

CHAPTER 3	Domain Characteristics Organization Chart Answer Key	BLM 3.2.3A
ANSWER KEY		

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