

The Diversity of Living Things Continued

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)

<u>Invertebrates</u>	<u>Vertebrates</u>
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) ^{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/Tennessee
- ^{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.

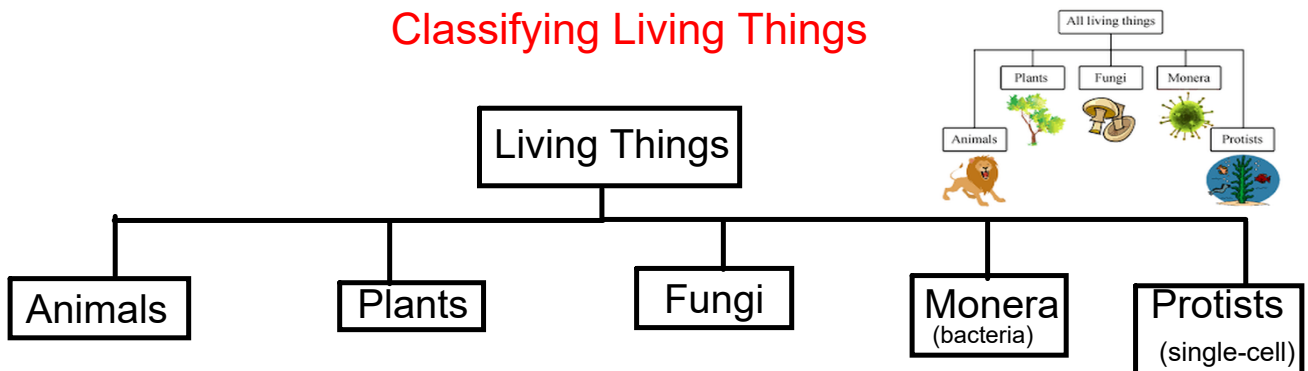
Proper terminology

We will look at this in a bit

What are some other Animal Phyla?

- **Porifera & Cnidaria – sponges & corals.**
- **Platyhelminthes - flatworms, tapeworms**
- **Nematoda - roundworms**
- **Mollusca - clams, snails & slugs, squids**
- **Echinodermata - starfish, sea urchins**
- **Annelida - segmented worms
(earthworms)**
- **Chordata - fish, amphibians, reptiles,
birds, mammals**

Classifying Living Things



A breakdown of more of each category is to follow on the next few slides

