60	63	66	68	70	73	75	77	78	80	82	83	84	86	86	87	88	89	90									
One step, rational numbers	20	22	23	25	27	29	31	33	35	37	39	42	44	46	49	51	54	58	61	63	65	67	70	71	73	76	77	78	80	81										
Two or more steps	17	18	20	21	23	25	26	28	30	32	35	37	39	42	44	46	49	51	54	56	59	61	63	66	68	70	71	73	76	77	78									
Expressions and Coordinate Graphs	26	28	30	32	34	37	39	41	44	47	49	52	54	57	59	62	64	67	69	71	73	75	77	79	80	82	83	84	86	87	88									
Skills	24	26	28	30	32	35	37	40	42	45	47	50	52	55	58	60	63	66	68	70	72	74	76	78	80	81	83	84	86	87	88									
Expressions and equations	26	28	30	33	35	37	40	43	46	48	51	53	56	59	61	64	66	68	70	73	76	77	78	80	82	83	84	86	87	88	89									
Graphs and function tables	22	24	25	27	29	31	34	36	38	41	43	46	49	51	54	56	59	62	64	67	69	71	74	76	78	79	81	83	84	86	87									
Applications	29	31	33	35	37	40	42	46	47	50	52	55	57	60	62	65	67	69	71	73	76	78	79	81	82	83	86	86	87	88	88									
Geometry	28	30	32	34	37	39	41	43	46	48	51	53	56	58	60	63	65	67	70	72	74	76	77	79	81	82	84	86	87	88										
Skills	27	29	31	33	35	38	40	42	45	47	50	52	55	57	60	62	65	67	70	72	74	76	78	80	81	83	84	86	87	88	89									
Shapes and terminology	26	28	30	33	36	38	40	43	46	49	51	54	57	60	62	65	68	70	72	76	77	78	80	82	84	85	86	88	89	90	91									
Relationships	28	30	32	33	35	37	39	42	44	46	48	50	53	55	57	60	62	64	67	69	71	73	76	77	79	81	82	84	86	87	88									
Applications	31	32	34	36	38	41	43	46	47	50	52	54	57	59	61	63	66	68	70	72	75	76	78	80	81	83	84	86	87	88	87									
Measurement	28	26	28	30	32	35	37	39	42	44	47	49	52	54	57	59	62	64	66	68	71	73	76	78	80	81	83	84	86	87	88									
Skills	26	28	30	32	34	36	38	41	43	46	48	51	53	56	58	60	63	66	67	69	71	73	76	77	78	80	81	83	84	86	86									
Metric units	24	26	27	29	32	34	36	38	41	43	46	48	50	53	55	58	60	62	66	67	69	71	73	74	76	77	79	80	81	83	84									
U.S. Customary units	30	33	36	39	42	45	48	51	54	57	60	62	65	68	70	73	76	77	79	81	83	84	86	87	88	89	90	91	92	93	94	94								
Perimeter, area, and volume	26	27	28	30	31	32	34	36	37	39	41	43	46	48	50	52	55	57	60	62	66	67	69	72	74	76	78	79	81	82	84									
Applications	21	23	25	26	28	31	33	35	37	40	42	46	48	50	53	56	58	61	64	66	69	71	73	76	77	79	81	83	84	86	87									
Probability and Statistics	23	24	26	28	30	32	34	36	39	41	44	47	49	52	55	58	60	63	66	68	70	72	74	76	78	80	81	83	84	86	87									
Probability	17	19	20	22	24	26	28	30	33	36	38	40	43	46	49	52	54	57	60	63	66	68	70	72	74	76	78	80	81	83	84									
Statistics	28	30	32	34	36	38	41	43	46	48	51	53	56	59	61	64	66	69	71	73	76	78	79	81	83	84	86	86	87	88	89									
Tables, Graphs, and Integrated Applications	29	31	33	36	38	40	43	45	48	51	53	56	59	61	64	66	69	71	73	76	78	79	81	83	84	86	87	88	89	90	91									
Tables and graphs	31	33	35	37	40	42	46	47	50	53	55	58	61	63	66	68	71	73	76	77	79	81	82	84	85	87	88	89	90	91	92									
Integrated applications	28	30	32	34	36	38	41	43	46	49	51	54	57	59	62	65	67	69	72	74	76	78	80	81	83	84	86	87	88	89	90									
Problem Solving	25	27	29	31	33	36	37	40	42	46	47	50	52	55	58	60	62	66	67	69	71	73	75	77	78	80	81	83	84	85	86									
Formulation	27	30	32	35	38	40	43	46	49	52	55	58	61	64	66	69	71	74	76	78	80	82	83	86	87	88	89	90	91	92										
Analysis and strategy	29	31	33	36	38	40	43	46	48	51	53	56	59	62	64	66	68	70	72	74	76	77	78	79	81	82	83	84	86	86										
Interpretation	19	20	22	23	25	27	28	30	32	34	37	39	41	43	46	48	50	52	55	57	59	61	63	65	67	69	71	73	74	76	77									
Solution of problems	24	26	28	30	32	34	37	39	41	44	46	49	51	54	57	59	61	64	66	68	71	73	76	78	80	81	83	84	85	86	86									
TOTAL MATHEMATICS	26	28	30	32	34	37	39	41	44	46	49	52	54	57	59	62	64	66	69	71	73	75	77	78	80	82	83	84	86											