Fundamental Science Concepts
For Middle Grades

Inquiry

How can I use scientific processes to learn what I want to know?

What are things made of?

Atoms: All matter on Earth is made of about 100 different types of atoms (elements).

Cells: Cells are the basic units of all living organisms.

Radiation: Electromagnetic radiation, including visible light, pervades the Universe.

How do systems interact and change?

Systems Change: Changes in a system are caused by interactions.

Forces: Parts of systems interact with each other through forces.

Energy: Energy exists in many different forms and can be transferred, transformed, and stored.

Conservation of Mass and Energy: A quantity that is conserved cannot be created nor destroyed.

Variation: Populations of species evolve in response to environmental changes.