

Name: _____ Date: _____

Invisible Microbes vs. Giant Redwoods: A 5th Grade Ecology Challenge

How do scientists group a moldy orange with a mountain gorilla? Classify organisms using cellular traits and nutrient absorption methods.

1. Imagine you find a fuzzy growth on an old log in the damp woods. It isn't green, it doesn't move, and it grows by absorbing nutrients from the rotting wood. Which kingdom does it likely belong to?

- A. Kingdom Plantae
- B. Kingdom Fungi
- C. Kingdom Animalia
- D. Kingdom Bacteria

2. True or False: Organisms in Kingdom Animalia are known as 'autotrophs' because they can make their own food using sunlight.

- A. True
- B. False

3. When scientists use the hierarchy of classification, which level is the MOST specific, containing only one unique type of organism?

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

4. You are looking through a microscope at a single-celled organism found in a pond. It has a nucleus and moves using tiny hairs called cilia. This complex single cell belongs to which group?

- A. Protista
- B. Archaea
- C. Plantae
- D. Animalia

5. True or False: Kingdom Archaea contains organisms that are often found in extreme environments, like boiling hot springs or very salty lakes.

- A. True
- B. False

6. A Venus Flytrap captures insects, but it also has green leaves and uses sunlight to grow. Because it has cell walls made of cellulose and photosynthesizes, it is classified as a _____.

- A. Protist
- B. Plant
- C. Fungus

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D. Animal

7. If two animals belong to the same 'Family,' which of these other taxonomic levels MUST they also share?

- A. Genus
- B. Species
- C. Class
- D. None of these

8. Bacteria are considered 'prokaryotes.' This means their single cell is missing a _____, which is the control center found in the cells of plants and animals.

- A. Cell wall
- B. Cytoplasm
- C. Nucleus
- D. Membrane

9. True or False: All living things in Kingdom Animalia are multicellular.

- A. True
- B. False

10. Scientists use 'Binomial Nomenclature' to name organisms. In the name *Ursus arctos* (the grizzly bear), the first word '*Ursus*' represents the organism's _____.

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