

How Are Living Things Classified?

- *Describe how early scientists classified living things.
- *Explain the system of binomial nomenclature.
- *Demonstrate how to use a dichotomous key.

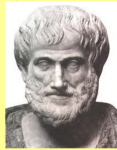
Classification

*Is when you place similar items together.



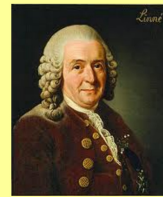
History of Classification

- *In early classification animals were classified by human traits and plants by use.
- *Aristotle observed the living world and started classifying based on physical characteristics.



Linnaeus

*He looked at the structure of the organism to create classification.



Modern Classification

- *Modern scientists classify by internal and external structures.
- *They also look at the history of the organism.



Six Kingdoms

*All living things are placed in a kingdom.



Scientific Names

*Binomial nomenclature is the two name (Genus-species) system used to name organisms.

Kingdom	Animalia	Animalia	Animalia
Phylum	Chordata	Chordata	Arthropoda
Class	Mammalia	Aves	Insecta
Order	Rodentia	Passeriformes	Odonata
Family	Castoridae	Icteridae	Gomphidae
Genus and species	<i>Castor canadensis</i>	<i>Icterus galbula</i>	<i>Gomphus spicatus</i>

Uses of Scientific Names

1. avoid mistakes
2. classify similar origin and history together.
3. give descriptive information
4. allow information to be easily organized

Tools for Identification

*Field Guides have descriptions and illustrations.



*Dichotomous Key is a detailed list of characteristics arranged in steps.