Taxonomy Notes (PPT)

Define Taxonomy:

Why Classify?

How do taxonomists group organisms when they classify them?

Assigning Scientific Names

Why aren’t common names good to use when identifying an organism?

What is used to clear up the confusion?

Ex: Cougar

Who was Carolus Linnaeus?

What is the first part of the scientific name?

How is it written?

How must it always appear?

What is the second part of the scientific name?

How is it written?

How must it always appear?

Example: **Human:** Genus: Species: Scientific name:

**Grizzly Bear:** Genus: Species: Scientific name:

Linnaeus’s System of Classification

How many taxa levels does Linnaeus’ classification system have?

Which taxa level is the largest and most inclusive?

Which taxa level is the smallest and most specific?

Place the taxa of the classification system correctly into the pyramid.

**More specific**

**More general**

The more taxonomic levels two organisms share,

Give the full classification for humans. What is the scientific name for humans?

|  |  |
| --- | --- |
| **KINGDOM** |  |
| **PHYLUM** |  |
| **CLASS** |  |
| **ORDER** |  |
| **FAMILY** |  |
| **GENUS** |  |
| **SPECIES** |  |

**Evolutionary Classification**

Define Phylogeny:

What determines evolutionary relationships?

a.

b.

c.

d.

Cladograms can be used to show these relationships.

What is a clade?

Using Venn diagrams:

* + Four groups are represented by circular regions.

A

B

C

D

* + Each region represents different taxonomic levels.
  + Regions that overlap, share common members.
  + Regions that do not overlap do not have common members.

Label the appropriate regions in the Venn diagram with: mammals, vertebrates, insects, all animals.

A = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ C = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

B = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ D = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Dichotomous Keys:**

What is a dichotomous key?

