



Kentucky Academic Standards Addressed By Zoo Program

ARE PRIMATES RIGHT HANDED OR LEFT HANDED?

Program description:

Students will think about their hand preference. Using inquiry and a variety of tools, they will discover whether the Zoo's primates are right handed or left handed.

Kentucky *Core Content for Science Assessment* standards addressed by this program:

EARLY PRIMARY – 6TH GRADE

Subdomain: Biological Science

Organizer: Unity and Diversity

Standards:

Early Primary

SC-EP-3.4.3.

Students will describe the basic structures and related functions of plants and animals that contribute to growth, reproduction and survival.

Each plant or animal has observable structures that serve different functions in growth, survival and reproduction. For example, humans have distinct body structures for walking, holding, seeing and talking. These observable structures should be explored to sort, classify, compare and describe organisms.

SC-04-3.4.1

Students will:

- Compare the different structures and functions of plants and animals that contribute to the growth, survival and reproduction of the organisms;
- Make inferences about the relationship between structure and function in organisms.

Each plant or animal has structures that serve different functions in growth, survival and reproduction. For example, humans have distinct body structures for walking holding, seeing and talking. Evidence about the relationship between structure and function should be used to make inferences and draw conclusions.

SC-04-3.4.4

Students will identify some characteristics of organisms that are inherited from the parents and others that are learned from interactions with the environment.

Observations of plants and animals yield the conclusion that organisms closely resemble their parents at some time in their life cycle. Some

characteristics *e.g., the color of flowers, the number of appendages) are passed to offspring. Other characteristics are learned from the interactions with the environment, such as the ability to ride a bicycle, and these cannot be passed on to the next generations. Explorations related to inherited versus learned characteristics should offer opportunities to collect data and draw conclusions about various groups of organisms.

5th Grade
SC-05-3.4.1

Students will describe and compare living systems to understand the complementary nature of structure and function.

Observations and comparisons of living systems at all levels of organization illustrate the complementary nature of structure and function. Important levels of organization for structure and function include cells, tissues, organs, organ systems, organisms (e.g., bacteria, protists, fungi, plants, animals), and ecosystems. Examining the relationship between structure and function provides a basis for comparisons and classification schemes.

6th Grade
SC-06-3.4.2

Students will make inferences about the factors influencing behavior based on data/evidence of various organism's behaviors.

Every organism requires a set of instructions for specifying its traits. This information is contained in genes located in the chromosomes of each cell that can be illustrated through the use of models. Heredity is the passage of these instructions from one generation to another and should be distinguished from learned traits.

8th Grade
SC-08-3.4.4

Students will describe and explain patterns found within groups of organisms in order to make biological classifications of those organisms.

Observations and patterns found within groups of organisms allow for biological classifications based on how organisms are related.

Subdomain: Biological Science
Organizer: Biological Change
Standards:

5th Grade
SC-05-3.5.1

Students will describe cause and effect relationships between enhanced survival/reproductive success and particular biological adaptations (e.g., changes in structures, behaviors, and/or physiology) to generalize about the diversity of populations of organisms.

Biological change over time accounts for the diversity of populations developed through gradual processes over many generations. Examining cause and effect relationships between enhanced survival/reproductive

success and biological adaptations (e.g., changes in structures, behaviors, and/or physiology), based on evidence gathered, creates the basis for explaining diversity.

6th Grade
SC-06-3.5.1

Students will explain that biological change over time accounts for the diversity of species developed through gradual processes over many generations.

Biological adaptations include changes in structures, behaviors, or physiology that enhance survival and reproductive success in a particular environment.