

Cells

Overview Sheet

Essential Question

How does the survival of a system (self, family, town) depend on the successful function of each of its interdependent parts?

Vocabulary

Cell	Prokaryotic	Eukaryotic	Organization
Organelle	Cell membrane	Nucleus	Cytoplasm
Endoplasmic	Ribosome	Mitochondria	Golgi Body
Reticulum	Lysosome	Cell Wall	Chloroplast
Chromosome	DNA	Central Vacuole	Chlorophyll
Virus	Host Cell	Organ System	Organism
Tissue	Organ	Passive transport	Equilibrium
Diffusion	Osmosis	Exocytosis	Cellular Respiration
Active transport	Endocytosis	Connective tissue	Muscle tissue
Photosynthesis	ATP	Nervous tissue	Epithelial tissue
Energy	Homeostasis		

Objectives

1. Identify and describe the characteristics that makes something living.
2. Describe the significance of homeostasis in a living organism.
3. What are two advantages of being multicellular?
4. Describe the functions of cell organelles.
5. Differentiate between plant and animal cells.
6. Differentiate between prokaryotic and eukaryotic cells.
7. Explain the process of photosynthesis (include the organelles, the input reactants, and the output products)
8. Explain the process of cellular respiration (include the organelles, the input reactants, and the output products).
9. Why are producers important the survival of all organisms?
10. How do photosynthesis and cellular respiration relate to each other?
11. How do particles move during diffusion and osmosis? Endocytosis and exocytosis?
12. (Bonus) Why would your muscles need to be supplied with more food when there is a lack of oxygen than when there is plenty of oxygen present?

Interactive Cell Organelle Table

<http://utahscience.oremjr.alpine.k12.ut.us/sciber00/7th/cells/sciber/orgtable.htm>

<http://www.cellsalive.com/cells/3dcell.htm>

<http://utahscience.oremjr.alpine.k12.ut.us/sciber00/7th/cells/lesson/index.htm>

<http://quizlet.com/83760/organelles-quiz-flash-cards/>

Levels of Organization

<http://utahscience.oremjr.alpine.k12.ut.us/sciber00/7th/cells/sciber/levelorg.htm>

http://www.mhhe.com/biosci/esp/2002_general/Esp/folder_structure/le/m1/s3/lem1s3_3.htm

<http://www.yellowtang.org/animations/organization.swf>

<http://quizlet.com/15397466/levels-of-organization-cells-flash-cards/>

Prokaryotic and Eukaryotic Cells

<https://www.wisc-online.com/learn/natural-science/life-science/ap11604/identifying-eukaryotic-animal-cell-organelles>

<http://www.scienceprofonline.com/cell-biology/prokaryotic-and-eukaryotic-two-types-of-biological-cells.html>

<http://www.quizmoz.com/quizzes/Science-Quizzes/p/Prokaryotic-Cell-Quiz.asp>

<http://quizlet.com/21621299/prokaryotic-and-eukaryotic-cells-vocabulary-flash-cards/>

Cell Transport

<http://utahscience.oremjr.alpine.k12.ut.us/sciber00/7th/cells/sciber/transpor.htm>

<http://quizlet.com/1219540/cell-transport-vocabulary-flash-cards/>

<http://glencoe.com/qe/science.php?qi=1395>

Vocabulary

<http://www.vocabulary.com/lists/33895#view=notes>

http://glencoe.mheducation.com/sites/007877800x/student_view0/self-check_quizzes.html