

# Kingdom Jigsaw Project

**Directions:** You and your group will be creating a shared Google Slide document on each of the six kingdoms. You will be putting together an electronic presentation your kingdoms and you will randomly draw one kingdom to present to the class. You will find the criteria for your Kingdom presentation below. Your presentation must include these items, starting slide with all group members names on it, be well put together, must include pictures, and must be professional. Your last page must list your references. See the end of this document for further info.

## Kingdom Archaeobacteria

- Title page with kingdom name and your name
- What domain does this belong in?
- Kingdom characteristics
  - a. Cell Type: prokaryotic or eukaryotic
  - b. Cell Wall: present, not present, or both
    - If present, what is it made out of?
  - c. Cell Number: unicellular, multicellular, or both
  - d. Nutrition: autotroph, heterotroph, or both
- Additional info to include for this kingdom:
  1. Why are archaeobacteria considered to be the oldest bacteria?
  2. Define anaerobic and bacteria
  3. What type of environments do Archaeobacteria live in?

## Kingdom Eubacteria

- Title page with kingdom name and your name
- What domain does this belong in?
- Kingdom characteristics
  - a. Cell Type: prokaryotic or eukaryotic
  - b. Cell Wall: present, not present, or both
    - If present, what is it made out of?
  - c. Cell Number: unicellular, multicellular, or both
  - d. Nutrition: autotroph, heterotroph, or both
- Additional info to include for this kingdom:
  1. One picture and one habitat where eubacteria are found.
  2. Define binary fission and list what type of reproduction it is.
  3. Find an example of a bad (disease causing) bacterium that can infect a human.
    - What is its scientific name and list two facts about the disease it causes.

## Kingdom Protista

- Title page with kingdom name and your name
- What domain does this belong in?
- Kingdom characteristics
  - a. Cell Type: prokaryotic or eukaryotic
  - b. Cell Wall: present, not present, or both
    - If present, what is it made out of?
  - c. Cell Number: unicellular, multicellular, or both
  - d. Nutrition: autotroph, heterotroph, or both
- Additional info to include for this kingdom:
  1. List the three main groups of protists
  2. Find ONE example of a protist and provide the following information:
    - Scientific name, habitat, specific way the protist feeds, whether or not it has a cell wall.

## Kingdom Fungi

- Title page with kingdom name and your name
- What domain does this belong in?
- Kingdom characteristics
  - a. Cell Type: prokaryotic or eukaryotic
  - b. Cell Wall: present, not present, or both
    - If present, what is it made out of?
  - c. Cell Number: unicellular, multicellular, or both
  - d. Nutrition: autotroph, heterotroph, or both
- Additional info to include for this kingdom:
  1. List two ways that Fungi can be beneficial and list the scientific name of one of the beneficial fungi
  2. List two ways that Fungi can be harmful and list the scientific name of one of the harmful fungi
  3. Define mycorrhizae and lichen

## Kingdom Plantae

- Title page with kingdom name and your name
- What domain does this belong in?
- Kingdom characteristics
  - a. Cell Type: prokaryotic or eukaryotic
  - b. Cell Wall: present, not present, or both
    - If present, what is it made out of?
  - c. Cell Number: unicellular, multicellular, or both
  - d. Nutrition: autotroph, heterotroph, or both
- Additional info to include for this kingdom:
  1. What are the four main groups of plants? Show a picture of each.
  2. Draw a cladogram to show the four main groups of plants
  3. Pick ONE plant that interests you and include the following information:
    - scientific name and 1 adaptation that allows the plant to survive in the environment it lives in (Ex: roses have thorns to help with defense from predators)

## Kingdom Animalia

- Title page with kingdom name and your name
- What domain does this belong in?
- Kingdom characteristics
  - a. Cell Type: prokaryotic or eukaryotic
  - b. Cell Wall: present, not present, or both
    - If present, what is it made out of?
  - c. Cell Number: unicellular, multicellular, or both
  - d. Nutrition: autotroph, heterotroph, or both
- Additional info to include for this kingdom:
  1. Define invertebrate and vertebrate/chordate and give an example of each.
  2. Pick ONE animal that interests you and include the following information:
    - scientific name and 1 adaptation that allows the animal to survive in the environment it lives in (Ex: porcupines have quills to help them with defense against predators.)

- All group members will need to copy and paste the complete website addresses into the last slide/part of your presentation.
- [www.google.com](http://www.google.com) and [www.wikipedia.com](http://www.wikipedia.com) are not correct references.
- The references need to be in alphabetical order and needs to look like the following:
  1. [http://animaldiversity.ummz.umich.edu/accounts/Hyla\\_versicolor/](http://animaldiversity.ummz.umich.edu/accounts/Hyla_versicolor/)
  2. [http://en.wikipedia.org/wiki/Gray\\_tree\\_frog](http://en.wikipedia.org/wiki/Gray_tree_frog)