

<b>CHAPTER 3</b>	<b>Domain Characteristics Organization Chart Answer Key</b>	<b>BLM 3.2.3A</b>
<b>ANSWER KEY</b>		

Archaea	Bacteria	Eukarya
<ul style="list-style-type: none"> <li>• Prokaryotic, unicellular organisms</li> </ul>	<ul style="list-style-type: none"> <li>• Prokaryotic, unicellular organisms</li> </ul>	<ul style="list-style-type: none"> <li>• Eukaryotic, unicellular to multicellular organisms</li> </ul>
<ul style="list-style-type: none"> <li>• Distinctive plasma membrane and cell wall chemistry</li> </ul>	<ul style="list-style-type: none"> <li>• Move by flagella</li> </ul>	<ul style="list-style-type: none"> <li>• Flagella, if present, have a 9 + 2 organization</li> </ul>
<ul style="list-style-type: none"> <li>• Lack a membrane-bounded nucleus</li> </ul>	<ul style="list-style-type: none"> <li>• Lack a membrane-bounded nucleus</li> </ul>	<ul style="list-style-type: none"> <li>• Membrane-bounded nucleus</li> </ul>
<ul style="list-style-type: none"> <li>• Reproduce asexually</li> </ul>	<ul style="list-style-type: none"> <li>• Reproduce asexually</li> </ul>	<ul style="list-style-type: none"> <li>• Sexual reproduction</li> </ul>
<ul style="list-style-type: none"> <li>• Many are autotrophic by chemosynthesis; some are heterotrophic by absorption</li> </ul>	<ul style="list-style-type: none"> <li>• Heterotrophic by absorption</li> </ul>	<ul style="list-style-type: none"> <li>• Phenotypes and nutrition are diverse</li> </ul>
<ul style="list-style-type: none"> <li>• Unique rRNA base sequence</li> </ul>	<ul style="list-style-type: none"> <li>• Autotrophic by chemosynthesis or by photosynthesis</li> </ul>	<ul style="list-style-type: none"> <li>• Each kingdom has specializations</li> </ul>
Example: <i>Halobacterium</i> sp.	Example: <i>Escherichia coli</i>	Example: <i>Chlamydomonas</i> sp.