3rd Grade Science

Week 7

Your Week at a Glance
• Classifying Plants and Animals • NGSSS: SC.3.L.15.1; SC.3.L.15.2

Student Name:_____

Teacher Name:_____

School: _____

Name _____ Date _____

SC.3.L.15.1 Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors. **SC.3.L.15.2** Classify flowering and nonflowering plants into major groups such as those that produce seeds, or those like ferns and mosses that produce spores, according to their physical characteristics.

Classifying Plants and Animals

Classifying means sorting into groups. For example, the fruit at a grocery store is classified. The apples might be in one bin, and the oranges in another bin. Plants and animals can also be sorted into groups.

All animals are sorted into two main groups. **Vertebrates** are animals that have a backbone. **Invertebrates** do not have a backbone.

Vertebrates

Many familiar animals are vertebrates. Ducks, mice, and dogs are vertebrates. People have backbones, so they are vertebrates, too.

Vertebrates have some other ways they are similar. Vertebrates all have a skeleton that is inside their bodies. The have muscles. They breathe using lungs or gills.

Laying Eggs or Live Birth

Some groups of vertebrates lay eggs. You might be familiar with bird eggs or frog eggs. Other groups of vertebrates give birth to live young. Horses, cows, mice, and rabbits all give birth to live young. So do people.

Vertebrates can be classified into five groups as shown in the chart.

Group	Description	Examples
Fish	• Breathes with gills • Lay eggs • Live in the water	• Trout • Carp • Salmon
Amphibians	• Have gills then lungs • Lay eggs • Live in water, then land	• Salamander • Frog • Toad
Reptiles	• Breathe with lungs • Most lay eggs • Have scaly skin or plates	• Alligator • Crocodile • Snake
Birds	• Breathe with lungs • Lay eggs • Have feathers	• Robin • Egret • Wren
Mammals	• Breathe with lungs • Live birth • Have hair or fur	• Rabbit • Cow • Mouse

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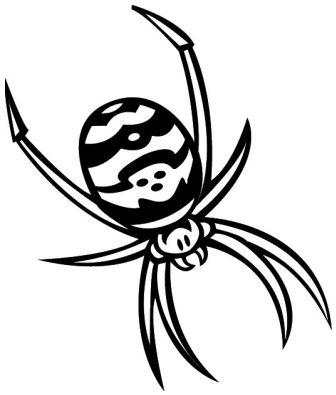
Invertebrates

Invertebrates are animals that do not have a backbone. Some invertebrates, like spiders, have a hard outer shell on their bodies. Crabs and lobsters are also invertebrates with hard body coverings.



Other invertebrates have soft bodies. Worms are an example of an invertebrate with a soft body. So are jellyfish.

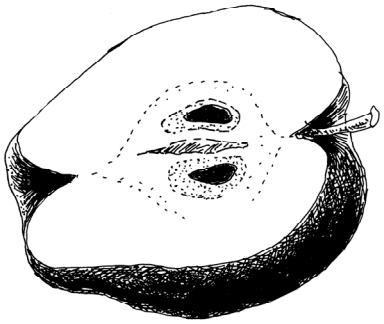
Classifying Plants

Plants are all similar in some ways. For example, all plants make their own food. Like animals, plants can be sorted into groups.

One characteristic used to sort plants into groups is the way that they make new plants. When plants are sorted this way, there are two groups: flowering plants and nonflowering plants.

Flowering Plants

Flowering plants reproduce using flowers. In these plants, seeds form in flowers. Orange trees, apple trees, and beans are flowering plants. So are roses and daisies. All flowering plants make seeds. They can be classified as seed plants.



Nonflowering Plants

Nonflowering plants reproduce without using flowers. Pine trees are an example. Their seeds are made in cones.

Other plants that do not have flowers also do not have seeds. They reproduce using spores. Ferns and mosses are examples of plants that makes spores. In some ways, spores are like seeds. When spores drop to the ground, a new plant can grow.

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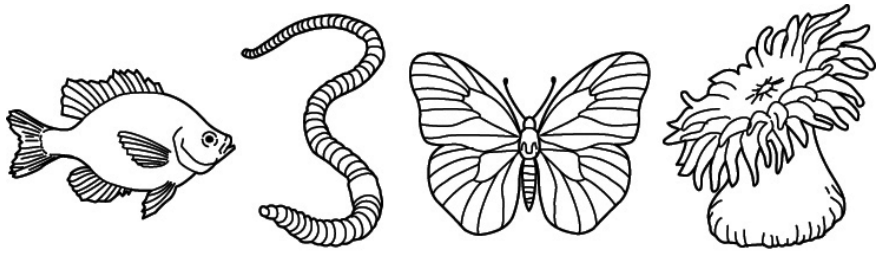
Name _____ Date _____

Student-Response Activity

❶ Observe these animals. Classify them as vertebrates or invertebrates. Circle the numbers of the vertebrates. Cross out the numbers of the invertebrates.



❷ Choose one animal from Question 1. Explain how you classified it.

_____

_____

_____

_____

❸ Classify a fern as a flowering plant or as a nonflowering plant. Explain your answer.

_____

_____

_____

_____

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Benchmark Assessment SC.3.L.15.1 SC.3.L.15.2

Fill in the letter of the best choice.

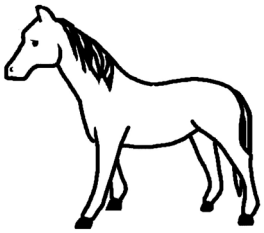
❶ What is produced in cones and flowers?

Ⓐ food
Ⓑ seeds
Ⓒ spores
Ⓓ water

❷ Which plant makes spores?

Ⓕ apple tree
Ⓖ fern
Ⓗ orange tree
Ⓘ rose

❸ How should this animal be classified?



Ⓐ amphibian
Ⓑ invertebrate
Ⓒ mammal
Ⓓ reptile

❹ Which animal lays eggs?

Ⓕ cat
Ⓖ duck
Ⓗ mouse
Ⓘ whale

❺ Which animal is an invertebrate?

Ⓐ cow
Ⓑ frog
Ⓒ snake
Ⓓ worm

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