

Cells

Overview Sheet

Essential Question

How are living things organized?

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	Endosymbiotic Theory	Cell Theory	compound microscope

Learning Targets

(Objectives)

- 1) Identify and describe the scientists (the Janssens, Hooke, Leeuwenhoek, Schleiden, Schwann, Virchow) who have helped contribute to our understanding of the cell
- 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 (overview + interactive)
- http://www.biology4kids.com/files/cell_main.html (overview)
- <http://www.fossilmuseum.net/Evolution/Endosymbiosis.htm> (Endosymbiotic theory)
- <http://www.sumanasinc.com/webcontent/animations/content/organelles.html> (Endosymbiotic Theory + video)
- <http://porpax.bio.miami.edu/~cmallery/150/unity/cell.text.htm> (Cell Theory)

More on back



- 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.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 (cell parts + interactive)
- 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 (cell parts + interactive)
- <http://www.usoe.k12.ut.us/curr/science/sciber00/7th/cells/sciber/orgtable.htm> (cell parts)
- <http://www.wisc-online.com/Objects/ViewObject.aspx?ID=AP11403> (interactive cell)
- http://www.wiley.com/college/boyer/0470003790/animations/cell_structure/cell_structure.htm (cell structure tutorial)
- <http://www.ibiblio.org/virtualcell/tour/cell/cell.htm> (interactive cell)
- <http://techcenter.davidson.k12.nc.us/cells.htm> (cell parts + interactive)
- <http://waynesword.palomar.edu/lmexer1a.htm> (cell parts + interactive)
- <http://www.biology.ualberta.ca/facilities/multimedia/index.php?Page=253> (click on any one: Animal Cell Mix and Match, Comparing Prokaryotic and Eukaryotic Cells, Plant Cell Mix and Match)
- <http://www.wisc-online.com/Objects/ViewObject.aspx?ID=ap11604> (interactive cell tutorial)
- <http://bcs.whfreeman.com/thelifewire/content/chp04/0402001.html> (interactive cell tutorial)
- <http://www.usoe.k12.ut.us/curr/science/sciber00/7th/cells/sciber/levelorg.htm> (levels of organization)
- <http://www.susanahalpine.com/anim/Life/memb.htm> (Fluid-Mosaic Model + video animation)
- <http://www.wisc-online.com/Objects/ViewObject.aspx?ID=ap1101> (cell membrane + interactive)
- http://highered.mcgraw-hill.com/sites/0072495855/student_view0/chapter2/animation_lysozymes.html (lysosomes + interactive)
- <http://bcs.whfreeman.com/thelifewire/content/chp04/0402002.html> (Golgi apparatus & E.R. + interactive)
- <http://programs.northlandcollege.edu/biology/biology1111/animations/flagellum.html> (flagellum & cilia + interactive)
- http://www.wiley.com/college/pratt/0471393878/student/animations/actin_myosin/index.html (cytoskeleton + interactive + advanced)
- http://highered.mcgraw-hill.com/sites/0078617340/student_view0/chapter2/virtual_lab.html (cell parts + virtual lab)
- <http://www.zerobio.com/crosswords/CellOrganelles.html> (cell parts + interactive crossword puzzle)
- <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 (quiz + interactive)
- 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# (game + interactive)
- 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)