

## Sample Lesson #2

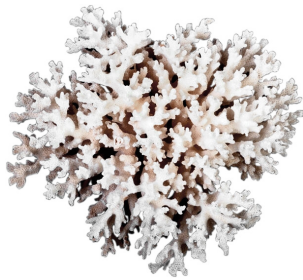
### Classification: Major Groups of Animals

Just as we did with the plants, let's look at the major groups of animals. As we consider each group, we will focus on the differences between this animal group and the others we will study. The six major groups are invertebrates, fish, amphibians, reptiles, birds, and mammals.

When we compare the body plans of different animals, we will look at several features:

- What type of body plan does this animal have? Many animals exhibit what is called *symmetry*. This refers to the level of organization the body has. Some organisms are **asymmetrical**, which means they have no particular organization, while others have **radial symmetry**, meaning they are organized around a central point. The most advanced animals tend to have **bilateral symmetry**, in which the animal's two sides look like mirror images of each other.

Asymmetrical



Radial Symmetry



Bilateral Symmetry



- What structure supports this animal? Does it have a skeleton? Does it have a backbone?
- What types of organized body systems does this animal have? For example, what type of circulatory, respiratory, digestive, and nervous system does it have? How does this animal transport nutrients? How does it get the oxygen it needs to survive? Does it feel pain? How does it process its food?
- How does this animal adapt to its surroundings?

1. There are six major groups of animals. Three are listed below. Write in the missing three.

Fish

Reptiles

Mammals

2. The prefix *a-* in front of a word often means not, such as in *asymmetrical*, which means not symmetrical. Which of the following terms means not living?

abiotic

atypical

apathetic

3. The most specific category of all living matter is \_\_\_\_\_.

domain      class      genus      species

4. The word *symmetry* refers to balance or sameness. An object has bilateral symmetry if you can draw an imaginary line through the middle and see that the two sides are mirror images. Circle the objects below that show bilateral symmetry.



5. Which of the following is not a reservoir in the carbon cycle?

air      ocean      fossil fuels

6. Which of the following spheres includes all animals and plants?

lithosphere      atmosphere      biosphere

7. The difference between nonvascular plants and all other plants is that nonvascular plants do not have (veins / seeds / stems).

8. In the grasslands, the tickbird lives on the back of the black rhinoceros. This arrangement provides the tickbird with ample food in the form of bugs that “bug” the rhinoceros. In return, the tickbird gives a loud squawk, alerting the rhinoceros to any approaching danger.

This arrangement is an example of \_\_\_\_\_.

parasitism      mutualism      commensalism

9. Which protein-producing cell organelle is being pointed to in the picture?

nucleus      ribosome      Golgi bodies

10. A warm weather front can be predicted from what type of cloud formation?

cumulonimbus      cumulus      stratus