**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?