The Diversity of Cells

The Discovery of Cells

Two Kinds of Cells

Similarities
- DNA
- Ribosomes
- Cell Membrane
- Cell Wall
- Cytoplasm

The Discovery of Cells & Cell Theory

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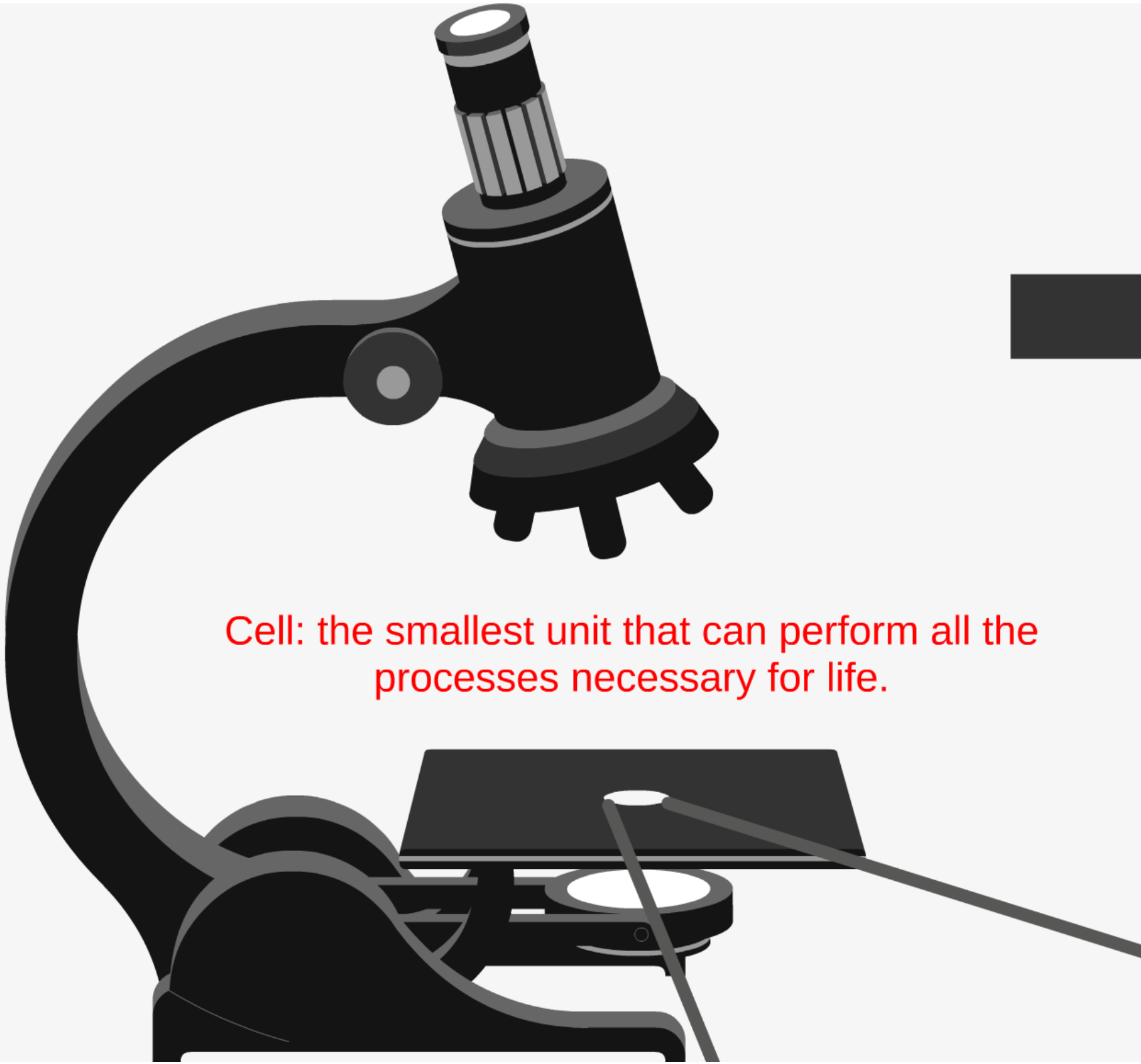

Cell: the smallest unit that can perform all the processes necessary for life.

The Discovery of Cells

Robert Hooke
1665

- 1st person to describe cells
- Looked at cork through a microscope
- He saw tiny boxes which he called cells
- Cells means "little rooms" in Latin

Robert Hooke
(1635-1703)

Theodor Schwann
1839

- Studied animals
- Concluded all animal tissues were made of cells
- Wrote the first two parts of cell theory

Matthias Schleiden
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The Discovery of Cells & Cell Theory

ABC's of Cell Theory

1. **A**ll organisms are made of cells
2. Te cell is the **B**asic unit of all living things
3. All cells **C**ome from existing cells

Rudolf Virchow 1858

- Discovered that cells could only come from other cells
- Added the third part of cell theory

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Prokaryotes

- No Nucleus
- Smallest Cells
- No membrane bound organelles
- DNA is long & circular
- Use flagellum to move
- Most prokaryotes are unicellular
- Unicellular means one cell

Eukaryotes

- Nucleus (DNA is housed here)
- Largest cells
- Contains all membrane bound organelles
- Most eukaryotes are multi-cellular
- Multi-cellular means "many cells"

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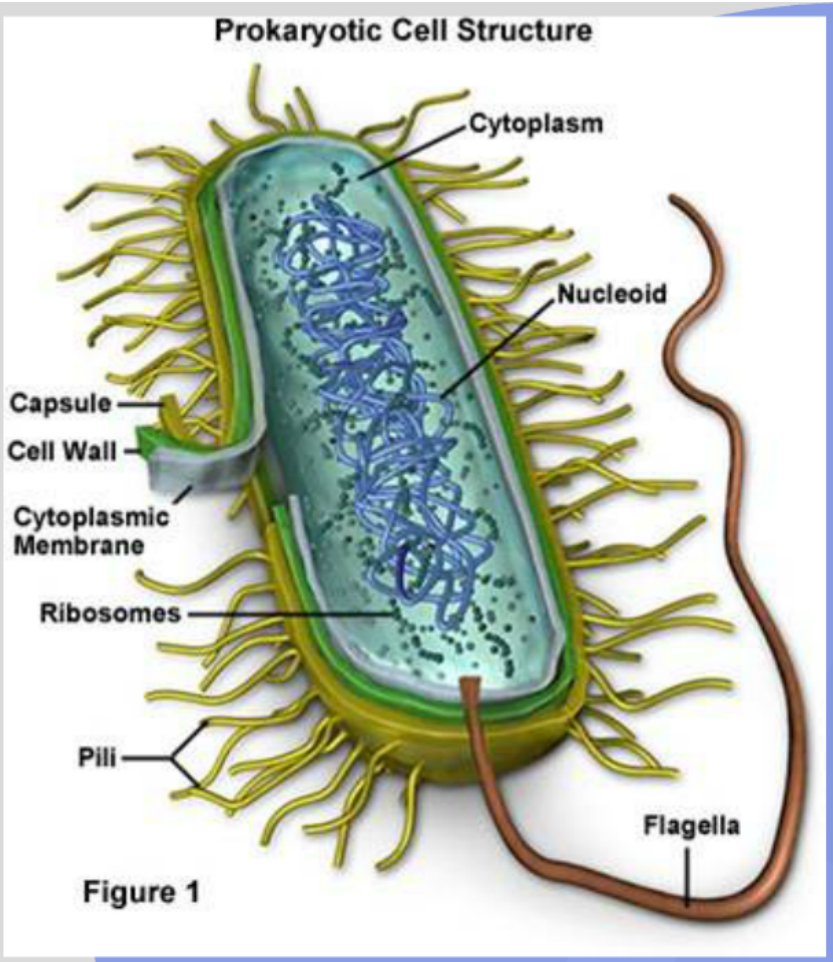
Prokaryotic Examples:

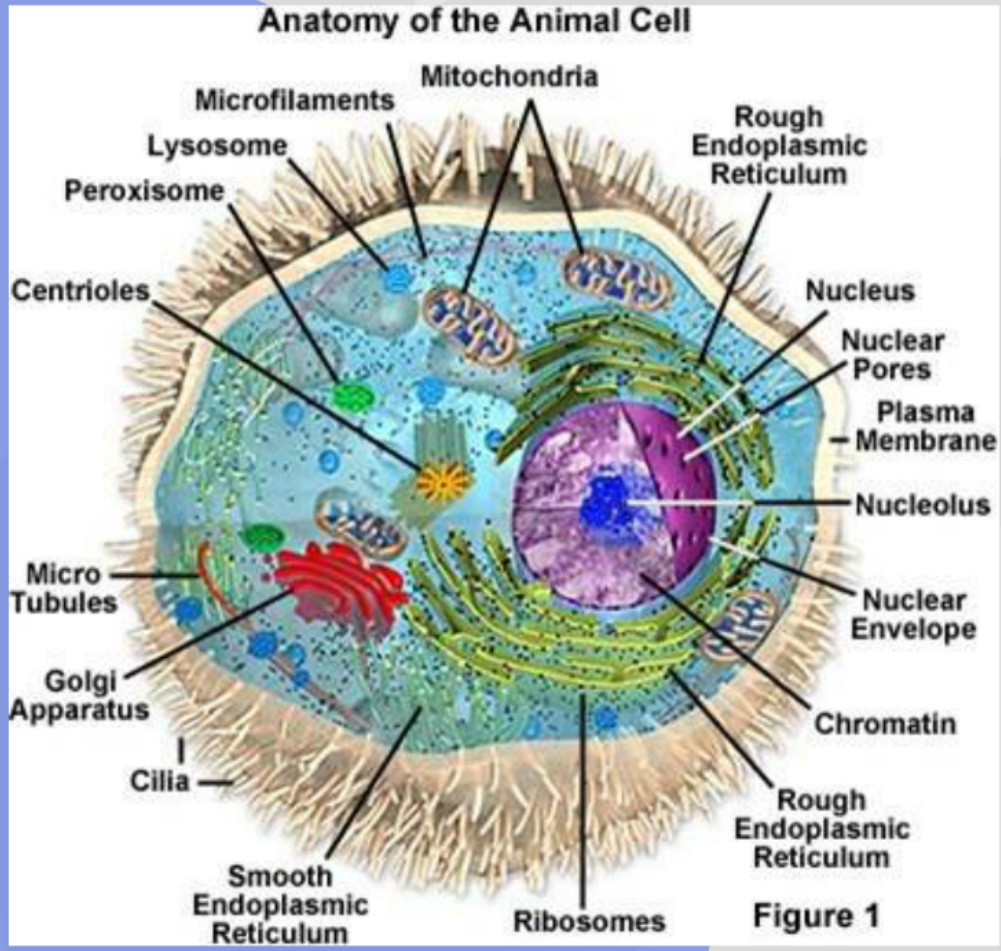
Types:
- Bacteria
- Archaea

- Bacteria in your mouth
- Bacteria living in the soil
- Bacteria in your digestive system
- Extremophiles

Eukaryotic Examples:

- Humans
- Animals
- Plants
- Mushrooms
- Yeasts





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