

Department: Science

Course Name: Fourth Grade Science

Course Description:

The fourth-grade science curriculum classifies scientific knowledge into the categories of physical, earth, and life sciences. The student will review the types and phases of matter to understand the relationship of basic atomic structure, elements, and compounds. The student will apply this knowledge to the Periodic Table to interpret the chart. The student will identify and categorize examples of the types of energy, with a focus on the sight and sound. Following physical science, the student will explore Earth's physical and chemical history, structure, and the causes, effects, and types of plate tectonic boundaries. From here, the student will look upward towards our solar system and discuss Earth's relationship with the solar system, the moon phases, and other larger astronomical features. Lastly, the student will return to Earth to take an in-depth look at oceans, living things, cells, and ecosystems. The focus will be on classification of organisms, identification of cells and cell parts, and ecosystemic relationships.

Content:

Classifying Living Things
Interactions in Ecosystems
Survival and Change of Living Things
Earth and Moon Cycles
Solar Systems
Weather and Water Cycles
Matter, Elements, and Compounds
Changes in Matter
Force and the Laws of Motion
Flow and Transformation of Electrical Energy
Plate tectonics
Oceans

Skills:

Identify the needs of living things
Recognize the relationship between organisms
Categorize the different types of animals
Identify the characteristics of an ecosystem
Compare and contrast elements and compounds
Determine the changes in matter
Understand the relationships between Earth, the sun, the moon, and the solar system

Text and Materials:

Bell, Butler, Lederman, et.al., Life Science (Cengage Learning, 2011)
Bell, Butler, Lederman, et.al., Earth Science (Cengage Learning, 2011)
Bell, Butler, Lederman, et.al., Physical Science (Cengage Learning, 2011)

Methods of Instruction:

Lecture
Textbook
Worksheets
Lab

Projects

Methods of Evaluation:

Tests

Quizzes

Homework

Class work

Class participation

Lab

Lab workbook

