

NECAP Science 2016 Grade 4 Release Items Prediction Chart

Item	DOK	Domain	NECAP Assessment Target	Prediction
1	2	Physical Science	PS1-1: Students will collect and organize data about physical properties in order to classify objects or draw conclusions about objects and their characteristic properties.	
2	2	Physical Science	PS1-3: Students will use measures of weight (data) to demonstrate that the whole equals the sum of its parts.	
3	2	Physical Science	PS2-6: Students will experiment, observe or predict how heat might move from one object to another.	
4	2	Earth/Space Science	ESS1-1: Given certain Earth materials (soils, rocks or minerals) students will use physical properties to sort, classify, and describe them.	
5	2	Earth/Space Science	ESS1-3: Students will explain how the use of scientific tools helps to extend senses and gather data about weather (i.e. weather/wind vane: direction; wind sock: wind intensity; anemometer: speed; thermometer: temperature; meter sticks/rulers: snow depth; rain gauges: rain amount in inches).	
6	2	Earth/Space Science	ESS1-3: Students will explain how the use of scientific tools helps to extend senses and gather data about weather (i.e. weather/wind vane: direction; wind sock: wind intensity; anemometer: speed; thermometer: temperature; meter sticks/rulers: snow depth; rain gauges: rain amount in inches).	
7	1	Life Science	LS1-2: Students will identify the basic needs of plants and animals in order to stay alive (i.e., water, air, food, space).	
8	2	Life Science	LS1-3: Students will predict, sequence or compare the life stages of organisms—plants and animals (e.g., put images of life stages of an organism in order, predict the next stage in sequence, compare two organisms).	
9	1	Life Science	LS4-8: Students will identify what the physical structures of humans do (e.g., sense organs—eyes, ears, skin, etc.) or compare physical structures of humans to similar structures of animals.	
10	2	Life Science	LS4-9: Students will distinguish between characteristics of humans that are inherited from parents (i.e., hair color, height, skin color, eye color) and others that are learned (e.g., riding a bike, singing a song, playing a game, reading.)	

NECAP Science 2016 Grade 4 Inquiry Prediction Chart

Item	DOK	Domain	Target	Prediction
1	2	Inquiry	INQ 3-8 Students will use accepted methods for organizing, representing, and manipulating data	
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 4-12 Students use evidence to support and justify interpretations and conclusions or explain how the evidence refutes the hypothesis.	
5	2	Inquiry	INQ 1-2 Students will construct coherent arguments in support of a question, hypothesis or prediction.	
6	2	Inquiry	INQ 4-11 Students will analyze data including determining if data are relevant, artifact, irrelevant or anomalous.	
7	2	Inquiry	INQ 2-6 Students will provide reasoning for appropriateness of materials, tools, procedures, and scale used in the investigation.	
8	3	Inquiry	INQ 4-12 Students use evidence to support and justify interpretations and conclusions or explain how the evidence refutes the hypothesis.	