

Advanced – Performance Level 4 (Score range: 569-900)

Identify a testable question/state a hypothesis; use data to predict how an event affects the physical property of an object; describe how melting, freezing, evaporation, and condensation change matter from one state to another; describe a force is a push/pull; identify gravity, magnetism, and friction as forces; explain multiple forces may act on an object at the same time; evaluate changes in speed/direction of motion caused by unbalanced forces; predict or infer how fossils are formed from previously living organisms; explain the contribution of volcanic/earthquake activity to changes on Earth's surface.

Proficient – Performance Level 3 (Score range: 508-568)

Identify effects when a variable changes; make conclusions/predictions; identify metric units; show data visually; use tools; explain atoms make up matter; describe states of matter; recognize effects of forces; describe plant/animal structures and effect of ecosystem interactions; identify organisms with similar life stages; classify organisms; describe fossils show change; describe weathering/erosion/deposition; compare weather/climate; identify water cycle parts; describe uses of natural resources/benefit of conserving; describe effects of Earth's motion; know repetition verifies results; identify model uses.

Partially Proficient – Performance Level 2 (Score range: 429-507)

Identify appropriate scientific tools used to gather data for an investigation; identify various types of energy and their common sources; recognize that an electrical circuit must be complete to function; describe how animals use food for growth and energy; identify organ systems and major organs; describe the function of various human body systems; sequence the stages of growth of plants/animals; describe ways that plants/animals of the same population and life stage look different; recognize the majority of Earth's surface is covered by salt/fresh water; predict results of experiments when repeated.

Unsatisfactory – Performance Level 1 (Score range: 300-428)

Students have a very limited understanding of scientific inquiry processes, as well as life, physical, and earth and space science concepts and vocabulary.