**III. Classification**

1. How many known species are there? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. This is \_\_\_\_\_\_\_\_% of all organisms that have ever lived.
2. Classification:

* What is another term for classification?
* What do you call scientists that study classification?
* Classifying organisms makes naming organisms more \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_.
* Classifying prevents \_\_\_\_\_\_\_\_\_\_\_\_ or inaccurate naming.
  + Give two examples of misnomers and explain why they aren't correct.

24. What language(s) is used for scientific naming?

* Why don't scientists around the world just use simpler, common names for organisms?

*Early Taxonomists*

25. Who was the first taxonomist and what two groups did he place organism in?

* How did Aristotle subdivide his two groups?

26. Who was first to use Latin for scientific naming?

* What was the problem with Ray's names?

27. What 18th century taxonomist developed the naming system still used today?

* How did Linnaeus group his organisms?
* Linnaeus is called the: "\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_"
* Linnaeus's naming system called?
* Explain binomial nomenclature:

* What must be done to a scientific name when you are writing it?
* Give an example of a common and scientific name for an animal.

*Taxonomic Groups*

28. What is a taxon?

* There is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of groups that goes from the broadest grouping to the most \_\_\_\_\_\_\_\_\_\_\_\_\_ grouping.

29. Name the 8 taxon in order from broadest to most specific.

30. Write the sentence used to help remember the 8 most important taxonomic levels.

31. Complete the following taxonomic table:

|  |  |
| --- | --- |
| Classification for Humans | |
| Taxonomic Level | Taxon |
| Domain |  |
| Kingdom |  |
| Phylum |  |
| Class |  |
| Order |  |
| Family |  |
| Genus |  |
| Species |  |

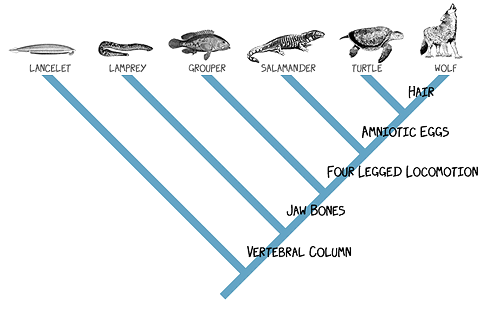
*Domains*

32. Three Domains of Life

* Archaeabacteria:
* Eubacteria:
* Eukaryota:
  + Protista:
  + Fungi:
  + Plantae
  + Animalia:

|  |  |  |  |
| --- | --- | --- | --- |
| Kingdom | Organization | Type of Nutrition | Examples |
| Protista |  |  |  |
| Fungi |  |  |  |
| Plantae |  |  |  |
| Animalia |  |  |  |

33. What is a cladogram?



* What characteristic(s) do the grouper and lamprey share?
* What characteristic is found in all the animals EXCEPT the lancelet?