## The Six Kingdoms

There are specific characteristics that scientists use to categorize all organisms into six kingdoms. The words listed below are used in this classification. Define the following terms in your own words:

1.) asexual reproduction- ________________________________________________
2.) autotrophic - ______________________________________________________
3.) eukaryotic- ______________________________________________________
4.) heterotrophic- ______________________________________________________
5.) mobility- ______________________________________________________
6.) multicellular- ______________________________________________________
7.) prokaryotic- ______________________________________________________
8.) unicellular- ______________________________________________________

Fill in the chart below, listing the distinctive characteristics of each kingdom.
(Hint: Begin with Chapter 18.3 of your Biology book for more information.)

<table>
<thead>
<tr>
<th>KINGDOM</th>
<th>Cell Type (eukaryotic / prokaryotic)</th>
<th>Nutrition (autotrophic / heterotrophic)</th>
<th>Body Type (unicellular / multicellular)</th>
<th>Cell Structure (cell wall / no cell wall)</th>
<th>Mobility</th>
<th>Special Characteristics</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>
1. To help you distinguish between the kingdoms in the diagram, color each kingdom a different color. This diagram shows multiple branches or divisions of the 6 kingdoms. The kingdoms are in **bold text**.

2. Which kingdom has the greatest number of species? ______________________________

3. Which kingdom has the smallest number of species? ______________________________

4. What characteristics do scientists use to distinguish between organisms in different kingdoms?
________________________________________________________________________________
________________________________________________________________________________

5. What is the cellular characteristic that distinguishes Kingdom Eubacteria and Archaebacteria from members of the other four kingdoms? __________________________________________
________________________________________________________________________________

6. What characteristics distinguish fungi from plants? ______________________________
________________________________________________________________________________

7. Which kingdoms include multicellular, heterotrophic organisms? ____________________
________________________________________________________________________________

8. One way scientists could have classified organisms is to separate them into unicellular and multicellular organisms. Explain why this is not a useful classification system. ____________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

9. Not too long ago, archaebacteria and eubacteria belonged to the same kingdom, the kingdom Monera. Their appearance is similar; both have similar shapes, are unicellular, and have nuclei that are not surrounded by a membrane. Explain why you think biologists have decided to divide the kingdom into two. ______________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________