Course Overview

Science, Grade 5

Fall Semester

First 9 weeks

Science and Technology

- **Microscope**
  - Parts
  - How to focus
  - Preparing slides
- **Lab Safety and Equipment**
  - Identification
  - Proper use
- **Role of Anton van Leeuwenhoek**

Cell Biology

- **Simple Cells**
  - Structure
  - Functions
  - Contrast single-cell and multi-cellular organism
- **Genetic Information**
  - Found in nucleus
- **Role of Robert Hooke**

Human Anatomy

- **Circulatory System**
  - Functions, parts, and how the system works
- **Heart**
  - Parts
  - Path of blood
  - Measuring heartbeat (taking pulse)
- **Role of cardiologists**

Botany

- **Parts, functions, and uses of trees**
  - Contributions of forest conservationists
  - How trees produce seeds
  - Role of foresters

Second 9 weeks

Zoology

- **Worms, mollusks, fish, amphibians**
  - Invertebrates and vertebrates (examples)

Life cycles
Internal and external structure
Habitats and food needs
Characteristics

Role of zoologists

Ecology

Populations

Factors that limit organisms in an ecosystem
Ways organisms compete for resources
An organism's niche

Endangered Species

Role of Ecologists

Spring Semester
Third 9 weeks

Chemistry

Atoms

Parts of atoms and their changes
Construct a model

Molecules

Mixtures and compounds

Elements

Define
Identify common elements
Recognize element's properties

Role of John Dalton

Physics

Heat

Speed and force of motion

Refraction and Reflection

Conserving energy

Electric energy

Sound energy

Role of Thomas Edison

(approximate midpoint)

Ecology

Water conservation

Carbon, nitrogen, and water cycle

Waterwise Program Contact:

Subsidence District – Susan Brown

Earth Science

Tides

- Spring tides
- Neap tides

Currents

- Causes
- Contrast surface and deep-water

Rocks and Weathering

Earth Layers

- Crust , mantle, and core

Erosion

- Define
- Forces of

Soil Formation

Astronomy

Stars

- Position
- Size, temperature, distance

Comparison of earth and moon

Solar System

- Model or diagram of
- Gravity
- Sun's necessity
- Earth's revolution

Role of Copernicus