

Name: _____ Date: _____

Your Guide to Organizing the Tree of Life for College Freshmen

How do scientists organize millions of species? Build your foundation in biological nomenclature and basic taxonomic hierarchy as an entry point to evolutionary biology.

1. Which of the following taxonomic levels represents the most inclusive (broadest) group of organisms?

- A. Phylum
- B. Class
- C. Domain
- D. Order

2. In the binomial nomenclature system, the first part of an organism's scientific name represents the _____.

- A. Species
- B. Genus
- C. Family
- D. Specific epithet

3. Organisms classified within the Kingdom Fungi are primarily autotrophic.

- A. True
- B. False

4. A biologist discovers a single-celled organism living in a high-salinity 'dead zone' in the ocean. This organism lacks a nucleus and peptidoglycan. It likely belongs to:

- A. Domain Bacteria
- B. Domain Archaea
- C. Kingdom Protista
- D. Kingdom Animalia

5. The scientific name for the common fruit fly is *Drosophila melanogaster*. In this name, 'melanogaster' refers to the _____ identifier.

- A. Phylum
- B. Family
- C. Genus
- D. Species

6. Members of the Kingdom Plantae are characterized by having cell walls composed primarily of cellulose.

- A. True
- B. False

Name: _____ Date: _____

7. Which of the following describes a key difference between the Kingdom Animalia and the Kingdom Plantae?

- A. Animals are prokaryotic, while plants are eukaryotic.
- B. Animals lack cell walls, while plants have cell walls.
- C. Animals are autotrophs, while plants are heterotrophs.
- D. Animals reproduce asexually, while plants only reproduce sexually.

8. If two organisms belong to the same Class, they MUST also belong to the same _____.

- A. Order
- B. Family
- C. Phylum
- D. Genus

9. The 'catch-all' kingdom that contains various eukaryotic organisms that do not fit neatly into plants, animals, or fungi is:

- A. Bacteria
- B. Archaea
- C. Protista
- D. Monera

10. In the modern taxonomic hierarchy, a Family is more specific than a Genus.

- A. True
- B. False