Standardized Testing and Reporting (STAR) Program

Information for Parents

Background and Sample Test Questions for the California Standards Tests (CSTs)

SCIENCE:
Biology, Chemistry,
Earth Science, and
Physics
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Purpose of this Parent Guide
This guide has sample (released) STAR questions shown in a way to help you better understand your child’s STAR results. STAR test results are only one way of showing what your child has learned. Talk with your child’s teacher to discuss specific STAR test results and any questions you may have about this guide. A sample STAR report and Guide to Your STAR Student Report can be found at the end of this guide.

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Introduction

Every spring, California students take tests that are a part of the Standardized Testing and Reporting (STAR) Program.

Most students take the California Standards Tests (CSTs), which were developed for California public schools and are aligned to the California content standards. California standards are statements of what students are expected to know and do and what schools are expected to teach.

Students and their parents receive individual test results showing how the student is meeting the state’s academic standards. STAR test results are one way of showing what your child has learned. Teachers and communities learn how schools are doing in getting groups of students to reach these standards. The purpose of this guide is to give parents sample test questions to help you better understand STAR results.

A sample student report and Guide to Your STAR Student Report can be found on pages 19 through 22 of this guide. This report shows which performance level a student achieved in each subject tested. In California, the performance levels are advanced, proficient, basic, below basic, and far below basic, and are shown by the dark green, light green, yellow, orange, and red bars on the student report. The goal in California is to have all students perform at the proficient or advanced level.

After you receive your child’s report and discuss these test results with your child’s teacher, this guide may be used to see the types of questions your child might answer correctly based on his or her performance level. If your child is not performing at the advanced or proficient level, you can then look at the types of questions your child needs to answer correctly to reach the state target of proficient.

Students who take the CSTs are tested in mathematics and English–language arts (grades two through eleven), science (grades five, eight, and nine through eleven), and history–social science (grades eight through eleven). The English–language arts test also includes a writing test for students in grades four and seven. See http://www.cde.ca.gov/ta/tg/sr/guidecstwrit08.asp.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Math</th>
<th>English–Language Arts</th>
<th>Science</th>
<th>History–Social Science</th>
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<tr>
<td>11</td>
<td>•</td>
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<td>•</td>
</tr>
</tbody>
</table>
The tests are kept confidential, but each year the state releases many questions to the public, and these released questions can help take much of the mystery out of the state tests. Students, parents, teachers, school officials, and other interested parties can look through dozens of questions at every grade to understand what students are expected to learn and how they are asked to demonstrate what they know and are able to do.

This parent guide includes a sample of Biology, Chemistry, Earth Science, and Physics questions for the CSTs. Each question provides two important pieces of information:

- The correct answer
- The state content standard the question is measuring

To view more test questions, visit www.cde.ca.gov/ta/tg/sr/css05rtq.asp. This Web page offers more information about each question and about students’ answers.

To see what California students are expected to know at each grade level—the content standards—visit www.cde.ca.gov/be/st/ss/.

**Purposes for Testing**

The results of the STAR Program tests can:

- Provide parents/guardians with one piece of information about the student’s performance. Test results should be considered with all other information on the student’s progress, such as report cards and parent-teacher conferences, to help parents/guardians understand how well the student knows the subject matter.

- Serve as a tool that helps parents/guardians and teachers work together to improve student learning.

- Help school districts and schools identify strengths and areas that need improvement in their educational programs.

- Allow the public and policymakers to hold public schools accountable for student achievement.

- Provide state and federal policymakers with information to help make program decisions and allocate resources.
STAR Program Tests

The STAR Program includes four types of tests. Each student is required to take the test that is right for his or her age and individual needs.

- The **California Standards Tests (CSTs)** are for California public schools and are aligned to the state content standards. Students in grades two through eleven take the CSTs for the subjects listed for their grade on page 1. The questions in this guide are CST questions previously used on actual tests.

- The **California Modified Assessment (CMA)** is a grade-level assessment for students with disabilities in California public schools who meet the state criteria.

- The **California Alternate Performance Assessment (CAPA)** is for California public school students who have significant cognitive disabilities and cannot take the CSTs even with accommodations or modifications.

- The **Standards-based Tests in Spanish (STS)** have been developed for Spanish-speaking English learners in California public schools. These tests measure the achievement of state content standards in reading/language arts and mathematics in Spanish.

Who Takes the STAR Program Tests?

All California public school students in grades two through eleven participate in the STAR Program.

How Do English Learners Participate in STAR Program Tests?

All English learners, regardless of their primary language, are required to take the STAR Program tests administered in English. California state law requires that all Spanish-speaking English learners take the STS *in addition to the English STAR Program tests* if:

- They have been enrolled in a school in the United States for less than a total of 12 months, *or*

- They receive instruction in Spanish, regardless of how long they have been in school in the United States.

How Do Students with Disabilities Participate in STAR Program Tests?

Most students with disabilities take the CSTs with all other students under standard conditions. Testing students with disabilities helps ensure that these students are getting the educational services they need to succeed. Some students with disabilities may require testing variations, accommodations, and/or modifications to be able to take tests. These are listed in the Matrix of Test Variations, Accommodations, and Modifications for Administration of California Statewide Assessments, which is available on the California Department of Education (CDE) Web page at [www.cde.ca.gov/ta/tg/sr/](http://www.cde.ca.gov/ta/tg/sr/).
Science: Biology, Chemistry, Earth Science, and Physics
Policy Definitions

In California, the performance levels used are:

- **Advanced.** This category represents a superior performance. Students demonstrate a comprehensive and complex understanding of the knowledge and skills measured by this assessment, at this grade, in this content area.

- **Proficient.** This category represents a solid performance. Students demonstrate a competent and adequate understanding of the knowledge and skills measured by this assessment, at this grade, in this content area.

- **Basic.** This category represents a limited performance. Students demonstrate a partial and rudimentary understanding of the knowledge and skills measured by this assessment, at this grade, in this content area.

- **Far Below/Below Basic.** This category represents a serious lack of performance. Students demonstrate little or a flawed understanding of the knowledge and skills measured by this assessment, at this grade, in this content area.

The goal in California is to have all students perform at the proficient or advanced level.

The policy definitions explain how well students understand the material being taught, including their academic strengths and weaknesses.

Included in this brochure are sample questions for biology, chemistry, earth science, and physics. The majority of students at the given policy definition level answered the question correctly. For example, “Question 4 (Basic Sample)” indicates that most of the students who achieved an overall “basic” score were able to answer Question 4 correctly. In other words, Question 4 typifies what a student scoring at the Basic level knows and can do.
Standards on Which Biology Questions Are Based

**Question 1 measures Genetics:** The genetic composition of cells can be altered by incorporation of exogenous DNA into the cells.

**Questions 2 and 5 measure Physiology:** As a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable (homeostatic) despite changes in the outside environment.

**Questions 3 and 4 measure Physiology:** Organisms have a variety of mechanisms to combat disease.

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**Question 1 (Proficient Sample)**

A base sequence is shown below.

ACAGTGC

How would the base sequence be coded on mRNA?

A. TGTCACG  
B. GUGACAU  
C. UGUCACG  
D. CACUGUA

**Correct answer:** C

*This question assesses knowledge of the transcription of information from DNA to mRNA and the rules of base-pairing.*

**Standard:** The genetic composition of cells can be altered by incorporation of exogenous DNA into the cells. As a basis for understanding this concept:

Students know how to apply base-pairing rules to explain precise copying of DNA during semiconservative replication and transcription of information from DNA into mRNA.
Biology

Question 2 (Proficient Sample)

The fight-or-flight response includes greater heart output and a rise in blood pressure. This response is due to

A  insulin secreted by the pancreas.
B  thyroxine secreted by the thyroid gland.
C  oxytocin secreted by the pituitary gland.
D  adrenaline secreted by the adrenal glands.

Correct answer: D

This question assesses understanding of how the body responds to external stimuli.

Standard: As a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable (homeostatic) despite changes in the outside environment. As a basis for understanding this concept:
Students know how the nervous system mediates communication between different parts of the body and the body’s interactions with the environment.

Question 3 (Proficient Sample)

What is the greatest danger to a patient who has had damage to the skin?

A  loss of oils produced by the skin
B  excessive muscle contractions in the damaged area
C  infections in uncovered tissues
D  damaged tissue entering the blood stream

Correct answer: C

This question assesses knowledge that skin is the first layer of defense against infection.

Standard: Organisms have a variety of mechanisms to combat disease. As a basis for understanding the human immune response:
Students know the role of the skin in providing nonspecific defenses against infection.
Biology

Question 4 (Basic Sample)

Individuals with HIV sometimes contract a pneumonia infection that is rare in the rest of the population because people with HIV

A are unable to fight off these pneumonia-causing organisms.
B are more often exposed to these pneumonia-causing organisms.
C release pheromones that attract the pneumonia-causing organisms.
D release substances that increase the strength of the pneumonia-causing organisms.

Correct answer: A

This question assesses knowledge that individuals with compromised immune systems may have a difficult time fighting infection.

Standard: Organisms have a variety of mechanisms to combat disease. As a basis for understanding the human immune response:

Students know why an individual with a compromised immune system (for example, a person with AIDS) may be unable to fight off and survive infections by microorganisms that are usually benign.

Question 5 (Below Basic Sample)

Striking the tendon just below the kneecap causes the lower leg to jerk. Moving an object quickly toward the face can cause the eyes to blink shut. These are examples of

A learned responses.
B short-term memory.
C reflex reactions.
D sensory overload.

Correct answer: C

This question assesses knowledge of the body’s reflex reactions.

Standard: As a result of the coordinated structures and functions of organ systems, the internal environment of the human body remains relatively stable (homeostatic) despite changes in the outside environment. As a basis for understanding this concept:

Students know how the nervous system mediates communication between different parts of the body and the body’s interactions with the environment.
Chemistry

Standards on Which Chemistry Questions Are Based

Questions 1, 2, 3, and 5 measure Atomic and Molecular Structure: The periodic table displays the elements in increasing atomic number and shows how periodicity of the physical and chemical properties of the elements relates to atomic structure.

Question 4 measures Chemical Bonds: Biological, chemical, and physical properties of matter result from the ability of atoms to form bonds from electrostatic forces between electrons and protons and between atoms and molecules.

Question 1 (Advanced Sample)

The chart above shows the relationship between the first ionization energy and the increase in atomic number. The letter on the chart for the alkali family of elements is

A. W.
B. X.
C. Y.
D. Z.

Correct answer: A

This question assesses application of knowledge of the periodic table to identify ionization energy in elements.

Standard: The periodic table displays the elements in increasing atomic number and shows how periodicity of the physical and chemical properties of the elements relates to atomic structure. As a basis for understanding this concept:

Students know how to use the periodic table to identify alkali metals, alkaline earth metals and transition metals, trends in ionization energy, electronegativity, and the relative sizes of ions and atoms.
Question 2 (Advanced Sample)

Which statement best describes the density of an atom’s nucleus?

A The nucleus occupies most of the atom’s volume but contains little of its mass.
B The nucleus occupies very little of the atom’s volume and contains little of its mass.
C The nucleus occupies most of the atom’s volume and contains most of its mass.
D The nucleus occupies very little of the atom’s volume but contains most of its mass.

Correct answer: D

This question assesses understanding of the structure and relative masses of the subatomic particles in an atom.

Standard: The periodic table displays the elements in increasing atomic number and shows how periodicity of the physical and chemical properties of the elements relates to atomic structure. As a basis for understanding this concept:

Students know the nucleus of the atom is much smaller than the atom yet contains most of its mass.
Chemistry

Question 3 (Advanced Sample)

Results of Firing Alpha Particles at Gold Foil

<table>
<thead>
<tr>
<th>Observation</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha particles went straight through gold foil</td>
<td>&gt; 98%</td>
</tr>
<tr>
<td>Alpha particles went through gold foil but were deflected at large angles</td>
<td>≈ 2%</td>
</tr>
<tr>
<td>Alpha particles bounced off gold foil</td>
<td>≈ 0.01%</td>
</tr>
</tbody>
</table>

What information do the experimental results above reveal about the nucleus of the gold atom?

A The nucleus contains less than half the mass of the atom.
B The nucleus is small and is the densest part of the atom.
C The nucleus contains small positive and negative particles.
D The nucleus is large and occupies most of the atom’s space.

Correct answer: B

This question assesses understanding of the structure, charges, and relative masses of the subatomic particles in an atom.

Standard: The periodic table displays the elements in increasing atomic number and shows how periodicity of the physical and chemical properties of the elements relates to atomic structure. As a basis for understanding this concept:

Students know the nucleus of the atom is much smaller than the atom yet contains most of its mass.
Chemistry

Question 4 (Advanced Sample)

Under the same conditions of pressure and temperature, a liquid differs from a gas because the molecules of the liquid

A. have no regular arrangement.
B. are in constant motion.
C. have stronger forces of attraction between them.
D. take the shape of the container they are in.

Correct answer: C

This question assesses understanding of the differences in bond strength in liquids and gases.

Standard: Biological, chemical, and physical properties of matter result from the ability of atoms to form bonds from electrostatic forces between electrons and protons and between atoms and molecules. As a basis for understanding this concept:

Students know the atoms and molecules in liquids move in a random pattern relative to one another because the intermolecular forces are too weak to hold the atoms or molecules in a solid form.
Chemistry

Question 5 (Proficient Sample)

Iodine would have chemical properties most like

A manganese (Mn).
B tellurium (Te).
C chlorine (Cl).
D xenon (Xe).

Correct answer: C

Standard: The periodic table displays the elements in increasing atomic number and shows how periodicity of the physical and chemical properties of the elements relates to atomic structure. As a basis for understanding this concept:
Students know how to use the periodic table to identify metals, semimetals, nonmetals, and halogens.
Earth Science

Standards on Which Earth Science Questions Are Based

Questions 1, 2, 3, 4, and 5 measure Earth’s Place in the Universe: Astronomy and planetary exploration reveal the solar system’s structure, scale, and change over time.

Question 1 (Proficient Sample)

Although many ancient civilizations designated certain patterns of stars as constellations, they never included planets in their constellations. What feature of planets, as opposed to stars, explains this?

A. They look bigger than stars.
B. They are more difficult to see than stars.
C. There are not enough of them to form a constellation.
D. They do not maintain fixed positions relative to other planets or stars.

Correct answer: D

This question assesses understanding that objects in the solar system are closer to Earth and move faster than stars.

Standard: Astronomy and planetary exploration reveal the solar system’s structure, scale, and change over time. As a basis for understanding this concept:
Students know the evidence indicating that the planets are much closer to Earth than the stars are.
Earth Science

Question 2 (Proficient Sample)
Which of the following statements best describes how the planets of the solar system formed?

A They are condensed rings of matter thrown off by the young Sun.
B They are the remains of an exploded star once paired with the Sun.
C The Sun captured them from smaller, older nearby stars.
D They formed from a nebular cloud of dust and gas.

Correct answer: D

This question assesses knowledge of how the objects in the solar system formed.

Standard: Astronomy and planetary exploration reveal the solar system’s structure, scale, and change over time. As a basis for understanding this concept:
Students know how the differences and similarities among the sun, the terrestrial planets, and the gas planets may have been established during the formation of the solar system.

Question 3 (Proficient Sample)
Which planet was formed from the light gases of the outer solar nebula?

A Mars
B Mercury
C Venus
D Uranus

Correct answer: D

This question assesses understanding of where the gas planets are located in the solar system.

Standard: Astronomy and planetary exploration reveal the solar system’s structure, scale, and change over time. As a basis for understanding this concept:
Students know how the differences and similarities among the sun, the terrestrial planets, and the gas planets may have been established during the formation of the solar system.
Earth Science

Question 4 (Proficient Sample)

Fusion is a form of nuclear reaction resulting in an enormous release of heat energy. The fusion of hydrogen to helium is a reaction that commonly occurs in

A the Sun and other typical stars.
B the ionosphere and thermosphere.
C Earth’s outer core of molten iron.
D a comet’s tail of ionized gases.

Correct answer: A

This question assesses knowledge that nuclear fusion of hydrogen to helium is the source of energy of the Sun.

Standard: Astronomy and planetary exploration reveal the solar system’s structure, scale, and change over time. As a basis for understanding this concept:
Students know the Sun is a typical star and is powered by nuclear reactions, primarily the fusion of hydrogen to form helium.

Question 5 (Basic Sample)

The surfaces of planet Mercury and our moon contain some very large craters that are most likely the result of

A giant lava flows.
B asteroid impacts.
C nuclear explosions.
D large collapsed caves.

Correct answer: B

This question assesses knowledge that asteroid and meteorite impacts on objects in the solar system caused the formation of craters.

Standard: Astronomy and planetary exploration reveal the solar system’s structure, scale, and change over time. As a basis for understanding this concept:
Students know the evidence for the dramatic effects that asteroid impacts have had in shaping the surface of planets and their moons and in mass extinctions of life on Earth.
Physics

Standards on Which Physics Questions Are Based

Questions 1, 2, 3, 4, and 5 measure Motion and Forces: Newton’s laws predict the motion of most objects.

Question 1 (Advanced Sample)

A 50-kg child on a skateboard experiences a 75-N force as shown.

What is the expected acceleration of the child?

A \( \frac{0.67 \text{ m}}{\text{s}^2} \)
B \( \frac{1.50 \text{ m}}{\text{s}^2} \)
C \( \frac{6.70 \text{ m}}{\text{s}^2} \)
D \( \frac{25.00 \text{ m}}{\text{s}^2} \)

Correct answer: B

This question assesses the application of Newton’s second law (\( F = ma \)) to determine the acceleration of an object.

Standard: Newton’s laws predict the motion of most objects. As a basis for understanding this concept:
Students know how to apply the law \( F = ma \) to solve one-dimensional motion problems that involve constant forces (Newton’s second law).
Physics

Question 2 (Advanced Sample)

A communication satellite is in a circular orbit around Earth. If the speed of the satellite is constant, the force acting on the satellite

A  is zero.
B  is decreasing.
C  points toward the center of Earth at all times.
D  points in the direction that the satellite is moving.

Correct answer: C

This question assesses knowledge that a gravitational force acting on an object is a perpendicular force.

Standard: Newton’s laws predict the motion of most objects. As a basis for understanding this concept:
Students know applying a force to an object perpendicular to the direction of its motion causes the object to change direction but not speed (e.g., Earth’s gravitational force causes a satellite in a circular orbit to change direction but not speed).

Question 3 (Advanced Sample)

A student holds a book at rest in an outstretched hand. The force exerted on the book by the student is equal to the book’s

A  mass.
B  weight.
C  volume.
D  density.

Correct answer: B

This question assesses the application of knowledge of balanced forces as stated in Newton’s first law.

Standard: Newton’s laws predict the motion of most objects. As a basis for understanding this concept:
Students know that when forces are balanced, no acceleration occurs; thus an object continues to move at a constant speed or stays at rest (Newton’s first law).
Physics

Question 4 (Proficient Sample)

A ball is dropped from rest from a height 6.0 meters above the ground. The ball falls freely and reaches the ground 1.1 seconds later. What is the average speed of the ball?

A $5.5 \text{ m/s}$
B $6.1 \text{ m/s}$
C $6.6 \text{ m/s}$
D $11 \text{ m/s}$

Correct answer: A

Standard: Newton’s laws predict the motion of most objects. As a basis for understanding this concept:
Students know how to solve problems that involve constant speed and average speed.

Question 5 (Proficient Sample)

A 10-newton force and a 15-newton force are acting from a single point in opposite directions. What additional force must be added to produce equilibrium?

A 5 N acting in the same direction as the 10-N force
B 5 N acting in the same direction as the 15-N force
C 10 N acting in the same direction as the 10-N force
D 25 N acting in the same direction as the 15-N force

Correct answer: A

Standard: Newton’s laws predict the motion of most objects. As a basis for understanding this concept:
Students know that when forces are balanced, no acceleration occurs; thus an object continues to move at a constant speed or stays at rest (Newton’s first law).
STAR Student Report

Dear Parent/Guardian,

Each year, California's Standardized Testing and Reporting (STAR) Program measures your child's progress in meeting California’s world class content standards. These standards describe what all students should know and be able to do at each grade level.

This report shows your child's scores on the STAR Program tests. I encourage you to discuss these results with your child and your child's teacher(s). Besides giving you valuable information about your child’s academic strengths and weaknesses, test scores help us understand how well our schools are doing and how we might do better in the most important job of all - preparing students to succeed in school and beyond.

Sincerely,

JACK O'CONNELL
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

Your child's overall results on the California Standards Tests

Your child's scale scores and performance levels

<table>
<thead>
<tr>
<th>Subject</th>
<th>Advanced</th>
<th>Proficient</th>
<th>Basic</th>
<th>Below Basic</th>
<th>Far Below Basic</th>
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</thead>
<tbody>
<tr>
<td>English-Language Arts</td>
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<td>350-391</td>
<td>300-349</td>
<td>263-299</td>
<td>150-262</td>
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<td>300-349</td>
<td>247-299</td>
<td>150-246</td>
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<td>World History</td>
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<td>350-399</td>
<td>300-349</td>
<td>275-299</td>
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<tr>
<td>Biology</td>
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<tr>
<td>Life Science</td>
<td>399-600</td>
<td>350-398</td>
<td>300-349</td>
<td>269-299</td>
<td>150-268</td>
</tr>
</tbody>
</table>

Find complete STAR results at [http://star.cde.ca.gov](http://star.cde.ca.gov) and your schools Accountability Report Card (SARC) at [www.cde.ca.gov/sid/sa/sarc](http://www.cde.ca.gov/sid/sa/sarc) or ask for a copy of the SARC at your child's school.

How should I use these STAR Program results?

These results are one of several tools used to follow your child's educational progress. While they provide an important measure, they should be viewed with other available information about your child's achievement, such as classroom tests, assignments, and grades.

These results are also intended to help ensure your child is getting the best possible education. If your child is not performing at the level you would like, these results can help guide a conversation with your child's teacher in order to help focus on specific areas for improvement.
CHILD'S NAME

Your child's strengths and needs based on these tests

A NOTE ON USING THIS INFORMATION: A single test can provide only limited information. A student taking the same test more than once might score higher or lower in each tested area within a small range. You should confirm your child's strengths and needs in these topics by reviewing classroom work, standards-based assessments, and your child's progress during the year.

Find released test items at www.cde.ca.gov/ta/tg/sr/resources.asp and a complete copy of the standards at www.cde.ca.gov/be/hses.

In the charts below, your child’s percent correct is compared to the percent correct range of students statewide whose performance level was Proficient on the total test. Proficient is the state target for all students.

### English-Language Arts

<table>
<thead>
<tr>
<th>Content Areas</th>
<th>Your Child's %</th>
<th>Your Child's Percent Correct Compared to the Percent Correct Range of Proficient Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Analysis and Vocabulary</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>Development</td>
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<td></td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>15</td>
<td>83%</td>
</tr>
<tr>
<td>Literary Response and Analysis</td>
<td>13</td>
<td>81%</td>
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<tr>
<td>Writing</td>
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<td></td>
</tr>
<tr>
<td>Written Conventions</td>
<td>11</td>
<td>85%</td>
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<tr>
<td>Writing Strategies</td>
<td>17</td>
<td>83%</td>
</tr>
</tbody>
</table>

### Geometry

<table>
<thead>
<tr>
<th>Content Areas</th>
<th>Your Child's %</th>
<th>Your Child's Percent Correct Compared to the Percent Correct Range of Proficient Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logic and Geometric Proofs</td>
<td>7</td>
<td>30%</td>
</tr>
<tr>
<td>Volume and Area Formulas</td>
<td>1</td>
<td>9%</td>
</tr>
<tr>
<td>Angle Relationships, Constructions, and Lines</td>
<td>5</td>
<td>31%</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>8</td>
<td>53%</td>
</tr>
</tbody>
</table>

### World History

<table>
<thead>
<tr>
<th>Content Areas</th>
<th>Your Child's %</th>
<th>Your Child's Percent Correct Compared to the Percent Correct Range of Proficient Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of Modern Political Thought</td>
<td>10</td>
<td>77%</td>
</tr>
<tr>
<td>Industrial Expansion and Imperialism</td>
<td>7</td>
<td>70%</td>
</tr>
<tr>
<td>Causes and Effects of the First World War</td>
<td>7</td>
<td>50%</td>
</tr>
<tr>
<td>Causes and Effects of the Second World War</td>
<td>9</td>
<td>69%</td>
</tr>
<tr>
<td>International Developments in the Post-WW II Era</td>
<td>5</td>
<td>50%</td>
</tr>
</tbody>
</table>

### Biology

<table>
<thead>
<tr>
<th>Content Areas</th>
<th>Your Child's %</th>
<th>Your Child's Percent Correct Compared to the Percent Correct Range of Proficient Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell Biology</td>
<td>3</td>
<td>33%</td>
</tr>
<tr>
<td>Genetics</td>
<td>6</td>
<td>33%</td>
</tr>
<tr>
<td>Ecology and Evolution</td>
<td>10</td>
<td>43%</td>
</tr>
<tr>
<td>Physiology</td>
<td>4</td>
<td>36%</td>
</tr>
<tr>
<td>Investigation and Experimentation</td>
<td>5</td>
<td>83%</td>
</tr>
</tbody>
</table>

### California Reading List (CRL)

Your child's recommended California Reading List Number is 12.

This recommended reading list number is based on your child's California English-Language Arts Standards Test score. While the CRL will provide you with a list of titles, no single score will tell you what books your child can or should read. Encourage your child to explore other reading list numbers to find books of interest.

To access the California Reading List:
* Visit [http://star.cde.ca.gov](http://star.cde.ca.gov) and click on California Reading List
* Click Search for a Reading List to find books for your child

### More about the STAR Program

Questions about the STAR Program or your child’s test results should first be directed to your child's teacher(s). Additional information may be available through the school principal or counselor. Information about the STAR Program, such as sample test questions and statewide tests, is also available on the CDE Web site at [www.cde.ca.gov/ta/tg/sr](http://www.cde.ca.gov/ta/tg/sr/).
THE GUIDE TO YOUR STAR STUDENT REPORT
CALIFORNIA STANDARDS TESTS

This guide helps you follow your child’s report and the recommendations that are provided. Some sections of your child’s report are translated word for word and other sections are translated more generally.

1. Your child’s information
   Here you find: your child’s student number, date of birth, grade, test date, school, and district. If available, your mailing address also appears in this section.

2. Introductory Letter from the State Superintendent of Public Instruction
   Dear Parent/Guardian,

   Each year, California’s Standardized Testing and Reporting (STAR) Program measures your child’s progress in meeting California’s world-class content standards. These standards describe what all students should know and be able to do at each grade level.

   This report shows your child’s scores on the STAR Program tests. I encourage you to discuss these results with your child and your child’s teacher(s). Besides giving you valuable information about your child’s academic strengths and weaknesses, test scores help us understand how well our schools are doing and how we might do better in the most important job of all — preparing students to succeed in school and beyond.

3. Your child’s scale scores and performance levels
   See how your child did on the California Standards Tests (CSTs) by looking at the vertical black bars below each subject heading. The number at the top of each bar is your child’s exact score on the test. The colored boxes to the left and the text at the bottom of each black bar provide your child’s performance level in each subject. There are five performance levels: advanced, proficient, basic, below basic, and far below basic. The goal in California is to have all students perform at the proficient or advanced level.

   English–language arts and mathematics are tested for most students in Grades 2–11. All students in Grades 8 and 11 are tested in history–social science, and some high school students take an end-of-course world history test. All students in Grades 5, 8, and 10 are tested in science and some high school students take end-of-course science tests. Scores are provided for all of the tests your child took. If your child did not take one or more of these tests or if a score was not to be reported, this is noted.

4. You can use these Web addresses to find complete STAR results (http://star.cde.ca.gov) and your school’s accountability report card (www.cde.ca.gov/ta/ac/sa/). You can also request a copy of the School Accountability Report Card (SARC) at your child’s school.

5. How should I use these STAR Program results?
   This section suggests other ways to monitor your child’s educational progress, including through classroom tests, assignments, and grades. You can use these sources of information to talk with your child’s teacher about specific areas for improvement.
A note on using this information

A single test can provide only limited information. A student taking the same test more than once might score higher or lower within a small range in each content area tested. You should confirm your child’s strengths and needs in these topics by reviewing classroom work, standards-based assessments, and progress reports during the year.

Your child’s strengths and needs based on these tests

These charts show how your child did in the different content areas for each test taken. The subject for each test is listed at the top of each chart. Most reports for students in Grades 2–11 include English–language arts and mathematics. Reports for students in Grades 5, 8, and 10 include science. Reports for students in Grades 8 and 11 include history–social science. Reports for high school students may include results for end-of-course tests in science or world history.

The items on the California Standards Test (CST) are grouped into the content areas on the left of each chart. These content areas are based on the California content standards, which describe what your child should know and be able to do at each grade level. (If your child did not take any of the tests expected for his/her grade level or if a score was unavailable to be reported, this is noted on the report.)

Next to the name of each content area are the number of questions your child answered correctly in that content area and the percentage of questions your child answered correctly in that content area, represented by a diamond on the chart. The bar shows the range of scores for students who scored at the proficient level on the test for that content area.

Below the chart is additional information about your child’s performance on each test.

This section contains one of the following:

- More information about the English–Language Arts Content Standards and the grade-level Mathematics Content Standards (Grades 2–4, 6 and 7) or Algebra I Standards (Grade 7).
- Content area results in science (Grades 5, 8, and 10), history–social science (Grades 8 and 11), and end-of-course tests.
- Additional resources (Grade 5).

Left: California Reading List (CRL), and: More about the STAR Program or Early Assessment Program (EAP) (for Grade 11)

CRL — This recommended reading list number is based on your child’s California English–Language Arts Standards Test score. Your child should be able to read titles within the list independently. Of course, no single test will tell you what books your child can or should read—encourage your child to explore other reading list numbers to find books of interest. Strong reading skills are critical for success in all school subjects. Encourage your child to read at home.

To access the California Reading List:
- Visit http://star.cde.ca.gov and click on California Reading List.
- Click Search for a Reading List to find books for your child.

EAP — If your child is in Grade 11, this section also presents information about the California State University's Early Assessment Program (EAP) and results for the EAP, if your child took the EAP. Additional information regarding EAP can be found at www.caistate.edu/eap.

More about the STAR Program — This section provides information about how you can get answers to your questions about the STAR Program and your child’s STAR test results.
Want to see more questions?
CDE released test questions: www.cde.ca.gov/ta/tg/sr/css05rtq.asp
More samples with information similar to what is found in this parent guide: www.starsamplequestions.org

Want to see the California content standards?
www.cde.ca.gov/be/st/ss/

Want more information about how students have performed?
http://star.cde.ca.gov/