

## 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.

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