

Unit 2: Classification Study Guide

Name: Key

- Define the following terms:

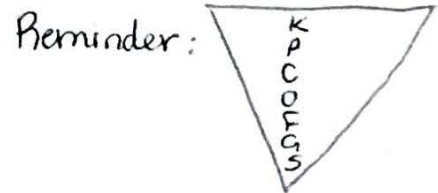
Classification:	the action or process of classifying something according to shared characteristics
Taxonomy:	the science of classification (from Kingdom to Species)
Dichotomous Key:	a tool used by scientists to classify organisms using a series of questions
Kingdom:	the broadest category of classification
Kingdom Animalia:	Made up of complex, multicellular organisms that lack cell walls, can usually move around, and quickly respond to their environment
Unicellular:	made up of a single cell
Multicellular:	made up of two or more cells
Prokaryote:	a single-celled organism that does not have a nucleus or membrane-bound organelles
Eukaryote:	an organism made up of cells that contain a nucleus
Heterotroph	organisms that get their nutrients by consuming other organisms
Autotroph	organisms that produce their own energy by synthesizing nutrients from their environment

- Name the 7 classifications in order from Broad to Specific:

1. Kingdom
2. Phylum
3. Class
4. Order
5. Family
6. Genus
7. Species

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3. Family
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5. Class
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- What is the purpose of a dichotomous key? a tool to identify organisms based on their structures and functions

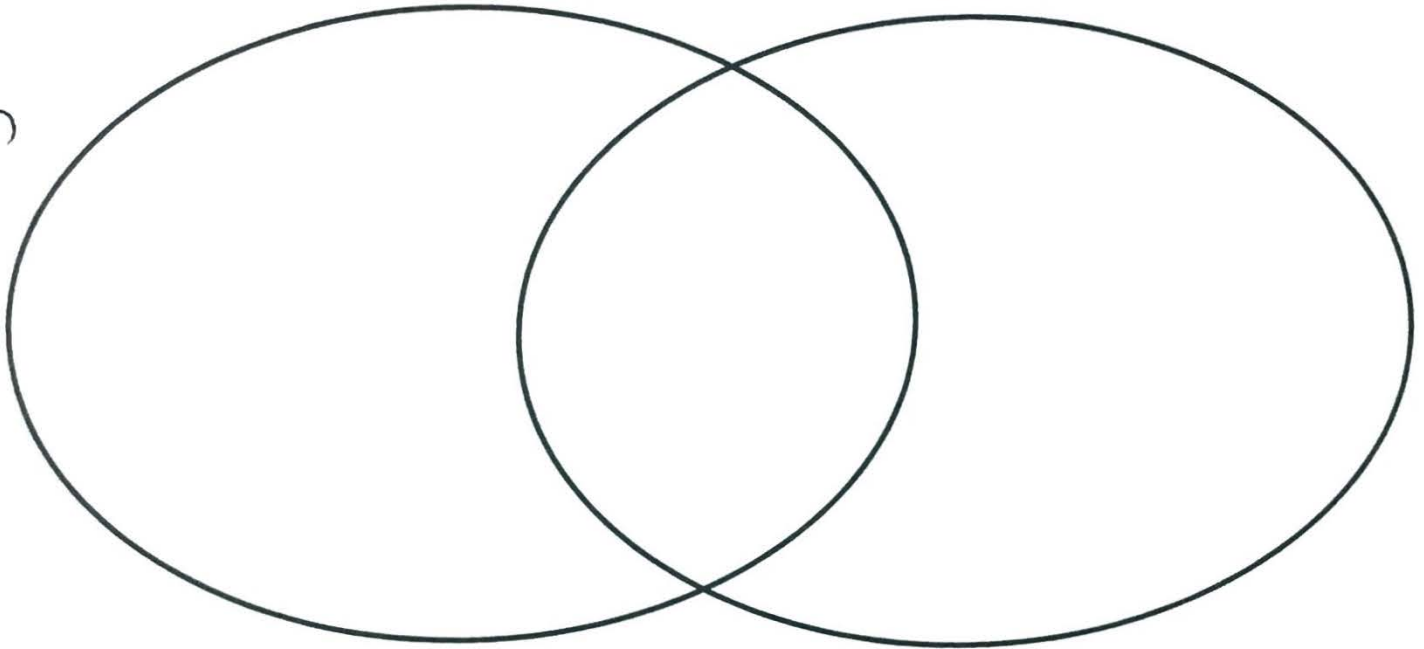
- How can you tell the difference between two kingdoms? (Give examples from ALL six characteristics on your notes/chart.) Then compare and contrast two kingdoms OTHER than Plants vs Animals.

○ The differences in the kingdoms can be seen in: Prokaryote vs Eukaryote, Multicellular vs Unicellular, Autotroph vs Heterotroph, Cell Wall vs Membrane, etc

Kingdom 1: _____

Kingdom 2: _____

Answers will Vary



- Be able to determine an organism's kingdom based on a given set of characteristics.

1. Which kingdoms are unicellular?

Archaeobacteria
Eubacteria Some fungi
Some protists

2. Which kingdoms are multi-cellular?

Plantae
Animalia some fungi
some protists

3. Which kingdoms are prokaryotes?

Archaeobacteria
Eubacteria

4. Which kingdoms are eukaryotes?

Protista Plantae
Fungi Animalia

5. Which kingdoms are heterotrophs?

Fungi and Animalia
Some Eubacteria, Protista, Plantae

6. Which kingdoms are autotrophs?

Archaeobacteria and Plantae
Some Eubacteria, Protista