

**Sunshine State Standards, Grades K-2
Benchmarks that can be taught through
The Dinosaurs of China exhibit**

Strand A: The Nature of Matter

Standard 1: The student understands that all matter has observable, measurable properties.

Benchmark SC.A.1.1.1: The student knows that objects can be described, classified, and compared by their composition (e.g., wood or metal) and their physical properties (e.g., color, size, and shape).

Grade Level Expectations

The student:

Kindergarten

1. knows that objects have many different observable properties:

- color
- shapes (circle, triangle, square)
- forms (flexible, stiff, straight, curved)
- textures (rough, smooth, hard, soft)
- sizes and weights (big, little, large, small, heavy, light, wide, thin, long, short)
- positions & speeds (over, under, in, out, above, below, left, right, fast, slow).

First

1. knows that objects can be grouped according to their physical characteristics (for example, shape, color, texture, form, size).

Second

1. knows ways objects can be grouped according to similarities or differences of their physical characteristics.

Strand F: Processes of Life

Standard 1: The student describes patterns of structure and function in living things.

Benchmark SC.F.1.1.1: The student knows the basic needs of all living things.

Grade Level Expectations

The student:

Kindergarten

1. knows some of the basic needs of living things (for example, food, water, space).

First

1. understands that living things need food, water, space, and shelter to survive.

Second

1. understands that the amount of food, water, space, and shelter needed is dependent on the size and kind of living things.

Benchmark SC.F.1.1.4: The student understands that structures of living things are adapted to their function in specific environments.

Grade Level Expectations

The student:

Kindergarten

1. knows that plants and animals are found in different kinds of environments and are often hidden.

First

1. knows that plants and animals have adaptations that help them survive in their environment (camouflage, teeth, spines).

Second

1. understands that structures of living things are adapted to their function in specific environments.

Benchmark SC.F.1.1.5: The student compares and describes the structural characteristics of plants and animals.

Grade Level Expectations

The student:

Kindergarten

1. knows selected characteristics of plants and animals (for example, shape, size, color). First

1. understands different ways in which living things can be grouped (for example, plant/animals, edible plants/non-edible plants).

Second

1. knows some characteristics of the vertebrate groups (mammals, reptiles, birds, amphibians, fish).

2. knows the main parts of plants (stems, leaves, roots, flowers).

3. knows that the structural characteristics of plants and animals are used to group them.

Standard 2: The student understands the process and importance of genetic diversity.

Benchmark SC.F.2.1.1: The student knows that living things have offspring that resemble their parents.

Grade Level Expectations

The student:

Kindergarten

1. knows names for animal offspring (for example, puppies, kittens, cubs, calves, chicks, children).

First

1. knows that plants and animals are similar but not identical to their parents.

Second

1. understands that plants and animals produce offspring with similar characteristics, but individual differences (for example, kittens in a litter may be colored differently).

Benchmark SC.F.2.1.2: The student knows that there are many different kinds of living things that live in a variety of environments.

Grade Level Expectations

The student:

Kindergarten

1. knows that plants and animals may live in different habitats.

First

1. knows plants and animals that live in a particular habitat (for example, black bears in the forest, whales in the ocean, camels in the desert, ducks in the wetlands).

2. knows the characteristics of the climate in different habitats (for example, sunlight, moisture, temperature).

3. knows some ways in which animals and plants are adapted to living in different environments.

Second

1. knows that plants and animals are adapted to different ranges of temperature and moisture.

Standard G: How Living Things Interact with Their Environments.

Strand 1: The student understands the competitive, interdependent, cyclic nature of living things in the environment.

Benchmark SC.G.1.1.2: The student knows that plants and animals are dependent upon each other for survival.

Grade Level Expectations

The student:

Kindergarten

1. understands ways that animals obtain food from plants and other animals.

First

1. knows that plants produce oxygen and food for animals.

2. understands that animals can be grouped according to what they eat.

3. understands that living things are part of a food chain. Second

1. understands that there is an interdependency of plants and animals that can be shown in a food web.

Benchmark SC.G.1.1.3: The student knows that there are many different plants and animals living in many different kinds of environments (e.g., hot, cold, wet, dry, sunny, and dark).

Grade Level Expectations

The student:

Kindergarten

Content addressed in first and second grades.

First

1. knows some characteristics of different environments and some plants and animals found there.

Second

1. understands that living organisms need to be adapted to their environment to survive.

Benchmark SC.G.1.1.4: The student knows that animals and plants can be associated with their environment by an examination of their structural characteristics.

Grade Level Expectations

The student:

Kindergarten

Content addressed in second grade.

First

Content addressed in second grade.

Second

1. knows that animals and plants can be associated with their environment by an examination of their structural characteristics (for example, physical structures are adaptations that allow plants and animals to survive, such as gills in fish, lungs in mammals).

Strand H: The Nature of Science

Standard 1: The student uses the scientific processes and habits of mind to solve problems.

Benchmark SC.H.1.1.1: The student knows that in order to learn, it is important to observe the same things often and compare them.

Grade Level Expectations

The student:

Kindergarten

1. knows that learning can come from careful observation.

First

1. knows that scientific investigations generally work the same way in different places.

Second

1. knows the difference between verified observation and personal interpretation.

Benchmark SC.H.1.1.4: The student knows that people use scientific processes including hypothesis, making inferences, and recording and communicating data when exploring the natural world.

Grade Level Expectations

The student:

Kindergarten

1. poses questions, seeks answers, draws pictures of observations, and makes decisions using information.

First

1. uses simple graphs, pictures, written statements, and numbers to observe, describe, record, and compare data.

Second

1. understands that, through the use of science processes, people can solve problems and make decisions.
2. analyzes information to make predictions, makes sketches and diagrams to explain ideas, draws conclusions using information and prior knowledge.
3. keeps science records.

Benchmark SC.H.1.1.5: The student uses the senses, tools, and instruments to obtain information from his or her surroundings.

Grade Level Expectations

The student:

Kindergarten

1. knows that the five senses (taste, touch, smell, hearing, sight) allow us to take in and respond to information in order to learn about our surroundings.

First

1. uses a variety of tools (for example, thermometers, magnifiers, rulers, scales, computers) to identify characteristics of objects.
2. uses standard (for example, centimeters) and nonstandard units (for example, paper clips, hands, pencils) to measure organisms and objects and parts of organisms and objects.

Second

1. uses a variety of tools to observe, measure, analyze and predict changes in size, mass, temperature, color, position, quantity, sound, and movement.
2. uses metric and standard English units to measure distance, volume, mass, and temperature.

Standard 3: The student understands that science, technology, and society are interwoven and interdependent.

Benchmark SC.H.3.1.1: The student knows that scientists and technologists use a variety of tools (e.g., thermometers, magnifiers, rulers, and scales) to obtain information in more detail and to make work easier.

Grade Level Expectations

The student:

Kindergarten

1. knows some appropriate tools for collecting information and extending the senses.

First

1. knows that scientists and technologists use a variety of tools (e.g., thermometers, magnifiers, rulers, and scales) to obtain information in more detail and to make work easier.

Second

1. knows ways in which tools are used by scientists (for example, to gather information, to analyze, to calculate).