# **Unit 4 - Living Things - Alike and Different**

Content Area: Science
Course(s): Science 1
Time Period: October
Length: 3-4 weeks
Status: Published

### **Unit Overview**

#### **Essential Questions**

How are living things alike and different?

What are some groups of living things?

How do some animals grow?

How are living things like their parents?

How are groups of living things different?

#### **Content**

Some groups of living things are: plants with flowers, plants without flowers, animals with a backbone, and animals without a backbone.

Animals grow according to their life cycle.

Many animals have the same shape and number of legs as their parents.

There are different kinds of plants and animals.

#### **Skills**

Describe ways to group living things

Describe how some animals grow and change

Know that plants and animals look like their parents

Understand how groups of living things are alike and different

#### **Assessments**

Group some living things

Describe how some plants and animals grow and change

Describe similarities and differences between a parent and its offspring

Understand that individuals in a plant or animal group share certain characteristics but also have some differences

Study Guide

Chapter Review

Chapter Test

Performance-Based Assessment Program Guide pg.52: Draw a Picture, Grow Plants, and/or Write a Poem

STEM activity book

# **Lessons/Learning Scenarios**

Chapter 4: Lesson 1, Lesson 4, Lesson 5, Lesson 6

Vocabulary

Study Guide

Chapter Review

#### **Standards**

SCI.K-2.5.1.2	All students will understand that science is both a body of knowledge and an evidence-based, model-building enterprise that continually extends, refines, and revises knowledge. The four Science Practices strands encompass the knowledge and reasoning skills that students must acquire to be proficient in science.
SCI.K-2.5.1.2.A	Students understand core concepts and principles of science and use measurement and observation tools to assist in categorizing, representing, and interpreting the natural and designed world.
SCI.K-2.5.1.2.B	Students master the conceptual, mathematical, physical, and computational tools that need to be applied when constructing and evaluating claims.
SCI.K-2.5.1.2.C	Scientific knowledge builds on itself over time.
SCI.K-2.5.2.2.A.a	Living and nonliving things are made of parts and can be described in terms of the materials of which they are made and their physical properties.
SCI.K-2.5.3.2	All students will understand that life science principles are powerful conceptual tools for making sense of the complexity, diversity, and interconnectedness of life on Earth. Order in natural systems arises in accordance with rules that govern the physical world, and the order of natural systems can be modeled and predicted through the use of mathematics.

SCI.K-2.5.3.2.A	Living organisms are composed of cellular units (structures) that carry out functions required for life. Cellular units are composed of molecules, which also carry out biological functions.
SCI.K-2.5.3.2.A.1	Group living and nonliving things according to the characteristics that they share.
SCI.K-2.5.3.2.A.a	Living organisms: Exchange nutrients and water with the environment. Reproduce. Grow and develop in a predictable manner.
SCI.K-2.5.3.2.B	Food is required for energy and building cellular materials. Organisms in an ecosystem have different ways of obtaining food, and some organisms obtain their food directly from other organisms.
SCI.K-2.5.3.2.B.2	Compare how different animals obtain food and water.
SCI.K-2.5.3.2.B.3	Explain that most plants get water from soil through their roots and gather light through their leaves.
SCI.K-2.5.3.2.B.b	Animals have various ways of obtaining food and water. Nearly all animals drink water or eat foods that contain water.
SCI.K-2.5.3.2.B.c	Most plants have roots to get water and leaves to gather sunlight.
SCI.K-2.5.3.2.D	Organisms reproduce, develop, and have predictable life cycles. Organisms contain genetic information that influences their traits, and they pass this on to their offspring during reproduction.
SCI.K-2.5.3.2.D.1	Record the observable characteristics of plants and animals to determine the similarities and differences between parents and their offspring.
SCI.K-2.5.3.2.D.2	Determine the characteristic changes that occur during the life cycle of plants and animals by examining a variety of species, and distinguish between growth and development.
SCI.K-2.5.3.2.D.a	Plants and animals often resemble their parents.
SCI.K-2.5.3.2.D.b	Organisms have predictable characteristics at different stages of development.
SCI.K-2.5.3.2.E	Sometimes, differences between organisms of the same kind provide advantages for surviving and reproducing in different environments. These selective differences may lead to dramatic changes in characteristics of organisms in a population over extremely long periods of time.
SCI.K-2.5.3.2.E.1	Describe similarities and differences in observable traits between parents and offspring.
SCI.K-2.5.3.2.E.a	Variations exist within a group of the same kind of organism.

## Resources