

NECAP Science 2010 Grade 8 Release Items Information

Item	GE Connection	DOK	Domain and Target		Prediction
1	S5-8: 9	2	PS 1-2	Students will, when given data about characteristic properties of matter (e.g., melting and boiling points, density, solubility), identify, compare or classify different substances).	
2	S5-8: 9	2	PS 1-3	Students will collect data or use data provided to infer or predict that the total amount of mass in a closed system stays the same, regardless of how substances interact.	
3	S5-8: 23	2	PS 2-7	Students will use data to draw conclusions about how heat can be transferred (convection, conduction, radiation).	
4	S5-6: 47	2	ESS1-1	Students will investigate the relationships among mass, volume and density.	
5	S5-6: 47, 48	2	ESS 1-3	Students will explain how earth events (abruptly and over time) can bring about changes in Earth's surface: landforms, ocean floor, rock features, or climate.	
6	S5-6: 44 S3-4: 44	2	ESS 2-6	Students will compare and contrast planets based on data provided about size, composition, location, orbital movement, atmosphere, or surface features (includes moons).	
7	S5-6: 47	3	ESS 1-1	Students will use geological evidence provided to support the idea that the Earth's crust/lithosphere is composed of plates that move.	
8	S5-6: 36 S7-8: 37, 38	2	LS 1-1	Students will use data and observations about the biodiversity of an ecosystem to make predictions or draw conclusions about how the diversity contributes to the stability of the ecosystem.	
9	S5-6: 36 S7-8: 49	2	LS 2-5	Students will use data and observations to predict outcomes when abiotic/biotic factors are changed in an ecosystem.	
10	S7-8: 38	2	LS 3-8	Students will use a model, classification system, or dichotomous key to illustrate, compare, or interpret possible relationships among groups of organisms (e.g., internal and external structures, anatomical features).	

NECAP Science 2010 Grade 8 Inquiry Task Information

Item	GE Connection	DOK	Inquiry Construct		Prediction
1	S5-8: 3	2	5	Students will develop an organized and logical approach to investigating the question, including controlling variables. (Planning and Critiquing of Investigations)	
2	S5-8: 2	2	3	Students will make and describe observations in order to ask questions, hypothesize, make predictions related to topic (Formulating Questions & Hypothesizing)	
3	S5-8: 6, 7	3	12	Students will use evidence to support and justify interpretations and conclusions or explain how the evidence refutes the hypothesis. (Developing and Evaluating Explanations)	
4	S5-8: 8	2	6	Students will provide reasoning for appropriateness of materials, tools, procedures, and scale used in the investigation (Planning and Critiquing of Investigations)	
5	S5-8: 7	3	12	Students will use evidence to support and justify interpretations and conclusions or explain how the evidence refutes the hypothesis. (Developing and Evaluating Explanations)	
6	S5-8: 3, 4	2	7	Students will follow procedures for collecting and recording qualitative or quantitative data, using equipment or measurement devices accurately (Conducting Investigations)	
7	S5-8: 6	2	11	Students will analyze data, including determining if data are relevant, artifact, irrelevant, or anomalous (Developing and Evaluating Explanations)	
8	S5-8: 6	2	11	Students will analyze data, including determining if data are relevant, artifact, irrelevant, or anomalous (Developing and Evaluating Explanations)	