

Ch 7-1: Life is Cellular

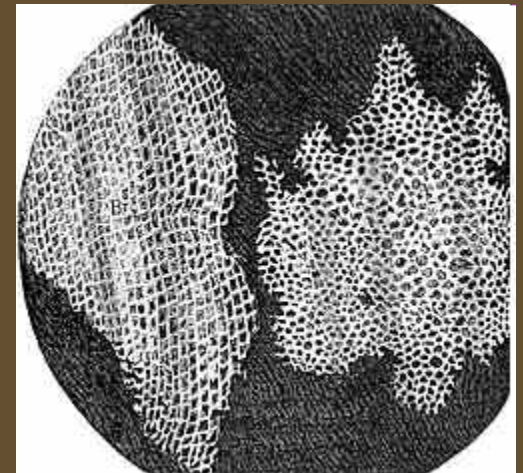
Essential questions:

- What are the principles of ***cell theory***?
- What are the differences between ***prokaryote*** and ***eukaryote*** cells?
- What is the function of major ***cell structures***?

7-1 Life Is Cellular

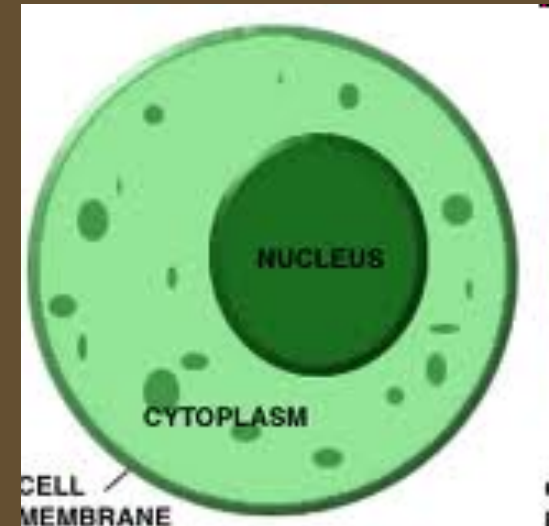
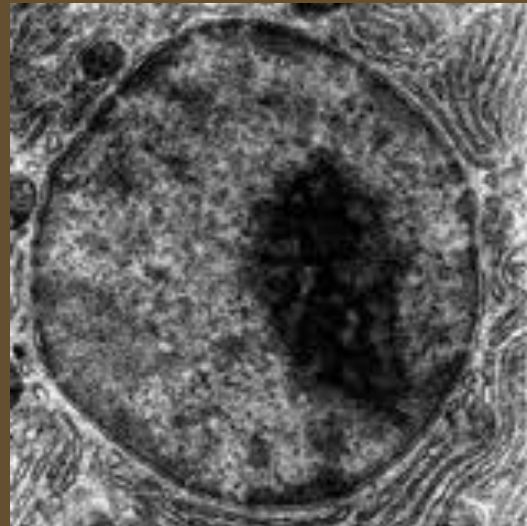
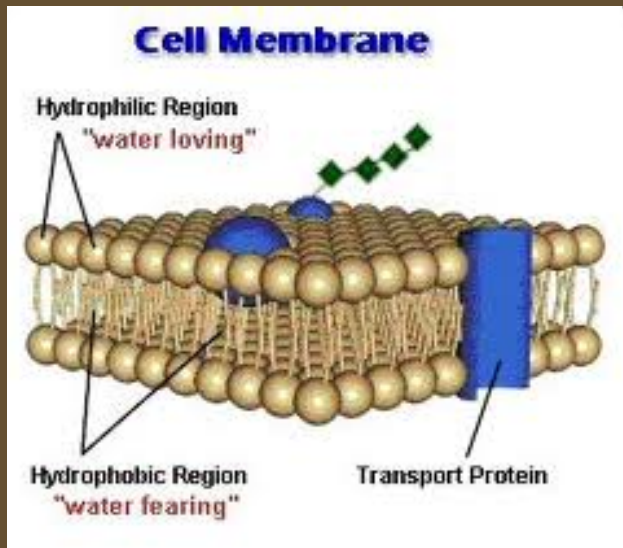
1. The Cell Theory

- a. van Leeuwenhoek – 1st to study living organisms w/ microscope
- b. Hooke – “cells”
- c. summary of cell theory
 1. All living things are made of cells
 2. Cells are basic unit of structure and function in living things
 3. New cells come from existing cells



B. Basic Cell Structures

1. cell membrane – thin, flexible barrier
2. nucleus – contains genetic material, control center of cell
3. cytoplasm – fills rest of cell, jelly-like



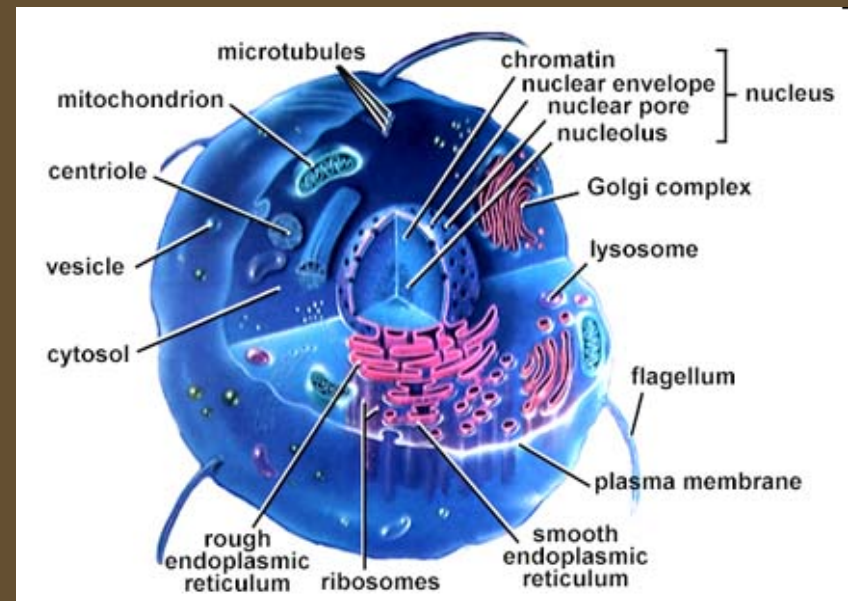
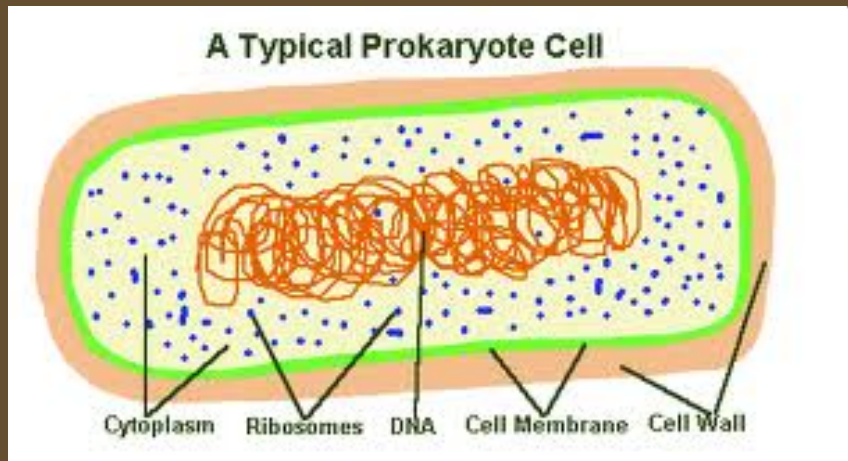
C. Prokaryotes and Eukaryotes

1. Prokaryotes – have cell membranes & cytoplasm, but no nucleus

ex: bacteria

2. Eukaryotes – cells have nucleus, most have **organelles** that perform specialized functions

ex: all plants, animals, fungi, etc.



7-2: Eukaryotic Cell Structures

