

## **Appendix A: STAR CST Reporting Clusters**

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The tables in this appendix present the reporting clusters, the number of items in each reporting cluster, and the average percent correct for a sample of students statewide for the 2006 CSTs.

The last three columns of each table, labeled “All,” “Minimally Proficient,” and “Minimally Advanced,” provide the expected average percent correct scores on each cluster for a representative sample of the state’s students, as well as the average percent correct for a representative sample of the state’s students who scored at the lowest score for proficient and at the lowest score for advanced on the CSTs (that is, for proficient, a sample of students statewide who obtained a scale score of exactly 350 or the lowest reported scale score above 350; and for advanced, a sample of students statewide who scored at the lowest score for advanced).

Because the goal for the state is for all students to score at the proficient level or above, a useful benchmark for interpreting cluster scores is the performance on the cluster for students who scored between minimally proficient and minimally advanced on the total test. These average percent correct values provide information about the relative difficulty of different clusters, which is important to take into account when considering the performance of students in the school or district.

## English-Language Arts CSTs Reporting Clusters

CALIFORNIA ENGLISH-LANGUAGE ARTS STANDARDS TESTS					
Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster					
Grade	Reporting Cluster	No. of Questions	Avg % Correct Statewide		
			All	Minimally Proficient	Minimally Advanced
<b>Grade 2</b>					
	Word Analysis and Vocabulary Development	22	64	68	85
	Reading Comprehension	15	66	74	89
	Literary Response and Analysis	6	67	73	89
	Written Conventions	14	63	70	89
	Writing Strategies	8	55	59	76
<b>Grade 3</b>					
	Word Analysis and Vocabulary Development	20	68	79	89
	Reading Comprehension	15	58	69	88
	Literary Response and Analysis	8	63	73	87
	Written Conventions	13	67	76	87
	Writing Strategies	9	57	69	85
<b>Grade 4</b>					
	Word Analysis and Vocabulary Development	18	66	69	83
	Reading Comprehension	15	60	62	80
	Literary Response and Analysis	9	67	72	84
	Written Conventions	18	65	68	82
	Writing Strategies	15	57	57	75
	Writing Applications	1 (8 points)	51	51	57
<b>Grade 5</b>					
	Word Analysis and Vocabulary Development	14	65	72	87
	Reading Comprehension	16	53	56	74
	Literary Response and Analysis	12	70	79	89
	Written Conventions	17	69	76	86
	Writing Strategies	16	56	60	78
<b>Grade 6</b>					
	Word Analysis and Vocabulary Development	13	69	78	90
	Reading Comprehension	17	61	68	82
	Literary Response and Analysis	12	57	62	77
	Written Conventions	16	66	73	85
	Writing Strategies	17	54	59	79

<b>CALIFORNIA ENGLISH-LANGUAGE ARTS STANDARDS TESTS</b>					
<b>Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster</b>					
<b>Grade</b>	<b>Reporting Cluster</b>	<b>No. of Questions</b>	<b>Avg % Correct Statewide</b>		
			<b>All</b>	<b>Minimally Proficient</b>	<b>Minimally Advanced</b>
<b>Grade 7</b>					
	Word Analysis and Vocabulary Development	11	61	64	81
	Reading Comprehension	18	61	66	82
	Literary Response and Analysis	13	51	53	76
	Written Conventions	16	64	71	83
	Writing Strategies	17	63	70	87
	Writing Applications	1 (8 points)	48	49	57
<b>Grade 8</b>					
	Word Analysis and Vocabulary Development	9	67	72	83
	Reading Comprehension	18	60	65	79
	Literary Response and Analysis	15	55	59	75
	Written Conventions	16	68	77	87
	Writing Strategies	17	56	62	77
<b>Grade 9</b>					
	Word Analysis and Vocabulary Development	8	69	79	89
	Reading Comprehension	18	57	62	78
	Literary Response and Analysis	16	59	62	79
	Written Conventions	13	68	77	88
	Writing Strategies	20	54	58	74
<b>Grade 10</b>					
	Word Analysis and Vocabulary Development	8	69	80	89
	Reading Comprehension	18	59	71	87
	Literary Response and Analysis	16	54	62	79
	Written Conventions	13	62	71	81
	Writing Strategies	20	60	73	85
<b>Grade 11</b>					
	Word Analysis and Vocabulary Development	8	56	67	82
	Reading Comprehension	19	57	68	82
	Literary Response and Analysis	17	54	62	77
	Written Conventions	9	62	76	87
	Writing Strategies	22	59	74	86

# Mathematics CSTs Reporting Clusters

CALIFORNIA MATHEMATICS STANDARDS TESTS					
Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster					
Grade/ Test	Reporting Cluster	No. of Questions	Avg % Correct Statewide		
			All	Minimally Proficient	Minimally Advanced
<b>GRADE-LEVEL MATHEMATICS</b>					
<b>Grade 2</b>					
	Place Value, Addition, and Subtraction	15	71	72	88
	Multiplication, Division, and Fractions	23	76	78	90
	Algebra and Functions	6	64	58	81
	Measurement and Geometry	14	79	80	91
	Statistics, Data Analysis, and Probability	7	69	66	79
<b>Grade 3</b>					
	Place Value, Fractions, and Decimals	16	72	73	87
	Addition, Subtraction, Multiplication, and Division	16	62	58	81
	Algebra and Functions	12	69	68	86
	Measurement and Geometry	16	77	78	87
	Statistics, Data Analysis, and Probability	5	84	89	95
<b>Grade 4</b>					
	Decimals, Fractions, and Negative Numbers	17	74	76	86
	Operations and Factoring	14	67	67	89
	Algebra and Functions	18	74	79	90
	Measurement and Geometry	12	66	66	82
	Statistics, Data Analysis, and Probability	4	82	89	95
<b>Grade 5</b>					
	Estimation, Percents, and Factoring	12	55	57	79
	Operations with Fractions and Decimals	17	62	64	83
	Algebra and Functions	17	69	74	89
	Measurement and Geometry	15	56	55	76
	Statistics, Data Analysis, and Probability	4	80	88	97
<b>Grade 6</b>					
	Ratios, Proportions, Percentages, Negative Fractions	15	61	68	88
	Operations and Problem Solving with Fractions	10	66	73	90
	Algebra and Functions	19	67	75	91
	Measurement and Geometry	10	50	52	74
	Statistics, Data Analysis, and Probability	11	52	55	82

<b>CALIFORNIA MATHEMATICS STANDARDS TESTS</b>					
<b>Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster</b>					
<b>Grade/ Test</b>	<b>Reporting Cluster</b>	<b>No. of Questions</b>	<b>Avg % Correct Statewide</b>		
			<b>All</b>	<b>Minimally Proficient</b>	<b>Minimally Advanced</b>
<b>Grade 7</b>					
	Rational Numbers	14	56	59	83
	Exponents, Powers, and Roots	8	56	62	84
	Quantitative Relationships and Evaluating Expressions	10	56	61	81
	Multistep Problems, Graphing, and Functions	15	62	70	86
	Measurement and Geometry	13	53	58	80
	Statistics, Data Analysis, and Probability	5	60	69	86
<b>END-OF-COURSE MATHEMATICS</b>					
<b>General Math</b>					
	Rational Numbers	14	46	60	82
	Exponents, Powers, and Roots	10	47	65	87
	Quantitative Relationships and Evaluating Expressions	11	54	71	85
	Multistep Problems, Graphing, and Functions	10	47	59	78
	Measurement and Geometry	11	43	56	75
	Statistics, Data Analysis, and Probability	9	53	68	84
<b>Algebra I</b>					
	Number Properties, Operations, and Linear Equations	17	55	72	88
	Graphing and Systems of Linear Equations	14	45	59	83
	Quadratics and Polynomials	21	43	55	78
	Functions and Rational Expressions	13	37	45	71
<b>Geometry</b>					
	Logic and Geometric Proofs	23	56	68	85
	Volume and Area Formulas	11	57	73	91
	Angle Relationships, Constructions, and Lines	16	47	61	82
	Trigonometry	15	55	70	88
<b>Algebra II</b>					
	Polynomials and Rational Expressions	19	60	74	89
	Quadratics, Conics, and Complex Numbers	17	47	58	77
	Exponents and Logarithms	15	51	66	84
	Series, Combinatorics, Probability and Statistics	14	49	58	74
<b>Summative High School Math</b>					
	Algebra I	18	72	77	91
	Geometry	19	69	74	88
	Algebra II	23	70	74	91
	Probability and Statistics	5	58	61	79

<b>CALIFORNIA MATHEMATICS STANDARDS TESTS</b>					
<b>Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster</b>					
<b>Grade/ Test</b>	<b>Reporting Cluster</b>	<b>No. of Questions</b>	<b>Avg % Correct Statewide</b>		
			<b>All</b>	<b>Minimally Proficient</b>	<b>Minimally Advanced</b>
<b>Integrated Math 1</b>					
	Number Properties, Operations, and Linear Equations	15	50	80	90
	Graphing	9	42	65	89
	Quadratics and Polynomials	14	38	60	82
	Functions and Rational Expressions	7	34	45	83
	Geometry	20	35	53	72
<b>Integrated Math 2</b>					
	Algebra I	20	55	61	80
	Logic and Geometric Proofs	22	51	55	77
	Angle Relationships, Constructions, and Lines	8	42	42	63
	Trigonometry	10	54	58	85
	Algebra II/Probability and Statistics	5	51	52	70
<b>Integrated Math 3</b>					
	Geometry	5	62	70	78
	Polynomials and Rational Expressions	19	53	60	85
	Quadratics, Conics, and Complex Numbers	17	46	51	68
	Exponents and Logarithms	15	49	62	86
	Series, Combinatorics, Probability and Statistics	9	44	56	74

## Science CSTs Reporting Clusters

CALIFORNIA SCIENCE STANDARDS TESTS					
Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster					
Grade/ Test	Reporting Cluster	No. of Questions	Avg % Correct Statewide		
			All	Minimally Proficient	Minimally Advanced
<b>GRADE-LEVEL SCIENCE</b>					
<b>Grade 5 Science</b>					
	Physical Science, Grade 5	12	52	62	79
	Physical Science, Grade 4	8	53	61	83
	Life Science, Grade 5	11	56	67	84
	Life Science, Grade 4	10	55	66	86
	Earth Science, Grade 5	12	56	67	83
	Earth Science, Grade 4	7	36	40	72
<b>Grade 8 Science</b>					
	Motion	8	44	44	58
	Forces, Density, and Buoyancy	13	53	59	70
	Structure of Matter and Periodic Table	16	51	57	71
	Earth in the Solar System	7	55	60	72
	Reactions and the Chemistry of Living Systems	10	44	48	62
	Investigation and Experimentation	6	54	63	78
<b>Grade 10 Life Science</b>					
	Cell Biology	10	45	50	64
	Genetics	12	48	55	73
	Physiology	10	56	67	84
	Ecology	11	54	64	81
	Evolution	11	52	62	82
	Investigation and Experimentation	6	64	81	93
<b>END-OF-COURSE SCIENCE</b>					
<b>Biology</b>					
	Cell Biology	9	53	60	77
	Genetics	18	53	59	77
	Ecology and Evolution	16	56	69	85
	Physiology	11	57	68	81
	Investigation and Experimentation	6	49	59	77
<b>Chemistry</b>					
	Atomic and Molecular Structure	8	51	60	79
	Chemical Bonds, Biochemistry	9	60	71	84
	Kinetics, Thermodynamics	14	52	61	78
	Chemical Reactions	13	52	64	81

<b>CALIFORNIA SCIENCE STANDARDS TESTS</b>					
<b>Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster</b>					
<b>Grade/ Test</b>	<b>Reporting Cluster</b>	<b>No. of Questions</b>	<b>Avg % Correct Statewide</b>		
			<b>All</b>	<b>Minimally Proficient</b>	<b>Minimally Advanced</b>
	Conservation of Matter and Stoichiometry	10	52	63	85
	Investigation and Experimentation	6	63	78	88
<b>Earth Science</b>					
	Astronomy and Cosmology	12	51	67	82
	Solid Earth	14	49	62	77
	The Earth's Energy	28	46	61	80
	Investigation and Experimentation	6	56	71	86
<b>Physics</b>					
	Motion and Forces	12	61	69	83
	Conservation of Energy and Momentum	12	55	64	81
	Heat and Thermodynamics	9	52	60	77
	Waves	10	54	60	80
	Electric and Magnetic Phenomena	11	54	60	77
	Investigation and Experimentation	6	57	67	83
<b>Integrated/Coordinated 1</b>					
	Biology/Life Sciences	10	50	80	91
	Chemistry	15	36	50	71
	Earth Sciences	17	44	71	87
	Physics	12	31	46	69
	Investigation and Experimentation	6	43	65	83
<b>Integrated/Coordinated 2</b>					
	Biology/Life Sciences	15	44	67	86
	Chemistry	6	39	59	75
	Earth Sciences	15	46	75	86
	Physics	18	37	56	74
	Investigation and Experimentation	6	41	69	87
<b>Integrated/Coordinated 3</b>					
	Biology/Life Sciences	16	46	68	85
	Chemistry	23	39	58	75
	Earth Sciences	7	47	70	82
	Physics	8	33	46	62
	Investigation and Experimentation	6	46	69	81

<b>CALIFORNIA SCIENCE STANDARDS TESTS</b>					
<b>Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster</b>					
<b>Grade/ Test</b>	<b>Reporting Cluster</b>	<b>No. of Questions</b>	<b>Avg % Correct Statewide</b>		
			<b>All</b>	<b>Minimally Proficient</b>	<b>Minimally Advanced</b>
<b>Integrated/Coordinated 4</b>					
	Biology/Life Sciences	13	49	77	86
	Chemistry	10	34	51	69
	Earth Sciences	15	44	72	82
	Physics	16	36	51	72
	Investigation and Experimentation	6	41	70	80

## History-Social Science CSTs Reporting Clusters

CALIFORNIA HISTORY-SOCIAL SCIENCE STANDARDS TESTS					
Number of Questions for 2006 Reporting Clusters and the Average Percent Correct on Each Reporting Cluster					
Grade/ Test	Reporting Cluster	No. of Questions	Avg % Correct Statewide		
			All	Minimally Proficient	Minimally Advanced
<b>Grade 8 (Grades 6, 7, 8 Standards)</b>					
	World History and Geography: Ancient Civilizations	16	50	58	70
	Late Antiquity and the Middle Ages	14	53	63	76
	Renaissance/Reformation	10	48	56	73
	U.S. Constitution and the Early Republic	22	53	63	79
	Civil War and Its Aftermath	13	49	58	73
<b>Grade 10 (World History)</b>					
	Development of Modern Political Thought	13	55	68	80
	Industrial Expansion and Imperialism	10	56	68	81
	Causes and Effects of the First World War	14	49	61	77
	Causes and Effects of the Second World War	13	46	55	74
	International Developments in the Post-World War II Era	10	47	58	72
<b>Grade 11 (U.S. History)</b>					
	Foundations of American Political and Social Thought	10	52	59	77
	Industrialization and the U.S. Role as a World Power	13	50	58	75
	United States between the World Wars	12	54	67	81
	World War II and Foreign Affairs	12	50	60	77
	Post-World War II Domestic Issues	13	49	56	73