

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