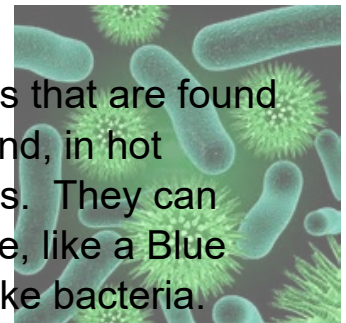We share the earth with many other living things that are found in many different places such as in water, on land, in hot deserts, in deep oceans and in the polar regions. They can even be found living inside you. Some are large, like a Blue Whale (30 m long) but some are microscopic, like bacteria.

Why do we classify things?

copy

* We classify things into groups in order to make things easier to understand.

* All living things share a set of charateristics in order to survive.

* All living things are grouped into the first level of classification known as a "kingdom".

There are 5 Kingdoms

1) Animals

2) Plants

3) Fungi

4) Monera (Bacteria)

5) Protists (Single-cell)

The Diversity of Living Things Continued

Copy all

2) Phylum

Animals have been divide into 25 phyla (groups) . They may be grouped by similar in basic structure.

    Ex) The elephant, fish and polar bear all belong to the Chordata Phylum because they all have a backbone.

3) Class

Class members have more common characteristics.

Ex) Amphibians
- -All live part of life in water and on land
- - Cold Blooded
- -Back Bone
- -Moist, smooth skin

Ex)

Invertebrates	Vertebrates
Arthropods	Mammals
Spiders	Birds
Insects	Amphibians
	Reptiles
	Fish

4) Order

Groups are more alike than those of class

EX) Three primary orders of Amphibia within the Subclass Lissamphibia
- > Caudata (Urodela) - Salamanders
- > Anura (Salientia) - Frogs and toads
- > Apoda (Gymnophiona) - Caecilians

5) Family

Groups are more alike than those of order (Ex. Salamanders with hidden gills are in the family Cryptobranchidae)

ex) Family Cryptobranchidae - hellbenders
- > "hidden gill"
- > contain the largest living salamanders
- > distributed in eastern US, Japan, one species in China to 9
- > *Cryptobranchis alleganiensis* found in Appalachians of Kentucky/Tenne

Family Ambystomatidae - mole salamanders
- > restricted to US and Canada
- > represented by marbled, tiger, and small-mouthed salamanders

6) Genus

These are made up of groups that are very similar, but the groups cannot breed together. Ex) Coyotes & Wolves

7) Species

Is a population of animals that can breed with one another. The young grow up to look like their parents.

https://www.nationalgeographic.com/animals/2006/05/grizzly-polar-bear-hybrid-animals/#close