

Test Outline: Cell Structure and Classification (Science 8)

OVERVIEW:

Topic 1.3 (but not concept 2)

LEARNING MAP CRITERIA: LIFE PROCESSES ARE PERFORMED AT THE CELLULAR LEVEL

Relevance	Extending	Proficient	Developing	Emerging
<input checked="" type="checkbox"/>	<p>Discuss the interrelationships of basic cell components and organelles (e.g. how the cell membrane and cell wall work together to protect and support the cell; why ribosomes are often stuck to the ER).</p> <p>Evaluate how a cell will be affected by increasing or decreasing the number of a specific organelle. Infer, based on the function of a specialized cell, how its organelles will be affected. (e.g. why does a muscle cell have more mitochondria? Why don't onion cells have chloroplasts?)</p>	<p>Independently label and describe the functions of cell structures, with a high degree of accuracy.</p>	<p>Label and describe the functions of cell structures with some accuracy.</p> <p>Define organelle and list or match examples of organelles.</p>	<p>Understand that the cell is the basic unit of living things and must exhibit the 7 characteristics of living things.</p>
<input checked="" type="checkbox"/>	<p>Synthesize own knowledge about prokaryotes and eukaryotes with new information, to evaluate the plausibility of the endosymbiont hypothesis.</p>	<p>Compare and contrast prokaryotic and eukaryotic cells.</p> <p>Given information about a cell, identify whether it is prokaryotic or eukaryotic.</p>	<p>Compare and contrast prokaryotic and eukaryotic cells generally (size and complexity).</p>	
<input checked="" type="checkbox"/> (is more relevant to the analogy assignment)	<p>Construct a sophisticated and comprehensive analogy of basic cell components and organelles.</p>	<p>Construct a suitable analogy of basic cell components and organelles.</p>	<p>Given a list of choices, identify the elements of an analogy that best match with a specific cell structure or organelle. Can explain decisions with some success, while using proper vocabulary.</p>	
<input checked="" type="checkbox"/>	<p>Compare and contrast plant and animal cells based on their morphology, function, and cellular processes.</p> <p>Explain the importance of photosynthesis and cellular respiration. Recognize the bigger-picture implications of one or both of these processes being disrupted (How would it affect the cell? A food web? An ecosystem? The globe?).</p>	<p>Make a simplistic comparison between plant and animal cells based on their components.</p> <p>List the inputs and outputs of photosynthesis and cellular respiration. Describe how they are part of a cycle.</p>	<p>Identify plant and animal cells based on their shape and general features.</p> <p>Identify the organelles and cell types (plant vs animal) that photosynthesis and cellular respiration take place in.</p>	<p>Identify plant and animal organisms.</p>

VOCABULARY:

(Disclaimer: This is not meant to be an exhaustive list. Vocabulary words may appear on the test that are not in this list.)

- Review Terms:
 - o Unicellular
 - o Multicellular
 - o Bacteria
 - o Producer
 - o Nutrient
 - o Waste
- Prokaryote
- Eukaryote
- Organelle
- Cell membrane
- Cell wall
- Cytoplasm
- Cytoplasm
- Ribosome
- Protein
- Nucleus
- DNA
- Chloroplast
- Mitochondria
- Vacuole
- Lysosome
- Endoplasmic reticulum
- Photosynthesis
- Cellular respiration

PRIMARY STUDY MATERIAL:

- Powerpoint (1.3) on weebly website + any in-class notes
- Textbook pg. 26-27, 29-31
- Practice:
 - o Worksheets:
 - Colouring diagram
 - Organelle matching
 - o Textbook questions
 - o Workbook questions