

Sixth Grade Science Standards (1/19)

Science Process Skills & Practices:

Students can recognize scientifically testable questions and make plausible predictions. Students can carry out safe investigations, control variables, recognize controls, measure accurately, and record data in a table that they can design themselves. Students can analyze data, graph results, draw conclusions based on evidence, and communicate these results. (All above based on Appendix H of NGSS--Nature of Science.)

Energy: Students can define energy. They can also identify specific types of energy in everyday situations (i.e. Not just potential or kinetic, but more specifically mechanical, electrical, sound, light, thermal, chemical, nuclear, gravitational, elastic.) Students can explain how energy is able to change forms. They can also explain that energy can be neither created nor destroyed (Law of Conservation of Energy.)

Matter: Students can define matter and identify its three common states. Students can explain that matter is made of tiny constituent pieces (atoms and molecules). They can also explain that matter can change forms, but cannot be created or destroyed (Law of Conservation of Matter.)

Motion & Stability--Forces and Interactions: Students can identify the forces that change an object's motion (or act on an object at rest). Students can demonstrate that some forces act at a distance (have fields) and some forces require contact.

Cells & Inheritance: Students can identify a cell is the basic unit of life and that organisms can be unicellular or multicellular. They can also describe how both types of organisms reproduce and pass traits to offspring.