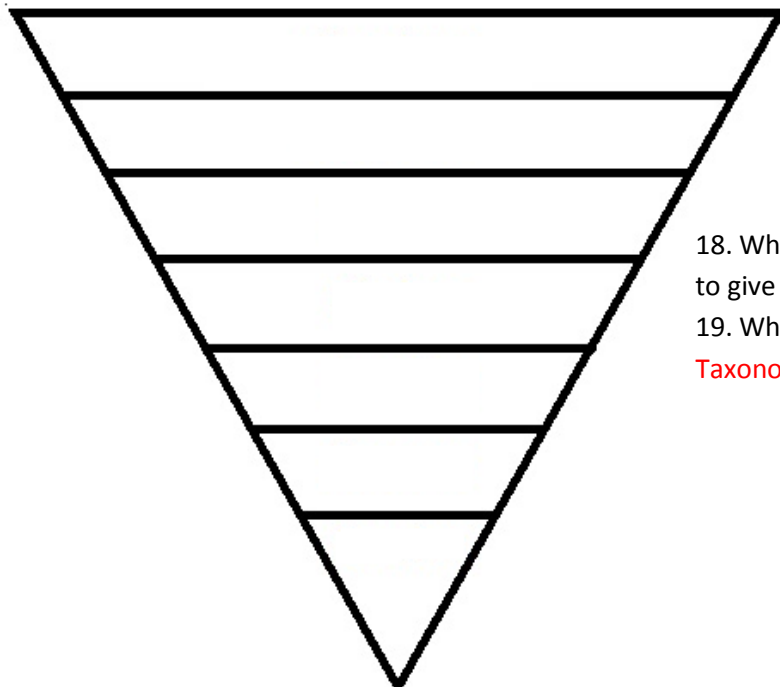


Characteristics and Classification of Life Study Guide

1. What are the 5 characteristics of all living things?
 - I. Living things are made of cells
 - II. Living things can respond to stimuli
 - III. Living things can obtain and use energy
 - IV. Living things reproduce
 - V. Living things grow and develop
2. All living things are made up of **cells**.
3. A change in an organism's surroundings that causes it to react is called a **stimulus**
4. The animal's reaction to a stimulus is called a **response**
5. Ability to make offspring is called **reproduction**
6. Reproduction with one parent is **asexual**
 - I. Offspring is **identical** to parent
7. Reproduction with two parents is **sexual**
 - I. Offspring are **different and a combination** from both parents
8. Organisms, such as plants, that make their own food are **autotrophs**
9. Organisms, such as animals, that cannot make their own food are **heterotrophs**
10. Process of becoming larger is **growth**
11. Process of becoming more complex is **development**
12. List 3 examples of a stimulus and a response

	Stimulus		Response
I.	_____	>	_____
II.	_____	>	_____
III.	_____	>	_____

13. Give 3 examples of heterotrophs: **lions, birds, fish**
14. Give 3 examples of autotrophs: **sunflower, pine tree, grass**
15. **classification** is grouping things based on common traits.
16. What are the levels of classification in order from broadest to most specific.



17. Fill in the mnemonic device to help with the levels of classification.

King Phillip came over for Good Spagetti

18. What two levels of classification do scientists use to give in a scientific name? **Genus Species**

19. What is the science of naming organisms called?
Taxonomy

20. What are the 5 kingdoms?
- I. Monera
 - II. Protist
 - III. Fungi
 - IV. Animals
 - V. Plants
21. What does **Binomial Nomenclature** mean? 2 name naming system
22. Who is the "Father of Taxonomy" **Carolus Linnaeus**
23. What do the trees *Tsuga Canadensis* and *Tsuga caroliniana* have in common? **Same genus**
24. What 3 things do all living things need to survive? **Water, Food, Shelter**
25. What is an example of each of the 5 kingdoms below:
- I. Monera: **bacteria**
 - II. Protist: **algae**
 - III. Fungi: **mold**
 - IV. Animals: **tigers, chickens, turtles, grasshopper**
 - V. Plants: **daisy, oak tree, rose**
26. In the scientific name *Limulus polyphemus*, what is the genus **Limulus** species **polyphemus**
27. Organisms that share the most similarities are found in which level of classification? **species**
28. A tadpole changing to a frog is an example of what characteristics of life? **Growth and Development**
29. A squirrel running up a tree when you walk towards it illustrates what characteristics of life? **Response to Stimulus**
30. If 2 organisms belong in the same order, then they must also belong in the same: **Kingdom, Phylum, Class** (Everything above that level)
31. If 2 organisms belong in the same family, then they must also belong in the same: **Kingdom, Phylum, Class, Order**
32. If 2 organisms belong in the same phylum, then they must also belong in the same: **Kingdom**
33. If 2 organisms belong in the same class, then they must also belong in the same: **Kingdom, Phylum**
34. Organisms that share the least similarities are found in which level of classification? **Kingdom**
35. What level of classification has the most organisms? **Kingdom**
36. What level of classification has the least amount of organisms? **Species**
37. Using the chart below, give the scientific name for a giraffe. ***Giraffa camelopardalis***

Kingdom: Animalia
 Phylum: Chordata
 Class: Mammalia
 Order: Artiodactyla
 Family: Giraffidae
 Genus: Giraffa
 Species: camelopardalis

