**Linnaeus** = created the system we use to classify all things.

**Classification Groups Used Today** *(Biggest to smallest)*

- __________________________ *(broadest)*
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________
- __________________________

Two organisms that are in the same **FAMILY** may not be in the same __________________________ but must be classified in the same ________________

Every organism has a universal **scientific name** made up of 2 words.

- The first word in each name comes from the organism’s __________________________.
- The second word in each name comes from the organism’s __________________________.

Organisms are classified as the same species if they:

1. have a similar __________________________.
2. are found together in nature.
3. can __________________________ and have ________________ that are fertile.
Important terms used to describe some basic characteristics of organisms:

- ____________________ - no nucleus or membrane bound organelles in their cells.
- ____________________ - cells contain a nucleus & membrane bound organelles.
- ____________________ - can produce usable energy on their own.
- ____________________ - must eat to get energy.

Showing Evolutionary Relationships

Use the cladogram to answer questions 1-3.
1. Which animal is the most primitive? ______________
2. What characteristics are shared by the lamprey and the turtle? ______________________________
3. Which animal has 4 walking legs, but not amniotic eggs? _____ _____ _______________________

Use the phylogenetic tree to answer questions 4 & 5.

4. What is the common ancestor of B, C & D? _____
5. How long ago did species B first appear? ________

All bacteria are placed into either Kingdom: ____________________ or ____________________
- All bacteria are unicellular & ____________________
- Organisms in Kingdoms Protista, Plantae, Fungi & Animalia are all ____________________ so they are grouped in the same Domain (__________)

PHYLOGENETIC TREE