

# Taxonomy

## TAXONOMY-Classification of living things

### Early Systems of Classification

- In the 1500s, **Aristotle** classified organisms as either animals or plants.

Aristotle's Classification System		
Plants		
Herbs	Shrubs	Trees
Violets Rosemary Onions	Blackberry bush Honeysuckle Flannelbush	Apple Oak Maple
Animals with red blood		
Land	Water	Air
Wolf Cat Bear	Dolphin Eel Sea bass	Owl Bat Crow

### Linnaeus's System

- Linnaeus's system of classification was the first formal system of **taxonomy**.
- System based on **STRUCTURAL** similarities and **EVOLUTIONARY** relationships



Bird of prey



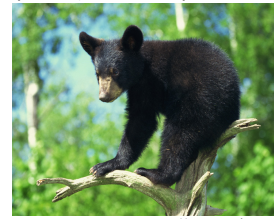
Perching bird



Wading bird

- Linnaeus's method of naming organisms, called **binomial nomenclature**, gives each species a scientific name (Genus & species) with two parts.

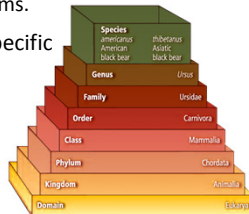
- Scientific names are in **Latin** and used in Biology because common names can vary



*Ursus americanus*  
American black bear

### Taxonomic Categories

- A named group of organisms is called a **taxa**.
- The **domain** is the broadest of all the taxa and contains one or more kingdoms.
- Arranged from broad to specific
  - Kingdom (broad)
  - Phylum/Division
  - Class
  - Order
  - Family
  - Genus
  - Species (specific)



## The Linnaeus System Written in Latin

- |                               |                        |
|-------------------------------|------------------------|
| 1. KINGDOM – Broadest         | (Animalia)             |
| 2. PHYLUM / DIVISION          | (Chordata)             |
| 3. CLASS                      | (Mammalia)             |
| 4. ORDER                      | (Primate)              |
| 5. FAMILY                     | (Hominidae)            |
| 6. GENUS                      | ( <i>Homo</i> )        |
| 7. SPECIES- specific organism | ( <i>Homo sapien</i> ) |

An organisms scientific name is their genus and species classification