**ASSESSMENT ANCHOR**

**S.3.A.2 Processes, Procedures, and Tools of Scientific Investigations**

S.3.A.2.1 Apply skills necessary to conduct an experiment or design a solution to solve a problem.

* S.3.A.2.1.1 Generate questions about objects, organisms, or events that can be answered through scientific investigations.
* S.3.A.2.1.2 Make predictions based on observations.
* S.3.A.2.1.3 Identify the variables in a simple investigation.

S.3.A.3.2 Use models to illustrate simple concepts.

* S.3.A.3.2.1 Identify what models represent (e.g., simple maps showing mountains, valleys, lakes, and rivers; dioramas).

**ASSESSMENT ANCHOR**

**S.3.C.3 Principles of Motion and Force**

S.3.C.3.1 Observe and identify changes in an object’s motion.

* S.3.C.3.1.1 Identify and describe an object’s motion (e.g., start/stop, up/down, left/right, faster/slower, spinning).
* S.3.C.3.1.2 Describe an object’s position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below).

S.3.D.1.3 Identify and describe the ways that cause Earth’s surface to be in a state of constant change.

* S.3.D.1.3.1 Identify ways that cause Earth’s surface to be constantly changing (e.g., wind and water erosion, contraction and expansion of surfaces).
* S.3.D.1.3.2 Distinguish between ways that tear down the surface of Earth and those that build up the surface (e.g., erosion, weathering, volcanic activity, earthquakes).
* S.3.D.1.3.3 Distinguish between slow and rapid changes to Earth’s surface (i.e., rapid [earthquakes, volcanic activity]; slow [weathering, erosion]).

**ASSESSMENT ANCHOR**

**S.5.A.1 Reasoning and Analysis**

S.5.A.1.1 Explain, interpret, and apply scientific, environmental, or technological knowledge presented in a variety of formats (visuals, scenarios, graphs).

* S.5.A.1.1.1 Explain how certain questions can be answered through scientific inquiry and/or technological design (e.g., investigate to find out if all clay or foil boats designs react the same when filled with paperclips).
* S.5.A.1.1.2 Explain how observations and/or experimental results are used to support inferences and claims about an investigation or relationship (e.g., make a claim based on information on a graph).
* S.5.A.1.1.3 Describe how explanations, predictions, and models are developed using evidence.

**ASSESSMENT ANCHOR**

**S.5.A.3 Systems, Models, and Patterns**

S3.A.3.1 Apply knowledge of systems and patterns to make predictions.

* S.5.A.3.1.1 Make predictions based on patterns in natural systems (e.g., phases of the
* Moon, time [day, month, and year], weather, seasons).

S.5.D.1.1 Describe constructive and destructive natural processes that form different geologic structures and resources.

* S.5.D.1.1.1 Differentiate between abrupt changes in Earth’s surface (e.g., earthquakes, volcanoes, meteor impacts, landslides) and gradual changes in Earth’s surface (e.g., lifting up of mountains, wearing away by erosion).
* S.5.D.1.1.2 Explain how geological processes observed today (e.g., erosion, changes in the composition of the atmosphere, volcanic eruptions, earthquakes) are similar to those in the past.

**ASSESSMENT ANCHOR**

**S.6.A.1 Reasoning and Analysis**

S.6.A.1.1 Explain, interpret, and apply scientific, environmental, or technological knowledge presented in a variety of formats (visuals, scenarios, graphs).

* S.6.A.1.1.1 Explain how certain questions can be answered through scientific inquiry and/or technological design (e.g., consumer product testing, common usage of simple machines, modern inventions).
* S.6.A.1.1.2 Use evidence to support inferences and claims about an investigation or relationship

S.6.A.1.2 Identify and analyze evidence that certain variables may have caused measurable changes in natural or human-made systems.

* S.6.A.1.2.1 Use evidence, observations, or explanations to make inferences about changes in systems over time.

S6.A.3.2 Apply knowledge of models to make predictions, draw inferences, or explain technological concepts.

* S.6.A.3.2.1 Describe how scientists use models to explore relationships and make predictions about natural systems.

**ASSESSMENT ANCHOR**

**S.7.A.1 Reasoning and Analysis**

S.7.A.1.1 Explain, interpret, and apply scientific, environmental, or technological knowledge presented in a variety of formats (visuals, scenarios, graphs).

* S.7.A.1.1.2 Develop questions that can be answered through scientific inquiry and/or technological design.
* S.7.A.1.1.3 Use evidence such as observations or experimental results to support inferences.
* S.7.A.1.1.4 Use evidence to develop descriptions, explanations, and models.

**ASSESSMENT ANCHOR**

**S.7.A.2 Processes, Procedures, and Tools of Scientific Investigations**

S.7.A.2.1 Apply knowledge of scientific investigation or technological design in different contexts to make inferences, solve problems, and/or answer questions.

* S.7.A.2.1.1 Use evidence from investigations to clearly describe relationships and communicate and support conclusions.

S.7.A.3.2 Apply knowledge of models to make predictions, draw inferences, or explain technological concepts.

* S.7.A.3.2.1 Make inferences based on scientific models (e.g., charts, graphs, diagrams).

**ASSESSMENT ANCHOR**

**S8.A.1 Reasoning and Analysis**

S8.A.1 1 Explain, interpret, and apply scientific, environmental, or technological knowledge presented in a variety of formats (e.g., visuals, scenarios, graphs).

* S8.A.1.1.1 Distinguish between a scientific theory and an opinion, explaining how a theory is supported with evidence, or how new data/information may change existing theories and practices.
* S8.A.1.1.2 Explain how certain questions can be answered through scientific inquiry and/or technological design.
* S8.A.1.1.3 Use evidence, such as observations or experimental results, to support inferences about a relationship.
* S8.A.1.1.4Develop descriptions, explanations, predictions, and models using evidence.

**ASSESSMENT ANCHOR**

**S8.D.1 Earth Features and Processes that Change Earth and Its Resources**

S8.D.1.1 Describe constructive and destructive natural processes that form different geologic structures and resources.

* S8.D.1.1.2 Describe natural processes that change Earth’s surface (e.g., landslides, volcanic eruptions, earthquakes, mountain building, new land being formed, weathering, erosion, sedimentation, soil formation).