

Classifying Living Things

Read the passage below.

Classification is a method for organizing or sorting information. A classification system makes information more meaningful and useful to us. Classification is used in many ways in our daily lives. Perhaps you have a classification system in place for your clothing. You may put all your socks in one drawer of a dresser, your shirts or sweaters in another drawer, and have your under garments and trousers organized separately as well. This kind of sorting helps us to find what we are looking for and it is easy to understand how classification will be helpful to us when we try to understand the relationship of living things.

The classification of living things is called **taxonomy**. Taxonomy involves the organization of all living things based on their **characteristics**. Hundreds of years ago scientists studied living things. They observed certain unique features of living things could be used to help us identify all life forms. All living things were first divided into two kingdoms; plants and animals. Later each of these two kingdoms was subdivided into groups. Each member of the group needed to have structures like the rest of the group. In one group, all creatures had backbones. Animals such as birds, fish, dogs and lizards all were in this group. Animals such as snails, spiders and worms did not have backbones and were put in other groups. Different groups were formed based on some structure they shared. Each time a group was subdivided; a new level was created and named.

Five different groups were formed many years ago. Today we recognize these five groups and two other groups. We call these groups the seven levels of classification and they are called Kingdom, Phylum, Class, Order, Family, Genus, and Species. Each species represents every living thing in the world.

When a new **organism** is discovered it is studied carefully. It is compared to other groups of organisms. When a group that shares the same characteristics as this new organism is found, the new organism is classified as a member of this group.

Classifying Living Things - Activity 1

1. Read the following sentence.

“Classification is a method for organizing or sorting information.” (Line 1)

Another word for “classification” is

- a. finding
- b. taxonomy
- c. morphology
- d. writing

2. Which word from the passage means

“unique features about living things”

- a. organisms
- b. classification
- c. garments
- d. characteristics

3. Which word has a suffix added to it?

- a. meaningful
- b. endanger
- c. backbone
- d. unusual

Classifying Living Things - Activity 2

Marine mammals such as killer whales, dolphins, seals, beluga whales, and sea lions have many things in common. Animals such as the Canada geese, domestic mallards, black bears, buffalo, red deer, elk, carp and catfish are not as much alike.

Your task is to design your own system for classifying animal life. You will need to come up with categories for organizing your animals. All the animals listed above must be included in your categories of taxonomy. Include other animals, not listed above, in your system.

Use your own ideas and ideas from the passage to help you plan your classification system.

Think:

How are these animals alike?

How are these animals different?

What characteristics will I use to compare my animals?

Will my chosen characteristics help me to classify my animals?

Plan:

Use this box to organize your ideas.

The Name of My Animal Classification System: _____

Possible characteristics:

Number of Groups _____

Names of Groups:

Animals in each group:

Write:

- Create a draft of your Animal Classification System on the blank paper provided by your teacher.
- Use your plan as a guide. Organize your ideas in chart or table form. Include a short paragraph at the end to explain why you chose the groupings you did.
- Remember to leave space between all lines of text, for editing.
- Use pencil.

Edit:

Share your draft Animal Classification System with a classmate. Read your work. Ask your classmate the questions below and record suggestions in the spaces provided.

	Yes	No
1. Did I name my classification system?	☺	☺
2. Did I choose groups for classifying my animals?	☺	☺
3. Have I organized my animals into the groups?	☺	☺
4. Did I write my paragraph to explain my design?	☺	☺
5. Does my paragraph have an opening and closing sentence?	☺	☺
6. Do you have any other suggestions?	☺	☺

Revision Suggestions:

Revise:

1. Read your “Revision Suggestions”.
2. Make changes on your draft copy.
3. Proofread your draft again. Check carefully for each of the following:
 - Do my words make sense?
 - Did I need to use punctuation and did I use the right punctuation?
 - . period
 - ? question mark
 - ! exclamation mark
 - “” quotation marks
 - Did I use capitals correctly? (names, sentence beginnings)
 - Did I spell the words correctly?
 - Do my printed ideas have missing words or extra words?
 - Can I make my work better by changing any words or ideas?
 - Is my work neat?

A Final Copy:

You are now ready to begin the final copy of your Animal Classification System and paragraph of rationale. Use the paper provided by your teacher.