

		Score and Description->	0 (includes blank)	1	2	3
<b>GRADE 10 Q2 ASSESSMENT KEY</b> 1 C D37 2 D D37 3 B D39 4 D D36 5 C D38 6 A D34 7 D D35 8 A D28 9 C D35 10 D D41 11 D DINQ8 12 C DINQ5 13 B DINQ3 <b>GRADE 10 Q2 OPEN ENDED QUESTIONS SCORING RUBRIC</b>	<b>Question</b>	<b>CT State Standard</b>	<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. 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	What is the problem this group is investigating? Make sure to identify the independent and dependent variables.	DINQ 5. Identify independent and dependent variables, and those variables that are kept constant, when designing an experiment.	<i>Blank, or does not identify problem at all.</i>	<i>Identifies problem as how type of mineral salts affects plant growth without identifying variables.</i>	<i>Identifies problem, misidentifies variables.</i>	<i>Identifies both variables correctly: How independent variable (type of mineral salts) affects dependent variable (plant growth)</i>

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>DINQ9. 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 type of mineral salts affects plant growth with no explanation.</i></p>	<p><i>Correct conclusion about that the type of mineral salts does affects plant growth. 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 plant growth. Little or unimportant validity concerns expressed.</i></p>	<p><i>Conclusion correct, refers to experiment and results and average plant growth. Expresses important concerns about validity use of different groups, and different units of measure, and possible need for more trials.</i></p>
63	<p>The class then decides to investigate whether changing different amounts of mineral salts affects the plant growth. 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</p>	<p>DINQ4 Design and conduct appropriate types of scientific investigations to answer different questions.</p>	<p><i>Describes an experiment without mentioning different amounts of mineral salts, or a plant growth experiment with no explanation.</i></p>	<p><i>Describes an experiment with independent variable of different amounts of mineral salts, may not mention using same plants, and may generally describe method to measure plant growth</i></p>	<p><i>Describes an experiment with independent variable of different amounts of mineral salts using same plants, and describes method to measure plant growth as dependent. May not address any other design concerns.</i></p>	<p><i>Describes an experiment with independent variable of different amounts of mineral salts using same plants, and describes method to measure plant growth as dependent. Describes some of controlling variables, multiple trials, control group.</i></p>