What's in a Name?

A robin is familiar to all of us. However, if you were talking with someone in America about the robin, things could become very confusing. You see, although we are both using the name "robin", it is not the same bird. The robin that is common in Ireland, and in the rest of Europe, is the European Robin. The American Robin, though similar, is not related.
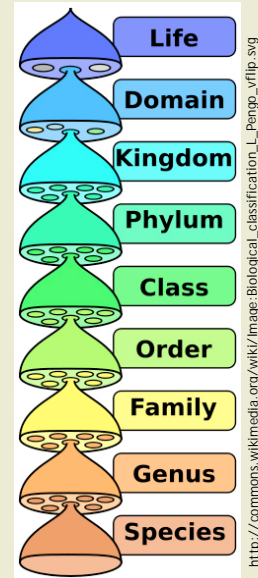

The European Robin
Erithacus rubecula

The American Robin
Turdus migratorius

There are many other examples where names can be confusing. Take the Mountain Lion – this big cat is also known as the panther, cougar or puma - very confusing if you know it as one or the other! In some cases, language may be the only problem - in Ireland we all know the flower called the "daisy" but in France it is known as a "pâquerette". If you didn't speak French you won't know which flower was which.

So how do scientists know which animals are which when they come together to discuss them? Well, to avoid any confusion, they use a common language and that is Latin. Every animal and plant has been given a Latin name.

In the 1700s, Swedish scientist Carl Linnaeus developed a system for naming plants and animals, a system which is still used by scientists today. Away back then Latin was a common language among scientists and so Linnaeus used it for his naming system.

Life is mostly divided into two main kingdoms - the animal kingdom and the plant kingdom. Each **kingdom** can be divided into categories that contains animals (or plants) with similar characteristics. Each category is known as a **phylum** (there are several phyla in a kingdom). An example of one phylum is Chordata – a category that contains animals with backbones (mammals, fish, birds, amphibians and reptiles). Another phylum is Arthropoda, which includes insects, spiders and crustaceans e.g. crabs.

http://commons.wikimedia.org/wiki/Image:Biological_classification_L_Pengo_vflip.svg

Next, each phylum is divided into **Class** - more familiar groups such as mammals Mammalia (mammals), Amphibia (amphibians), Aves - (Aves) etc.., then into **Order** - where each Class can have one or more Orders - for example Mammalia can be broken into Carnivora (dogs, cats etc..), Primates (monkeys), Rodentia (rats & mice) etc....

Class is then divided into **Family**, with animals such as cats in the Felidae family, dogs in the Canidae family and bears in the Ursidae family.

Families are then divided in **Genus**, containing animals (or plants) which are closely related, for example, in the cat family (Felidae) there are Felis (domestic cats), Panthera (lions and tigers), Acinonyx (cheetah) and many more.

Within a Genus, animals (or plants) are finally divided into **Species**, which gives you a name for each individual animal. For example, dividing the genus *Panthera* (lions and tigers) gives you such big cats as the tiger (*Panthera tigris*), lion (*Panthera leo*), jaguar (*Panthera onca*).

The genus accompanies the species names, with the genus name coming first, beginning with a capital letter, and the species name second, beginning with a lower case letter. The genus and species are usually written in italics e.g. *Panthera onca* (the jaguar)

The system of arranging animals and plants, with similar characteristics, into sets or groups is called **classification**. The science of naming and classifying animals and plants is called **taxonomy**.