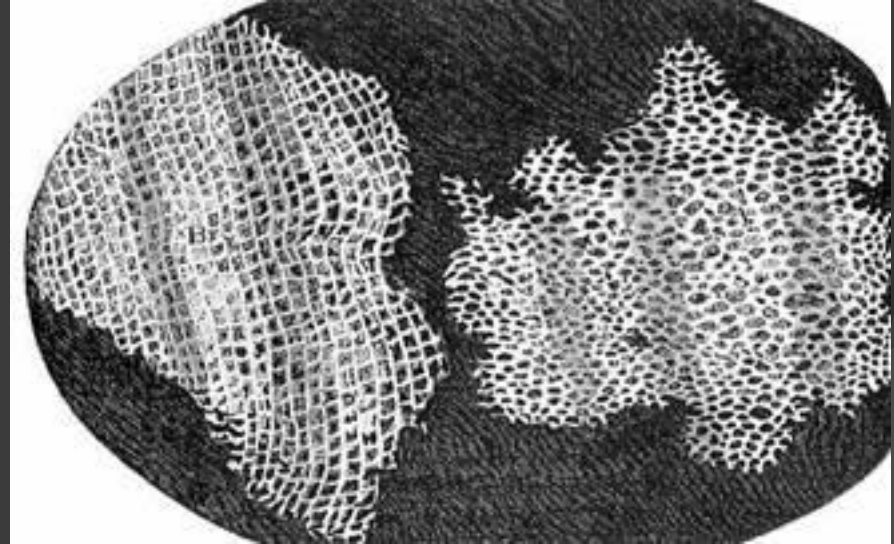


UNIT 3: CELLS

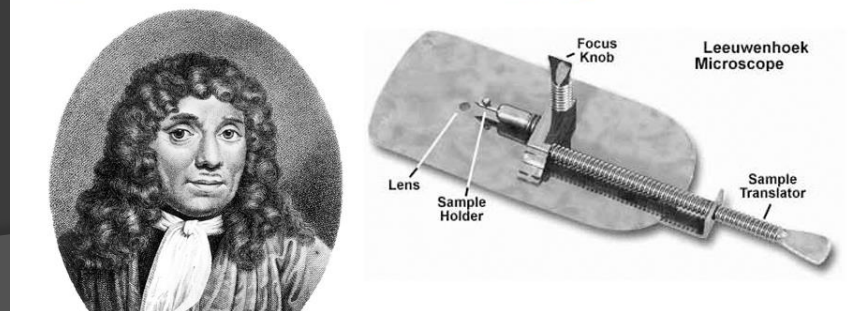
History of the Cell

- Mid-1600s Robert Hooke – compound microscope to look at a slice of cork
 - Called chambers in the cork “cells”



History of the Cell:

- Mid-1600s Anton van Leeuwenhoek – single-lens microscope to look at pond water.
 - Tons of tiny living organisms



The Cell Theory:

- ⦿ All living things are composed of cells
- ⦿ Cells are the basic units of structure and function in living things
- ⦿ New cells are produced from existing cells

Two Main Types of Cells:

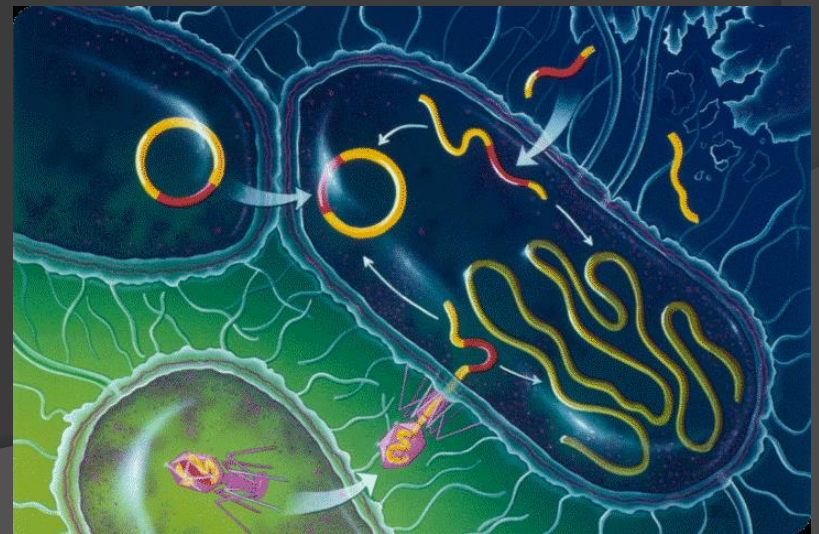
1. Prokaryotes
2. Eukaryotes

◎ Both have:

- DNA and RNA
- Ribosomes
- Cell membrane
- Cytoplasm

Prokaryotes

- Unicellular
- Smaller and simpler (less complicated)
- No nucleus (still have genetic material)
 - DNA is free floating in cytoplasm
 - Circular DNA = Plasmid
- No membrane-bound organelles
- Example: Bacteria



Eukaryotes

- Multi-cellular
- Large and more complex
- Contain a nucleus (holds genetic material)
- Contain membrane-bound organelles
- Example: Animal Cell, Plant Cell, Fungi, and Protists

