

		Score and Description->	0 (includes blank)	1	2	3
GRADE 8 Q3 ASSESSMENT KEY 0809 1 A C20 2 D C20 3 B C19 4 A C19 5 D C18 6 B CINQ2 7 B CINQ5 8 C CINQ7 9 A CINQ3 10 B CINQ1 GRADE 8 Q3 OPEN ENDED QUESTIONS SCORING RUBRIC	Question	CT State Standard	<p>The response, although may be on topic, is an unsatisfactory answer to the question. It may fail to address the question, or it may address the question in a very limited way.</p> <p>There may be no evidence of elaboration, extension, higher-order thinking, or relevant prior knowledge. There may be evidence of serious misconceptions</p>	<p>This response is a marginal answer to the question. While it may contain some elements of a proficient response, it is inaccurate, incomplete, and/or inappropriate. There is little if any evidence of elaboration, extension, higher-order thinking or relevant prior knowledge. There may be evidence of significant misconceptions.</p>	<p>This response is a proficient answer to the question. It is generally correct, complete, and appropriate although minor inaccuracies may appear. There may be limited evidence of elaboration, extension, higher-order thinking, and relevant prior knowledge, or there may be significant evidence of these traits but other flaws (e.g., inaccuracies, omissions, and inappropriateness) may be more than minor.</p>	<p>This response is an excellent answer to the question. It is correct, complete, and appropriate and contains elaboration, extension, and/or evidence of higher-order thinking and relevant prior knowledge. There is no evidence of misconceptions. Minor errors will not necessarily lower the score.</p>
61	<p>What are the variables that should have been controlled or kept constant in the experiment? Explain why it is important to control variables in an experiment.</p>	<p>CINQ4. Identify independent and dependent variables, including those that are kept constant and those used as controls.</p>	<p><i>States no constants needed, or all variables incorrect.</i></p>	<p><i>Misidentifies one of the variables. Only some constant properties correctly identified, or no explanation as to the reason for controlling variables.</i></p>	<p><i>Identifies both variables: Independent variable: mass, but should have kept sizes. heights the same, dependent variable: time or rate. Lists some important properties to keep constant., some explanation of need for constants</i></p>	<p><i>Identifies both variables correctly, Lists most properties to keep constant: size of spheres, texture, height, wind, how dropped, how measured, who dropped it, etc... Discusses reason for controlling variables as knowing the cause for the effect, referring to making a valid conclusion</i></p>
62	<p>What conclusions can be drawn from their experiment and results? How valid do you think these conclusions are, based on the group's experiment and results? Explain your answer fully</p>	<p>CINQ8. Articulate conclusions and explanations based on research data, and assess results based on the design of the investigation.</p>	<p><i>Conclusion wrong, or conclusion about mass affects rate with no explanation.</i></p>	<p><i>Correct conclusion about that the mass does not affect time. Generally valid, but little reference to experiment and results (may refer to own experience or other info).</i></p>	<p><i>Conclusion correct and generally valid, refers to experiment and results and average time. Little or unimportant validity concerns expressed.</i></p>	<p><i>Conclusion correct, refers to experiment and results and average time. Expresses important concerns about validity use of different heights, and different textures of spheres, results of Styrofoam off, and possible need for more trials.</i></p>

63	The class then decides to investigate different shapes affects the falling time or rate of dropped objects. Write a step-by-step procedure you could use to collect reliable data related to your question. Include enough detail so that someone else could conduct the same experiment and get similar results	CINQ3 Design and conduct appropriate types of scientific investigations to answer different questions.	<i>Describes an experiment without mentioning different shapes, or a dropping experiment with no explanation.</i>	<i>Describes an experiment with independent variable of different shapes, may not mention objects, and may generally describe method to measure falling rate.</i>	<i>Describes an experiment with independent variable of different shapes using same objects, and describes method to measure falling rate as dependent. May not address any other design concerns.</i>	<i>Describes an experiment with independent variable of different shapes using the same type, size and mass object, and describes method to measure falling rate as dependent. Describes some of controlling variables, multiple trials, control group.</i>
64	Why is an earthquake more likely to occur in California than in Connecticut? Explain fully.	CINQ 10. Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.	<i>A 0 response may show an incorrect explanation or major misconceptions. (more buildings, more people, different gravity). Misconceptions may be present.</i>	<i>A 1 response may show some explanation of earthquakes, but not the differences between the states. It contains limited or no elaboration. Misconceptions may be present.</i>	<i>A 2 response may indicate some misconceptions (no fault lines or plates in CT) or be much less elaborated. It is somewhat elaborated and contains no misconceptions.</i>	<i>It is correct, complete and well elaborated. "This item assesses students' understanding of earthquakes. California is located on a major fault line, which is a boundary between two tectonic plates on the Earth's surface. When there is movement in these plates, an earthquake along the late boundary can occur. Connecticut is not located on a plate boundary and is therefore less likely to experience and earthquake. The historical record also indicates that more earthquakes have occurred in California than in Connecticut. The geographical area of California is also much larger than Connecticut making an earthquake more likely to occur somewhere in California. A 3 response identifies why earthquakes occur along plate boundaries, and the differences between the two.</i>

basic		0-12
proficient	13	13-15
goal	16	16-22
advanced	19	

