

## *Norwood Public Schools*

# **Grade 6 Science Curriculum Overview**

### **Description:**

To align with the Massachusetts Science and Technology Frameworks the sixth grade science program includes topics in Life, Physical, and Earth Science. Physical Science topics to be studied will include measurement, SI units, and the scientific method. Life Science topics to be studied will include cell types and cell structures as well as classification of living things. Earth Science topics that will be covered include topography and the Earth's atmosphere. All students are expected to complete homework assignments on a timely basis.

### **Learning Experiences:**

Students will:

- Use common scientific tools to make accurate measurements using SI units.
- Interpret and construct models of Earth's surface and its features.
- Observe and explain how erosion and deposition shape Earth's surface.
- Create a model of Earth's atmosphere.
- Explain how heat is transferred within Earth's atmosphere.
- Create a taxonomic key to classify various organisms.
- Differentiate between viruses and bacteria.
- Identify and operate the various parts of a compound light microscope.
- Compare and contrast plant and animal cells by diagramming each.

## **Content Outline:**

### Term 1

Scientific Method

Measurement: length, mass, volume, time, temperature

Mapping: topographic maps, map projections

### Term 2

Erosion, Weathering, and Deposition:

Atmosphere: Layers of Earth's Atmosphere

### Term 3

Atmosphere (cont.): Heat Transfer Within Earth's Atmosphere

Classification: Why Classify Organisms?, Levels of Classification,

Viruses

### Term 4

Viruses (cont.): Viral reproduction

Bacteria: Types, Bacterial reproduction

Cells: Structure and Functions

Microscopes

## **Resources Used:**

Pearson/Prentice Hall Science Explorer Modules

- *The Nature of Science and Technology* (Book P)
- *Earth's Changing Surface* (Book G)
- *Weather and Climate* (Book I)
- *From Bacteria to Plants* (Book A)
- *Cells and Heredity* (Book C)

Discovery Education/United Streaming videos

Brain Pop (interactive technology)

Topic specific DVD's

Various hands-on investigations

Various teacher demonstrations

Related school assemblies/presenters

Time for Kids Magazine

As of (March 20, 2012)

