

NECAP Science 2016 Grade 8 Release Items Prediction Chart

Item	DOK	Domain	NECAP Assessment Target	Prediction
1	2	Physical Science	PS1-1: Students will investigate the relationships among mass, volume and density.	
2	1	Physical Science	PS1-5: Given graphic or written information, students will classify matter as atom/molecule or element/compound	
3	2	Physical Science	PS2-7: Students will use data to draw conclusions about how heat can be transferred (convection, conduction, radiation.)	
4	2	Physical Science	PS1-4: Students will represent or explain the relationship between or among energy, molecular motion, temperature and states of matter.	
5	2	Earth/Space Science	ESS1-1: Students will use geological evidence provided to support the idea that the Earth's crust/lithosphere is composed of plates that move.	
6	2	Earth/Space Science	ESS1-3: 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.	
7	2	Earth/Space Science	ESS2-8: Students will explain temporal or positional relationships between or among the Earth, sun and moon (e.g., night/day, seasons, year, tides) OR how gravitational force affects objects in the solar system (e.g., moons, tides, orbits, satellites).	
8	2	Life Science	LS2-6: Given a scenario, students will trace the flow of energy through an ecosystem, beginning with the sun, through organisms in the food web and into the environment (includes photosynthesis and respiration.)	
9	2	Life Science	LS2-7: Given an ecosystem, students will trace how matter cycles among and between organisms and the physical environment (water, oxygen, food web, decomposition, recycling, but not carbon cycle or nitrogen cycle).	
10	2	Life Science	LS4-11: Using data provided, students will select evidence that supports the concept that genetic information is passed on from both parents to offspring.	

NECAP Science 2016 Grade 8 Inquiry Prediction Chart

Item	DOK	Domain	Target	Prediction
1	2	Inquiry	INQ 1-3 Students will make and describe observations in order to ask questions, hypothesize, make predictions related to topic.	
2	2	Inquiry	INQ 3-8 Students will use accepted methods for organizing, representing, and manipulating data.	
3	2	Inquiry	INQ 3-10 Students will summarize results based on data.	
4	2	Inquiry	INQ 1-2 Students will construct coherent arguments in support of a question, hypothesis or prediction.	
5	2	Inquiry	INQ 4-11 Students will analyze data including determining if data are relevant, artifact, irrelevant or anomalous.	
6	2	Inquiry	INQ 2-4 Students will identify information/evidence that needs to be collected in order to answer the question, hypothesis, prediction.	
7	3	Inquiry	INQ 4-13 Students will communicate how scientific knowledge applies to explain results, propose further investigations or construct and analyze alternative explanations.	
8	3	Inquiry	INQ 4-12 Students use evidence to support and justify interpretations and conclusions or explain how the evidence refutes the hypothesis.	