

# Cells

Overview Sheet

## Essential Question

What is the most basic structural unit of living things?

## Vocabulary

prokaryotes	eukaryotes	cell	nuclear membrane	nucleus
nucleolus	cytoplasm	ribosomes	cell membrane	lysosome
Golgi apparatus	microfilaments	microtubules	mitochondrion	vacuole
chloroplast	organ system	cell wall	organism	tissue
organ	endoplasmic reticulum			

## Objectives

- 1) Identify scientists and describe their impact on understanding cells
- 2) Describe Cell Theory
- 3) Explain Endosymbiotic Theory
- 4) List the processes of a living cell
- 5) Compare and contrast prokaryotes and eukaryotes
- 6) Identify, name, and describe cellular organelles and their functions
- 7) Explain how cells (plant and animal) differ from one another
- 8) Describe the cellular organization in a multi-cellular organism

## Helpful Websites

- <http://www.cellsalive.com/> (overview + interactive)
- <http://www.eurekascience.com/ICanDoThat/cells.htm> (overview)
- [http://www.wiley.com/legacy/college/boyer/0470003790/animations/cell\\_structure/cell\\_structure.htm](http://www.wiley.com/legacy/college/boyer/0470003790/animations/cell_structure/cell_structure.htm) (overview + interactive)
- <http://porpax.bio.miami.edu/~cmallery/150/unity/cell.text.htm> (Cell Theory)
- [http://www.biology.arizona.edu/cell\\_bio/tutorials/cells/cells3.html](http://www.biology.arizona.edu/cell_bio/tutorials/cells/cells3.html) (Cell Theory)
- <http://www.biologycorner.com/worksheets/cellrap.html> (Cell Theory + song)
- <http://www.sumanasinc.com/webcontent/animations/content/organelles.html> (Endosymbiotic Theory + video)
- <http://www.rkm.com.au/CELL/index.html> (cell parts)

- <http://www.tvdsb.on.ca/westmin/science/sbi3a1/cells/cells.htm> (cell parts + interactive)
- [http://www.iknowthat.com/com/App?File=ScienceLab.htm&Type=S&SWF=cell%2Fscience\\_desk&App=Science+Lab](http://www.iknowthat.com/com/App?File=ScienceLab.htm&Type=S&SWF=cell%2Fscience_desk&App=Science+Lab) (cell parts + interactive)
- [http://www.wisc-online.com/objects/index\\_tj.asp?objID=AP11604](http://www.wisc-online.com/objects/index_tj.asp?objID=AP11604) (cell parts + interactive)
- [http://www.wisc-online.com/objects/index\\_tj.asp?objID=AP11403](http://www.wisc-online.com/objects/index_tj.asp?objID=AP11403) (cell parts + interactive)
- <http://www.usoe.k12.ut.us/curr/science/sciber00/7th/cells/sciber/orgtable.htm> (cell parts)
- <http://waynesword.palomar.edu/lmexer1a.htm> (cell parts + interactive)
- <http://www.usoe.k12.ut.us/curr/science/sciber00/7th/cells/sciber/levelorg.htm> (levels of organization)
- [http://highered.mcgraw-hill.com/sites/0078617340/student\\_view0/chapter2/virtual\\_lab.html](http://highered.mcgraw-hill.com/sites/0078617340/student_view0/chapter2/virtual_lab.html) (cell parts + virtual lab)
- <http://biologyinmotion.com/organize-it/> (quiz/game + interactive)
- <http://www.biologycorner.com/bio1/cellquiz.html> (quiz + interactive)
- <http://www.glencoe.com/ge/science.php?qi=258> (quiz + interactive)
- <http://www.quia.com/mc/65947.html> (quiz + interactive)
- <http://www.biologycorner.com/bio1/cellquiz.html> (quiz + interactive)
- [http://highered.mcgraw-hill.com/sites/0078617340/student\\_view0/chapter2/section1/self-check\\_quiz\\_eng.html](http://highered.mcgraw-hill.com/sites/0078617340/student_view0/chapter2/section1/self-check_quiz_eng.html) (quiz + interactive)
- [http://www.zerobio.com/target\\_practice\\_quiz/target\\_practice\\_quiz\\_cells.htm](http://www.zerobio.com/target_practice_quiz/target_practice_quiz_cells.htm) (quiz + interactive)
- [http://highered.mcgraw-hill.com/sites/0078617340/student\\_view0/chapter2/interactive\\_tutor.html#](http://highered.mcgraw-hill.com/sites/0078617340/student_view0/chapter2/interactive_tutor.html#) (game + interactive)
- [http://nobelprize.org/educational\\_games/medicine/cell/game/index.html](http://nobelprize.org/educational_games/medicine/cell/game/index.html) (game/comic + interactive)
- <http://www.mhln.com/ob/assets/00035501/htm/00035804/00035804.htm> (cell parts + video)
- <http://highered.mcgraw-hill.com/sites/dl/free/0078617340/164155/00035805.html> (cell specialization + video)