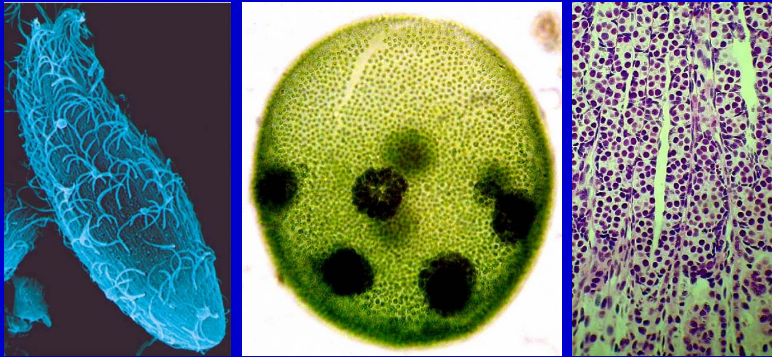


Cell Biology

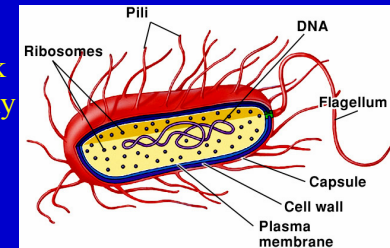


A cell is chemical system that is able to maintain its structure and reproduce. Cells are the fundamental unit of life. All living things are cells or composed of cells.

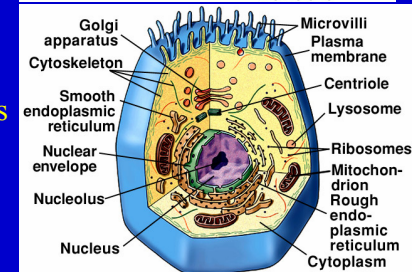
1

The interior contents of cells is the **cytoplasm**. The cytoplasm is isolated from the surrounding environment by the plasma membrane. There are two fundamentally different forms of cells.

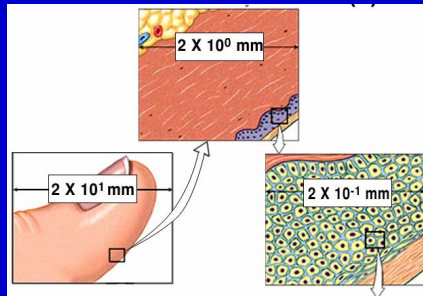
Prokaryotic cells - relatively simple cells - lack nuclear membrane and many organelles - bacteria and their relatives are all prokaryotic



Eukaryotic cells - more complex cells - have a nucleus and many organelles - all cells of plants, animals, fungi, and protists

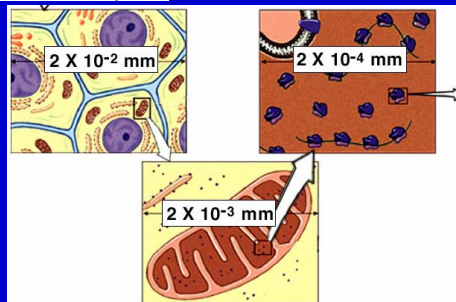


2



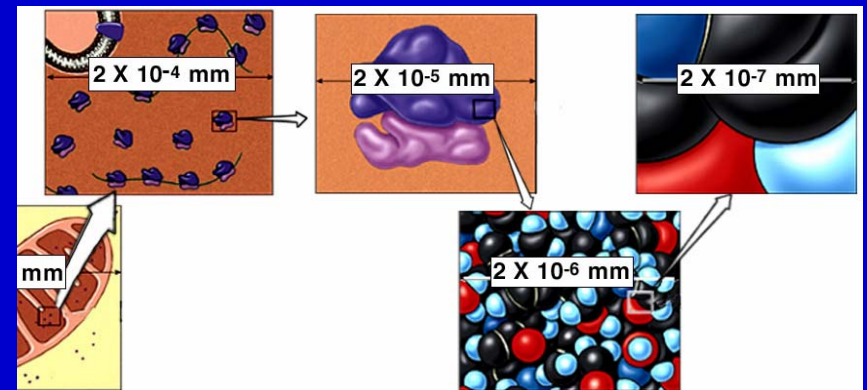
Most cells are small
 Prokaryotic: 1-10 μ m
 Eukaryotic: 10 - 100 μ m
 (1 μ m = .001 mm)

Cells and organelles



3

Organelles, Macromolecules, & Atoms



4