



Characteristics of Living Things

Name: _____

Test Date: _____

Class website:
<http://sd41blogs.ca/hemingway/>

“All living things have common characteristics.”

My Questions:

Cells are the basic unit of life:

Visual Dictionary words (For cell definitions make sure to include the function- if you would like you can draw one large cell and label all of the organelles)				
cytoplasm	nucleus	nuclear membrane (nuclear envelope)	nuclear pore	chromatin
chromosome	nucleolus	ribosome	rough endoplasmic reticulum (R.E.R.)	smooth endoplasmic reticulum (S.E.R.)
golgi apparatus (golgi body/ golgi complex)	lysosome	vacuole (large & small)	mitochondria	chloroplast
cytoskeleton	centrioles	cell membrane (plasma membrane)	cell wall	organelle
vesicle	DNA (deoxyribonucleic acid)	prokaryotic	eukaryotic	multicellular
unicellular	cell specialization	Tissue	Organ	Organ system
photosynthesis	cellular respiration			

Learning Goals	Learning Goal unpacked in detail	Resources You learn....You choose
A1. <ul style="list-style-type: none"> I can describe the structure and functions of the cell's organelles. I can identify the organelles within a plant and animal cell. 	I know what the cell theory is Cell organelles to know are: <ul style="list-style-type: none"> cell membrane (plasma membrane) cell wall chloroplast mitochondria cytoplasm DNA (deoxyribonucleic acid) chromatin chromosome 	CREATE NOTES FROM TEXTBOOK: p. 169 - 183
		HANDOUTS/NOTES FROM CLASS: Cell Structure & Function
		MAKE NOTES on VIDEOS & WEBSITES in Unit 1 on class website

	<ul style="list-style-type: none"> • golgi apparatus (golgi body, golgi complex) • nucleus • nuclear membrane (nuclear envelope) • nuclear pore • nucleolus • centrioles • ribosome • rough endoplasmic reticulum (R.E.R.) • smooth endoplasmic reticulum (S.E.R.) • vacuole • vesicle • lysosome 	
<p>A2.</p> <p>I can compare the characteristics of a <u>prokaryotic cell</u> with a <u>eukaryotic cell</u>.</p>	<ul style="list-style-type: none"> • differences and similarities • types of cells • size of cells • simple vs. complex • What parts of the cell do the two have in common? 	<p>CREATE NOTES FROM TEXTBOOK: p.172 – 173</p> <p>HANDOUTS/NOTES FROM CLASS:</p> <ul style="list-style-type: none"> • Cell Structure & Function <p>MAKE NOTES on VIDEOS & WEBSITES on class website</p>
<p>A3.</p> <p>I can describe <u>cell specialization</u>.</p> <p>I can describe levels of organization within multicellular organisms</p>	<ul style="list-style-type: none"> • Cell specialization • Tissue • Organ • Organ system 	<p>CREATE NOTES FROM TEXTBOOK: p. 190 - 193</p> <p>HANDOUTS/NOTES FROM CLASS:</p> <p>MAKE NOTES on VIDEOS & WEBSITES on class website</p>
<p>A4.</p> <p>I can describe the roles of photosynthesis and cellular respiration with the cell.</p> <p>I can compare photosynthesis and cellular respiration in</p>	<p>processes of photosynthesis & cellular respiration:</p> <ul style="list-style-type: none"> • where do the reactions occur? • know the word equations for photosynthesis & cellular respiration • know the simplified chemical equations (ie. no balancing of chemical equations required) for photosynthesis & cellular respiration 	<p>CREATE NOTES FROM TEXTBOOK: Photosynthesis p. 200 -207 Cell Respiration p. 220 – 222 Comparison p. 232</p> <p>HANDOUTS/NOTES FROM CLASS:</p> <p>MAKE NOTES on VIDEOS & WEBSITES on class website</p> <p>Biology 12 Cellular Respiration - by CS SCIENCE SPARK YouTube</p>

<p>terms of the reactants, products, and chemical equations.</p> <p>I understand that these two chemical equations are the opposite of one another.</p>	<ul style="list-style-type: none"> • what are the reactants? • what are the products? • where do the cells get the reactants for the reactions? • what is the relationship between the two reactions? 	
<p>A5.</p> <p>I can describe <u>sexual and asexual reproduction</u></p>	<ul style="list-style-type: none"> • mitosis • meiosis • budding • conjugation 	<p>CREATE NOTES FROM TEXTBOOK: p. 16 – 17 sexual vs. asexual p.244 – 259 (mitosis) p. 275 – 278 (meiosis) p.278 (compare mitosis & meiosis) p. 667 (budding) p. 475 (conjugation)</p> <p>HANDOUTS/NOTES FROM CLASS:</p> <p>MAKE NOTES on VIDEOS & WEBSITES on class website</p>
<p>A6.</p> <p>I can demonstrate the correct use of the compound light microscope.</p>	<p>I understand all the microscope parts and their functions.</p> <p>I can focus on a specimen under low power, medium power and high power.</p> <p>I can make a wet mount slide.</p> <p>I can draw a specimen properly according to drawing guidelines</p> <p>I can estimate size of a specimen</p> <p>I can calculate drawing magnification of a proper scientific drawing</p>	<p>CREATE NOTES FROM TEXTBOOK: p. 1070 - 1071</p> <p>HANDOUTS/NOTES FROM CLASS:</p> <ul style="list-style-type: none"> • Lab activity: labelling the microscope • Microscope worksheets <p>MAKE NOTES on VIDEOS & WEBSITES on class website</p>