

Animal Kingdom

Program Summary: Participants will learn about animal classification.

K – 2nd grade:

Observe and discuss fur, feathers, scales, and skin. Compare and contrast animals (does this rabbit have scales like the snake?). Observe and discuss body parts and movement. Compare and contrast the animal characteristics to human characteristics. Observe and discuss texture (rough, smooth, soft, hard, bumpy, slimy, wet, dry, etc.), color, size, weight (heavy or not?). For older/advanced students, animal “family group” vocabulary will be used (insects, arachnids, amphibians, reptiles, birds, mammals).

- ✓ SC00-S1C1-01: Observe common objects using multiple senses
- ✓ SC00-S1C1-02: Ask questions based on experiences with objects, organisms, and events in the environment
- ✓ SC00-S4C1-01: Distinguish between living and non-living things
- ✓ SC00-S4C1-02: Name human body parts
- ✓ SC00-S4C1-03: Identify the 5 senses and their corresponding body part (touch - skin, smell - nose, taste - tongue, hearing - ears, sight - eyes)
- ✓ SC00-S4C2-01: Describe that most animals will grow to physically resemble their parents
- ✓ SC00-S4C3-01: Identify some plants and animals that exist in the local environment
- ✓ SC00-S4C3-02: Identify that plants and animals need the following to survive - food, water, air, and space
- ✓ SC00-S5C1-01: Identify the following observable properties of objects using the senses - shape, texture, size, color
- ✓ SC00-S5C1-02: Compare objects by the following observable properties - size, color, type of material
- ✓ SS00 - 3SS-R1: Demonstrate understanding of the concept of location, with emphasis on:
01: determining the relative location of objects using the terms near/far, behind/in front, over/under

- ✓ SC01-S1C1-02: Ask questions based on experiences with objects, organisms, and events in the environment
- ✓ SC01-S4C1-01: Identify characteristics of living things
- ✓ SC01-S4C1-02: Compare observable features of living things - movement (legs, wings), protection (skin, feathers, tree bark), respiration (lungs, gills)
- ✓ SC01-S4C1-03: Identify similarities/differences between/among different groups of animals (#of legs, body coverings, size)
- ✓ SC01-S4C2-02: Identify similarities and differences between animals and their parents
- ✓ SC01-S4C3-01: Identify some plants and animals that exist in the local environment
- ✓ SC01-S4C3-02: Compare habitats in which animals live (desert, prairie, forest, water, underground)
- ✓ SC01-S4C3-03: Describe how plants and animals within a habitat are dependant on each other
- ✓ SC01-S5C1-01: Classify objects by the following observable properties - shape, texture, size, color, weight

- ✓ SC01-S5C2-01: Demonstrate the various ways that objects can move (straight line, zigzag, back-and-forth, round-and-round, fast, slow)
- ✓ SC02-S1C1-02: Formulate relevant questions about the properties of objects, organisms, and events in the environment
- ✓ SC02-S4C1-01: Identify animal structures that serve different functions (sensory, defense, locomotion)
- ✓ SC02-S4C1-02: Identify the following major parts of - digestive system (mouth, esophagus, stomach, small/large intestines), respiratory system (nose, trachea, lungs, diaphragm), circulatory system (heart arteries, veins, blood)
- ✓ SC02-S4C1-03: Describe basic functions of systems (digestive - breakdown and absorption of food, disposal of waste, respiratory - exchange of oxygen and carbon dioxide, circulatory - transportation of nutrients and oxygen throughout the body)
- ✓ SC02-S4C2-01: Describe the life cycle of various insects
- ✓ SC02-S4C2-02: Describe the life cycles of various mammals
- ✓ SC02-S4C2-03: Compare the life cycles of various organisms
- ✓ SC02-S5C1-01: Describe objects in terms of measurable properties - length, weight, temperature

3rd – 4th grade:

Observe and discuss the above at an advanced level (exoskeletons, exothermic, endothermic, etc.). Discuss additional grouping methods (invertebrates vs. vertebrates, herbivores vs. carnivores, etc.)

- ✓ SC03-S1C1-01: Formulate relevant questions about the properties of objects, organisms, and events in the environment using observations and prior knowledge
- ✓ SC03-S4C3-01: Identify the living and non living components of an ecosystem
- ✓ SC03-S4C3-03: Explain the inter-relationships among plants and animals in different environments - consumers, producers, and decomposers
- ✓ SC03-S4C4-01: Identify adaptations of plants and animals that allow them to live in specific environments
- ✓ SC04-S4C1-02: Classify animals by identifiable group characteristics - vertebrates (mammals, birds, fish, reptiles, amphibians) and invertebrates (insects and arachnids)
- ✓ SC04-S4C4-02: Give examples of adaptations that allow plants and animals to survive - camouflage (horned lizards, coyotes), mimicry (Monarch and Viceroy butterflies), physical (cactus spines), mutualism (species of acacia that harbor ants which repel other harmful insects)

5th – 6th grade:

Review vocabulary and characteristics of all “family groups.” If appropriate, introduce Kingdom, Phylum, Class, Order, Family, Genus, and Species information.

- ✓ SC05-S4C1-01: Skeletal System
- ✓ SC05-S4C1-02: Muscular system
- ✓ SC06-S4C1-01: Explain the importance of water to organisms

7th grade and up:

Review all. Particular emphasis on student observation and questioning.

- ✓ SC08-S4C4-01: Explain how an organism's behavior allows it to survive in an environment
- ✓ SC08-S4C4-02: Describe how an organism can maintain a stable internal environment while living in a constantly changing external environment