

# Kingdom & Domains

## Guided Notes & Questions

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

### A Simpler View Point

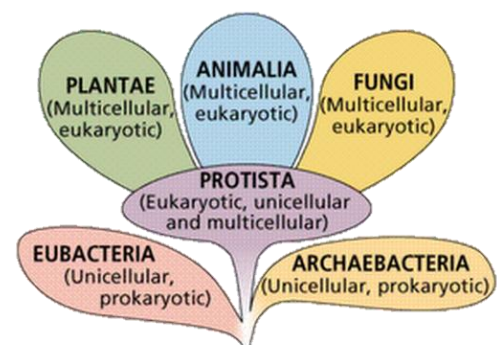
1. Scientific viewpoints were simpler in Linnaeus's time, the only difference between living things were what, that separated animals from plants?
2. Animals were mobile organisms that used food for energy. They were called what? \_\_\_\_\_
3. Plants were green, photosynthetic organisms that used energy from the sun and were called what?

### Five Kingdoms

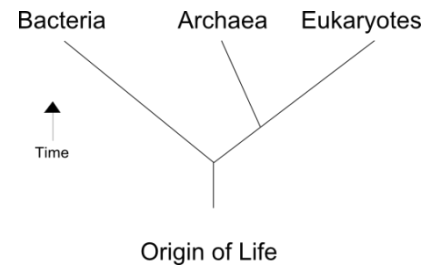
4. Microorganisms, such as \_\_\_\_\_ and \_\_\_\_\_ were recognized as being different than plants and animals, and soon scientist agreed that they should have their own kingdom, in which they named what?
5. What organisms were placed in their own kingdom called **FUNGI**?
6. Still scientist realized they needed a kingdom that would contain organisms that lacked a nuclei, mitochondria and chloroplast. What was the kingdom scientist placed those organisms in?

### Six Kingdoms

7. Evidence continued to accumulate that microorganism within \_\_\_\_\_ were composed of \_\_\_\_\_ distinct groups.
8. Some biologist think the difference between these two groups are as great as what other two Kingdoms?
9. What two kingdoms did **MONERA** separate into?
10. List all six kingdoms in which we classify all organisms into.



# The Three Domain-System



11. Molecular analysis of ribosomal subunits of RNA and the use of molecular clocks have given rise to a new taxonomic category known as \_\_\_\_\_.

12. Domains are a more inclusive that is **LARGER** than a kingdom. There are \_\_\_\_\_ domains.

- \_\_\_\_\_: composed of protest, fungi, plants, and animals.
- \_\_\_\_\_: corresponds with kingdom Eubacteria
- \_\_\_\_\_: corresponds to kingdom Archaeobacteria

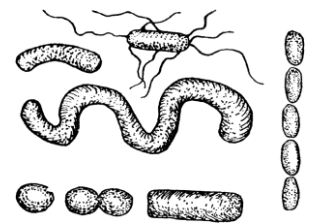
## Domain Bacteria

13. Members of domain \_\_\_\_\_ are unicellular and prokaryotic.

What does prokaryotic mean?

14. The cell walls contain a substance known as

\_\_\_\_\_ : a polymer consisting of



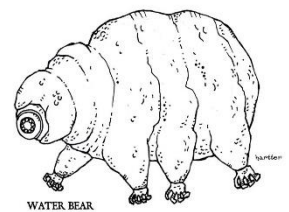
15. Domain Bacteria corresponds with Kingdom \_\_\_\_\_.

- These bacteria are ecologically diverse ranging from free-living soil organisms to deadly parasites. Some photosynthesize, while other do not. Some need oxygen to survive, while others are killed by oxygen.

## Domain Archaea

16. Domain Archaea is also known as what?

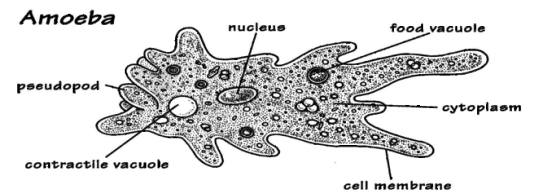
17. These organisms are also unicellular and prokaryotic and live in some of the most \_\_\_\_\_ you can imagine. List some of the extreme environments and organisms below.



18. These organisms lack \_\_\_\_\_ and their cell membranes contain \_\_\_\_\_ that are not found in any other organism.

19. This domain corresponds with Kingdom \_\_\_\_\_.

## Domain Eukarya: Kingdom Protista



20. Kingdom Eukarya consists of what 4 remaining kingdoms?

21. Kingdom \_\_\_\_\_ is composed of \_\_\_\_\_ organisms that CANNOT be classified as animals, plants, or fungi.

- Protista has to be least satisfying category meaning its members display the greatest variety.
- Some protist are unicellular, some are multicellular. Some protist are photosynthetic, while others are heterotrophic. Some display characteristics of plants, while others with fungi or animals.

## Domain Eukarya: Kingdom Fungi



22. Members of the kingdom \_\_\_\_\_ are \_\_\_\_\_.  
Most feed on \_\_\_\_\_. In other words, they need a “host.”

23. Unlike other heterotrophs, these fungi \_\_\_\_\_ into their food source. Then they absorb the smaller food molecules into their bodies.

24. The most recognizable fungi including \_\_\_\_\_ are \_\_\_\_\_. Some fungi include \_\_\_\_\_ and are \_\_\_\_\_.

## Domain Eukarya: Kingdom Plantae

25. The members of \_\_\_\_\_ are multicellular organisms that are photosynthetic \_\_\_\_\_.



26. Plant are called what, meaning they cannot move from place to place.

27. They also have cell walls composed of what? \_\_\_\_\_.

- This kingdom contains cone-bearing and flowering plants as well as mosses and ferns.

## Domain Eukarya: Kingdom Animalia

28. Members of this kingdom are multicellular and autotrophic. This kingdom is \_\_\_\_\_

29. The cells of animals do not have \_\_\_\_\_, and most CAN move about. At least at some part in their life cycle.

- There is incredible diversity in the Animal Kingdom, and many species of animals exist in nearly every part of the planet.

