

Classification of Living Things Name _____ Date _____

1. _____ A person who studies the groupings of living things is a (taxonomist / classificationist).
2. _____ The (Bacteria / Moneran) kingdom was recently divided into two separate kingdoms.
3. _____ One characteristic of organisms in the (plant / animal) kingdom, is the ability to use photosynthesis to make glucose.
4. _____ The study of an organism's (phylogeny / dichotomous key) reveals its evolutionary history.
5. _____ Organisms in the (Archaeobacteria / Eubacteria) kingdom have the ability to live in extreme environments.
6. _____ Prokaryotic cells have no nucleus or other (organelles / cell walls).
7. _____ *H. sapiens* is the scientific name for a human. The H. stands for (homo / homindae).
8. _____ The scientific name for a bobcat is *Lynx rufus*. The (genus / family) of the bobcat is Lynx.

Characteristic	Archaeobacteria	Eubacteria	Fungi	Protista	Plantae	Animalia
Cell type	Prokaryotic	Prokaryotic	Eukaryotic	Eukaryotic	Eukaryotic	Eukaryotic
Body form	Unicellular	Unicellular	Unicellular Multicellular	Unicellular Multicellular	Multicellular	Multicellular
Method of obtaining food	Heterotrophic Autotrophic	Heterotrophic Autotrophic	Heterotrophic	Heterotrophic Autotrophic	Autotrophic	Heterotrophic
Complex organ systems	No	No	No	No	Yes	Yes

TRUE / FALSE

- _____ 9. All fungi are multicellular.
- _____ 10. All animals are made of cells, organs, and organ systems.
- _____ 11. Some Archaeobacteria, Eubacteria, and Protists undergo photosynthesis or chemosynthesis
- _____ 12. The cells of fungi and protists DO NOT have a true nucleus.
- _____ 13. There are no differences between fungi and protists.
- _____ 14. Unicellular organisms CANNOT have complex organ systems.

Complete Taxonomy—in order							
Grey wolf	Animalia	Chordata	Mammalia	Carnivora	Canidae	Canis	lupis
Gopher	Animalia	Chordata	Mammalia	Rodenta	Geomyidae	Thomomys	bottae
Housefly	Animalia	Arthropoda	Insecta	Diptera	Muscidae	Musca	domestica

15. _____ Do the grey wolf and the gopher produce milk for their young?
16. _____ Rabbits are rodents. Which of the above animals is more closely related to rabbits?
17. _____ How many of these organisms are heterotrophic, multicellular, and eukaryotes?
18. _____ Using binomial nomenclature, give the scientific name of the grey wolf.
19. _____ Could a grey wolf and a gopher mate and produce fertile offspring?
20. _____ How many taxonomic groups would the grey wolf share with a dog if the scientific name for a dog is *Canis familiaris*?
21. _____ In which phylum do organisms with a spinal cord belong?
22. _____ Give the scientific name of the organism above that does not have hair and does not produce milk for its young.