

CLASSIFICATION

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Activities will help students explore the concept of classification—the arranging of things by like elements. The basis is a simple taxonomy. Some scientific names are briefly introduced and explained.

General background information, suggested activities, questions for discussion, and answers are included.

Encourage students to keep completed pages in a folder or notebook for further reference and review.

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CLASSIFICATION

WHAT IS CLASSIFICATION?

Classification is a system of grouping things which are alike in some way. There is no perfect way to classify all things in the world. A classification system should have a useful purpose for the persons who are using it. One important purpose is to help you learn how things can be related.

Classify the objects below into four categories:

Use

Shape

Living

Nonliving



Use	Shape	Living	Nonliving	?	?

Choose two other categories and fill them with appropriate objects. Can an object be in more than one category? Put a star by those which are.

DISCUSS

Is there only one correct way to put objects into categories?

CLASSIFICATION

WHY DO WE CLASSIFY?

We classify physical nonliving things as well as living things in order to organize them. If there were no method of classification in a library, you would never find the book you wanted. When you shop at a supermarket, you know where to find apples or milk because the products are organized.

If you owned a small hardware store, how would you display your products?

Counter 1 _____

 Counter 2 _____

 Counter 3 _____

 Counter 4 _____

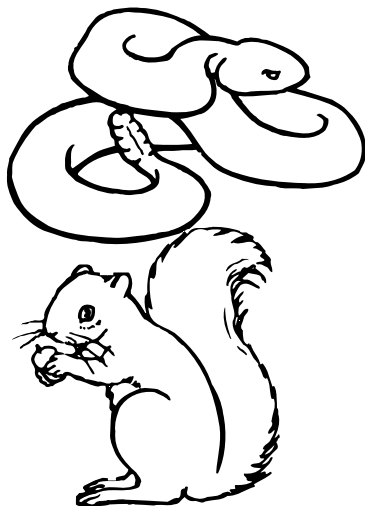


How would your system help shoppers? _____

How would it help you? _____

In very early days animals and other living (biological) organisms were classified according to whether they were harmful or nonharmful.

List animals you think might be harmful or nonharmful to humans.



HARMFUL

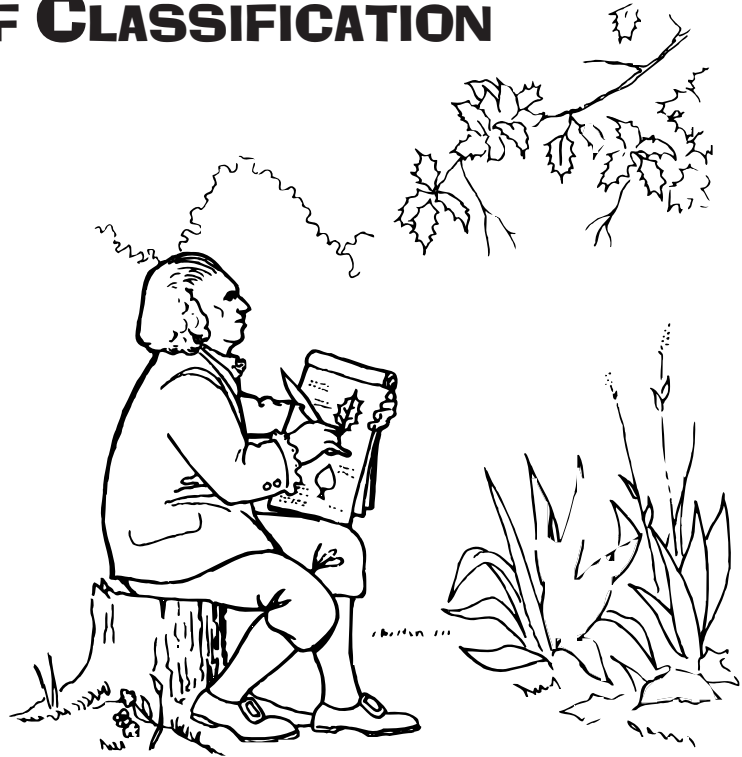
NONHARMFUL

DISCUSS

Do you think this early system of classification had a useful purpose? Why?

CLASSIFICATION**HISTORY OF CLASSIFICATION**

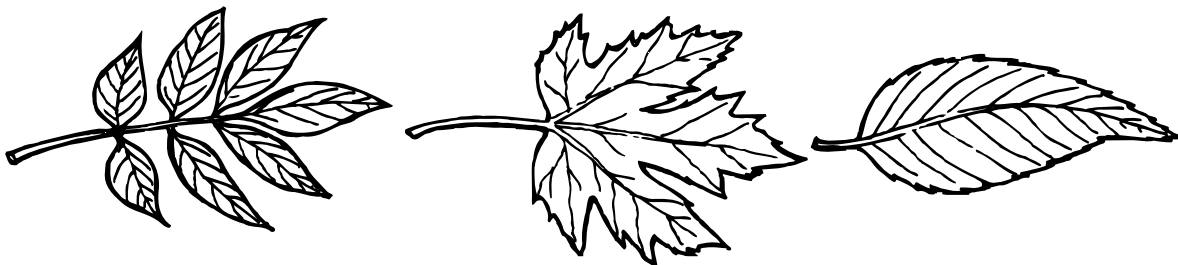
A very simple early classification system was used by the Greek scholar, Aristotle. He grouped animals into two-legged and four-legged classes. Later, other scholars and scientists studied animals and plants. They recorded more detailed facts. But it was not until the 1700s that our modern system of classification was created by a Swedish botanist and doctor, Carolus Linnaeus. His aim was to name and describe all plants and animals in the world. Although the **Linnaean System** is still used by scientists all over the world, it has been expanded to include new and different living things as they are discovered. It will continue to grow as human knowledge grows.



Research and write a short biography of Linnaeus.

ACTIVITY

Linnaeus copied his careful studies of each plant into a notebook. Bring three leaves from different trees or plants. Carefully study the shapes, stems, veins, colors and texture. Describe each leaf on a separate sheet of paper as Linnaeus did. When the leaves are dry, you can make a skeleton by placing one between two sheets of paper and pressing the top. You will then be able to study the veins. Compare your three studies for similarities and differences.

**ACTIVITY**

Collect five leaves from different trees or plants. Sort them into such classes as: smooth, serrated, lobed, compound, needles, color, etc. List ways they are alike and different.
