

		Score and Description- >	0 (includes blank)	1	2	3
<p>GRADE 9 Q4 ASSESSMENT KEY 0708</p> <p>1 A d8 2 B d3 3 A d8 4 B d8 5 C d7 6 B d9 7 A d1 8 B d2 9 D DINQ5 10 B DINQ3</p> <p>GRADE 9 Q4 OPEN ENDED QUESTIONS SCORING RUBRIC</p>	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.</p> <p>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	Describe a cause and two possible effects of global warming.	DINQ 10 Communicate about science in different formats, using relevant science vocabulary, supporting evidence and clear logic.	<i>The response fails to describe a cause or give any effects for global warming. Misconceptions may be present.</i>	<i>The response partially describes a cause for global warming. It contains limited elaboration. Misconceptions may be present.</i> -or- <i>The response correctly gives one or two effects of global warming. It contains limited or no elaboration. Misconceptions may be present.</i>	<i>The response generally describes a cause for global warming AND gives one or two effects. It is less elaborated than the Score 3 responses. It may be incomplete or contain inaccuracies.</i> -or- <i>The response gives two effects. It is well elaborated and contains no misconceptions.</i>	<i>The response describes a cause for global warming AND gives two effects. It is correct, complete and well elaborated.</i> “There are natural reasons that Earth is warming up, but human activity is contributing to global warming by producing too much carbon dioxide and other gases, known as greenhouse gases. These gases trap heat that would otherwise escape into space. Humans burn fossil fuels and destroy forests that absorb carbon dioxide. Because of this, the amount of carbon dioxide in the air has increased 25%, and the average temperature has increased by 0.5°C since the 1890s. So, as carbon dioxide in the atmosphere increases, temperatures will continue to increase. This increase could cause a rise in sea level by the melting of glaciers and polar ice caps. As temperature rises and land is flooded, the temperate zones will change. Areas that now produce food crops will not be productive. Areas at higher latitudes might become productive.

62.	Using the axes below, construct a graph showing the amount of solution the student found each minute. Be sure to label the axes	DINQ8 Use mathematical operations to analyze and interpret data, and present relationships between variables in appropriate forms.	<i>Student fails to plot data for either S or T correctly or produces an illogical graph.</i>	<i>Student scales and plots either S or T correctly or scales and plots S and T combined (for example, adds data for each into one data point). No labels on graph.</i>	<i>Student scales and plots S and T correctly; one or both axis labels or plot labels are missing (or incorrect).</i>	<i>Student scales, plots, and labels the graph correctly (minutes on x, ml on y, 2 sets of data)</i>
63	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.	DINQ5. Identify independent and dependent variables, including those that are kept constant and those used as controls.	<i>States no constants needed, or all variables incorrect.</i>	<i>Misidentifies one of the variables. Only some constant properties correctly identified, or no explanation as to the reason for controlling variables.</i>	<i>Identifies both variables: Independent variable: soil type, Lists some important properties to keep constant.,pH of mixture, amount of spoil, rate of pouring, temperature, some explanation of need for constants</i>	<i>Lists most properties to keep constant:... Discusses reason for controlling variables as knowing the cause for the effect, referring to making a valid conclusion</i>
64	The student then decided to test to see whether different temperature could affect Soil S. 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.	DINQ4 Design and conduct appropriate types of scientific investigations to answer different questions.	<i>Describes an experiment without mentioning different temperature.</i>	<i>Describes an experiment with independent variable of temperature, may not mention conditions, and may generally describe method to measure rate or amount.</i>	<i>Describes an experiment with independent variable of different amounts of temperature and same type of soil and keep some important amounts the same describes method to measure rate or amount as dependent. May not address any other design concerns.</i>	<i>Describes an experiment with independent variable of different temperature using same soil, amount, setup,, and describes method to measure rate and amount as dependent. Describes some of controlling variables, multiple trials, control group.</i>