

# Classification

Age: 3rd grade-up

## Lecture and Activity

Classification of animals is a way to put them into groups that share the same traits. This is an important way to see how animals are related to each other. They are divided using traits or characteristics (like whether they have a backbone or not). The way we classify animals and plants was created by a scientist named Linnaeus.

The Linnaeus system classifies plants and animals on seven levels, using Latin and Greek words. With the development of genome science, the biological connection between animals is beginning to alter and within a generation, there will be a more accurate classification system. But for now scientists accept the classic Linnaeus system which can be shown in the following way.

All living things are classified on the seven levels:

Kingdom

Phylum

Class

Order

Family

Genus

Species

An example of how this works in an Eastern Chipmunk is:

Kingdom	Animalia	animal
Phylum	Chordata	has backbone
Class	Mammalia	has backbone, nurses young
Order	Rodentia	has backbone, nurses young, long, sharp front teeth
Family	Scuridae	has backbone, nurses young, long, sharp front teeth, bushy tail
Genus	Tamias	has backbone, nurses young, long, sharp front teeth, bushy tail, climbs trees
Species	striatus	has backbone, nurses young, long, sharp front teeth, bushy tail, climbs trees, stripes

## Animal Classification Activity

**Purpose:** To understand the concept of classification using a simple key.

To Prepare:

1. Photocopy “key sheets” (one per student).
2. Photocopy several animal sheets.
4. Separate the 12 animals. Put them out on a table, face up.
5. Let students choose animals and run through the key to name them. They should try several different animals to get the feel of how a key works.

# Learning to use a Dicotomous Key

tape animal here

1. Do you have a backbone?  
Yes - wait for number 3  
No - you are an insect - wait for number 2
2. Do you change (metamorphosis) from a caterpillar to your adult form?  
Yes - you are a butterfly!  
No - you are a grasshopper!
3. Do you have gills and scales?  
Yes - you are a fish!  
No - wait for number 4
4. Do you lay eggs?  
Yes - wait for number 5  
No - wait for number 10
5. Do you have feathers?  
Yes - you are a bird!  
No - wait for number 6
6. Do you lay eggs in the water?  
Yes - wait for number 7  
No - wait for number 8
7. Do you live on land but come back to the water to lay your eggs.  
Yes - wait for number 9  
No - you are a pickerel frog!
8. Do you have a protective shell?  
Yes - you are a turtle!  
No - you are a snake!
9. Do you have lots of warty bumps and no tail?  
Yes - you are a toad!  
No - you are a newt (red eft)
10. Are you a carnivore (eat meat)?  
Yes - you are a fox  
No, wait for 11
11. Are you an omnivore?  
Yes - you are a raccoon!  
No - you are a herbivore - wait for number 12
12. Are you a rodent?  
Yes - you are a squirrel!  
No - you are a moose!

