

		Score and Description->	0 (includes blank)	1	2	3
GRADE 7 Q3 ASSESSMENT KEY 0809 GRADE 7 Q3 1 C C17 2 A C17 3 D C17 4 C C17 5 B C17 6 B C16 7 B CINQ2 8 D CINQ5 9 B CINQ3 10 B CINQ1 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 is the problem this group is investigating? Make sure to identify the independent and dependent variables.</p>	CINQ 4. 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 running affects heart rate without identifying variables.</i>	<i>Identifies problem, misidentifies variables.</i>	<i>Identifies both variables correctly: How independent variable (running) affects dependent variable (heart rate)</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>	CINQ 8. Draw conclusions and identify sources of error.	<i>Conclusion wrong, or conclusion about running affects heart rate with no explanation.</i>	<i>Correct conclusion about running affects heart rate. Generally valid, but little reference to experiment and results (may refer to own experience or other info).</i>	<i>Conclusion correct and generally valid, refers to experiment and results and average heart rate. Little or unimportant validity concerns expressed.</i>	<i>Conclusion correct, refers to Group B experiment and results and average heart rate. Expresses important concerns about validity with number of people, and possible need for more trials.</i>

63	The class then decides to investigate whether listening to different kinds of music affects people's pulse rate. 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 type of music, or a heart rate experiment with no explanation.</i>	<i>Describes an experiment with independent variable of type of music, may not mention using same people, and may generally describe method to measure pulse rate.</i>	<i>Describes an experiment with independent variable of type of music using same people, and describes method to measure heart rate as dependent. May not address any other design concerns.</i>	<i>Describes an experiment with independent variable of type of music using same people, and describes method to measure heart rate as dependent. Describes some of controlling variables, multiple trials, control group.</i>
64	Imagine that you are building a robot. Your robot will have a skeleton similar to a human skeleton. If the robot needs to be able to move a limb in all directions, what kind of parts would be needed? Explain your answer.	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. (Robots don't have to be built like a skeleton). Misconceptions may be present.</i>	<i>A 1 response may show some explanation of joints. It contains limited or no elaboration. Misconceptions may be present. (Hinge or glide joint will be Ok for full movement)</i>	<i>. A 2 response may indicate some misconceptions (pivot joint same as ball/socket) or be much less elaborated (no mention of tendons). It is somewhat elaborated and contains little misconceptions.</i>	<i>It is correct, complete and well elaborated and contains no misconceptions.. Needs to mention a ball/socket joint giving full movement as well as the need for tendons and connecting tissue. A 3 response identifies the ball and socket joint, tendons, and WHY it gives full movement..</i>

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