

Cells

Students will demonstrate their knowledge of a living cell and be able to describe how the various organelles work together to accomplish large tasks.

Cells are the basic unit of all living things. They come in many shapes and sizes and can accomplish many specialized jobs. There are a million, million cells in the human body while bacteria and protists consist of only a single cell. This unit will focus on the function of cells as well as the diversity of cell types. Students will be introduces to the fields of microbiology and epidemiology.

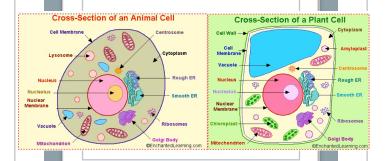
Required Elements

- □ Checkpoint Quiz
- ☐ Unit Assessment
- □ 5 Content Elements
- □ 2 Cell Study Lab Exercises
 - □ 1 Science Literacy

Content Elements

Complete all 5 10 pts. each

- ☐ **Lecture Series** Participate in face-to-face discussions
- □ "Inside a Cell" − Take a look inside a living cell with this animated video. Students will review the functions of various cell parts.
- ☐ Cell Shrinky Dinks —
 Students will use classroom
 tools to draw a plant and
 animal cell. Descriptions of cell
 parts will be included
- ☐ Cell Transport Reading
 Guide Read about
 transportation in and out of the cell with this in depth look at the cell membrane.
- □ Photosynthesis/Respiration Reading Guide – Read about chloroplasts and mitochondria



Cell Study Lab Exercises

Complete BOTH
10 pts. Each

- □ Microscope Lab Learn how scientists view and study cells with an introductory lab experience. Students learn the parts of a microscope and use it to view prepared and self made slides.
- Osmosis Diffusion Lab Students will observe the process of osmosis using baggies, starch and iodine.

Science Literacy

Choose ONE 5 pts.

- □ Science World
- ☐ Graph Practice

Name:			
Hour			

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		Bottle Biology Finish Osmosis Jones Classroom Flu	Bottle Biology Cell Parts Inside a Cell Video Inside a Cell Guided Reading	Bottle Biology Prokaryote vs Eukaryote Lecture Shrinky Dinks	NO SCHOOL FOR YOU!	26
27	Bottle Biology Membranes Lecture Osmosis/Diffusion Lab Cells In it's Environment	Bottle Biology Checkpoint Quiz Microscope Lab	30 Bottle Biology Lecture Molecular Models Photosynthesis & Respiration	Bottle Biology Disease Notes Bacteria Identification Science Literacy Review	Test 2	3
4	5 Review	6 Review	7 Term One Exam	Term One Exam	No School	10