SCIENCE STANDARDS FOR SIXTH GRADE:

**Earth and Space Science**:

Topic: Rocks, Minerals and Soil
This topic focuses on the study of rocks, minerals, and soil, which make up the lithosphere. Classifying and identifying different types of rocks, minerals, and soil can decode the past environment in which they formed.

- Minerals have specific, quantifiable properties.
- Igneous, metamorphic and sedimentary rocks have unique characteristics that can be used for identification and/or classification.
- Igneous, metamorphic and sedimentary rocks form in different ways.
- Soil is unconsolidated material that contains nutrient matter and weathered rock.
- Rocks, minerals, and soils have common and practical uses.

**Physical Science**:

Topic: Matter and Motion
This topic focuses on the study of foundational concepts of the particulate nature of matter, linear motion, and kinetic and potential energy.

- All matter is made up of small particles called atoms.
- Changes of state are explained by a model of matter composed of atoms and/or molecules that are in motion.
- There are two categories of energy: kinetic and potential
- An object's motion can be described by its speed and the direction by which it is moving.

**Life Science**:

Topic: Cellular to Multi-cellular
This topic focuses on the study of the basics of Modern Cell Theory. All organisms are composed of cells, which are the fundamental unit of life. Cells

carry on the many processes that sustain life.  All cells come from pre-existing cells.

- Cells are the fundamental unit of life.
- All cells come from pre-existing cells.
- Cells carry on specific functions that sustain life.
- Living systems at all levels of organization demonstrate the complementary nature of structure and function.