


<p><b>Class Notes</b>  <i>Taxonomy</i>  <i>(Naming and Grouping)</i></p>	<p>Name: _____  Period: _____  Date: _____</p> <p style="text-align: center;"><b>Notes:</b></p>
<p>What is <b>taxonomy</b>?</p>	<ul style="list-style-type: none"> <li>• grouping and naming of organisms <ul style="list-style-type: none"> <li>○ to understand the variety of life</li> <li>○ to avoid confusion of regional names</li> </ul> </li> </ul>
<p>What was Carl Linnaeus' contribution to classification?</p>	<ul style="list-style-type: none"> <li>• developed the binomial nomenclature (2-part name), now called the <b>scientific name</b></li> <li>• developed a 7-level (taxon) system of classification</li> </ul>
<p>Place the <b>taxons</b> in order from largest to smallest:</p> <p>Pneumonic:  <b>(D</b>readed <b>K</b>ing <b>P</b>hilip  <b>C</b>ame <b>O</b>ver <b>F</b>or  <b>G</b>reat <b>s</b>paghetti)</p>	<p>Domain  Kingdom  Phylum  Class  Order  Family  <i>Genus</i>  <i>species</i></p> 
<p>What are the 3 Domains?</p>	<ul style="list-style-type: none"> <li>• Archaea - ancient prokaryotes</li> <li>• Bacteria - prokaryotes</li> <li>• Eukarya - eukaryotes (includes plants, animals, fungi)</li> </ul>
<p>How are taxonomic groups organized?</p>	<ul style="list-style-type: none"> <li>• Beginning with domain, each successive level of classification becomes more specific</li> <li>• Organisms within the same group have more in common with one another than those within the next largest group <ul style="list-style-type: none"> <li>○ <i>Members of a genus share more in common than members of a family</i></li> </ul> </li> </ul>
<p>What are the 6 Kingdoms?</p>	<ul style="list-style-type: none"> <li>• Archaea</li> <li>• Bacteria</li> <li>• Protista</li> <li>• Plantae</li> <li>• Fungi</li> <li>• Animalia</li> </ul>
<p>What is a <b>cladogram</b>?</p>	<ul style="list-style-type: none"> <li>• a diagram that shows evolutionary relationships between organisms</li> <li>• Helps scientists understand how one lineage broke away from another in the course of evolution</li> </ul>
<p>What is a <b>dichotomous key</b>?</p>	<ul style="list-style-type: none"> <li>• Classification used to identify unknown organisms</li> <li>• Based on visible similarities</li> </ul>
<p><b>Summary:</b></p>	

Here's a quick chart to distinguish some of the basic similarities and differences among the 6 kingdoms. Refer to Section 18-3 of the Biology text for more details.

Domain	[---Bacteria---]	[---Archaea---]	[-----Eukarya-----]			
Kingdom	Bacteria	Archaea	Protista	Fungi	Plantae	Animalia
Single-celled or multicellular?	single-celled	single-celled	mostly single-celled but can be multicellular	mostly multicellular but can be unicellular	multicellular	multicellular
Membrane bound nucleus? (prokaryotic or eukaryotic)	prokaryotic	prokaryotic	eukaryotic	eukaryotic	eukaryotic	eukaryotic
Nutrition (autotrophic or heterotrophic)	either	either	either or both	external heterotroph	autotroph	heterotroph
Cell wall structure	peptidoglycan	<u>NOT</u> peptidoglycan	some have cellulose	chitin	cellulose	none
Reproduction (asexual or sexual)	asexual	asexual	both	both	both	mostly sexual
Contain chloroplasts?	no	no	if autotrophic	no	yes	no