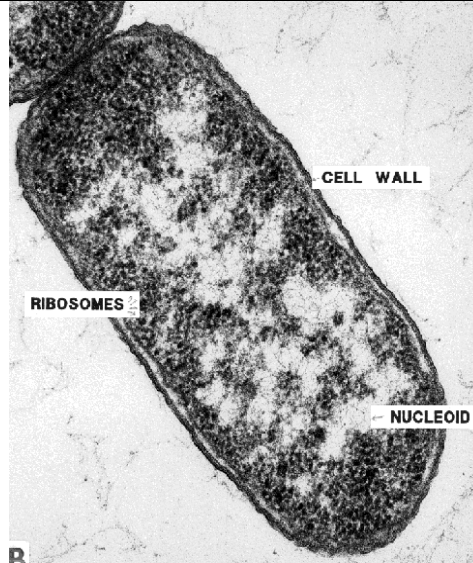
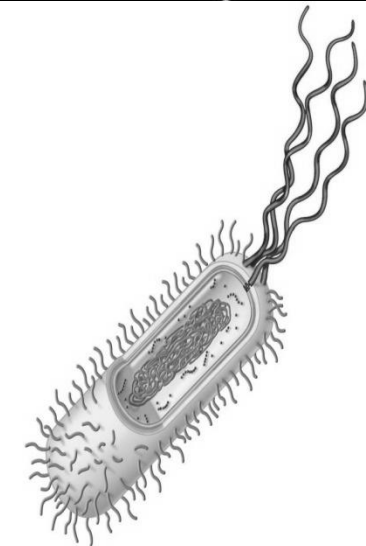
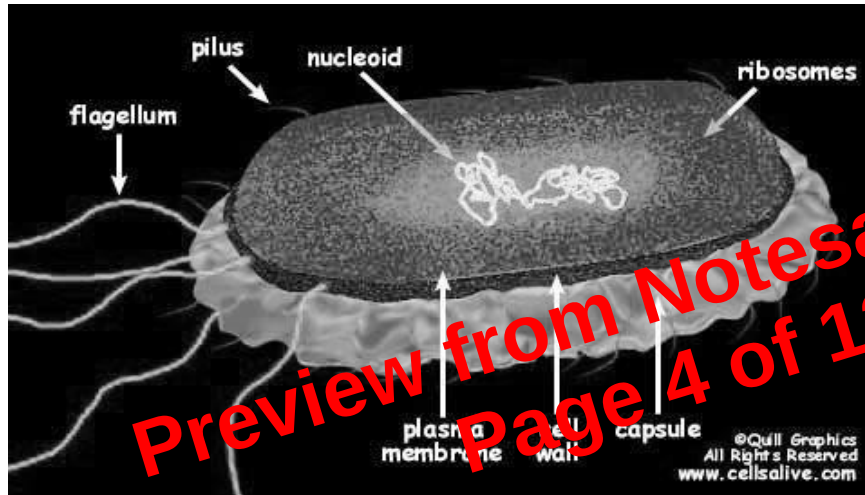


Prokaryotic cells do NOT have:

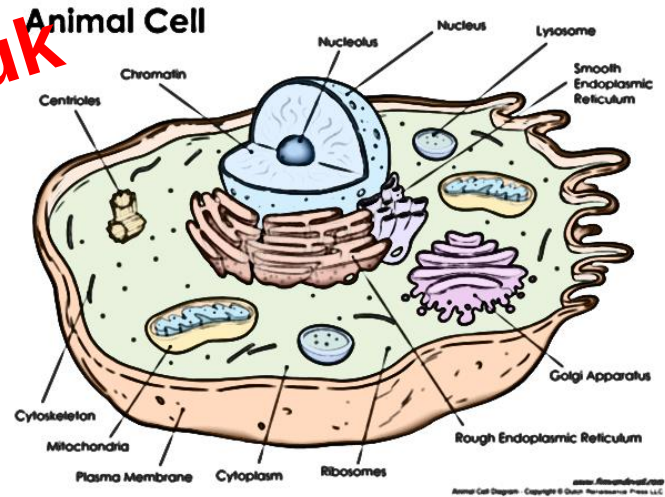
- Nucleus
- Membrane bound organelles



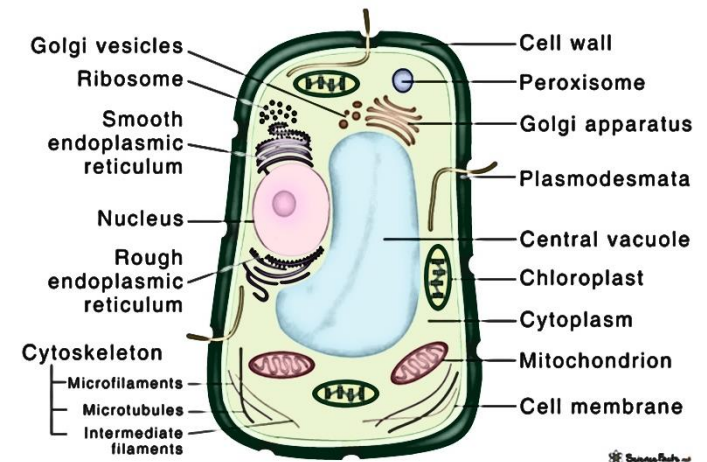
EUKARYOTIC

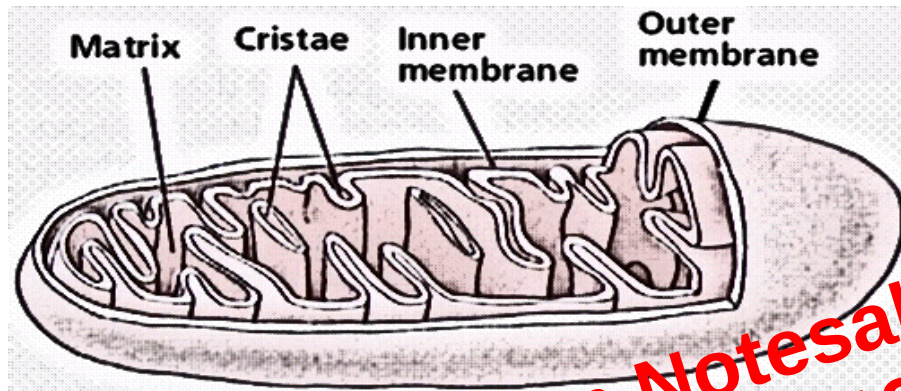
Contain organelles surrounded by membranes
Most living organisms

"Typical" Animal Cell



Plant Cell



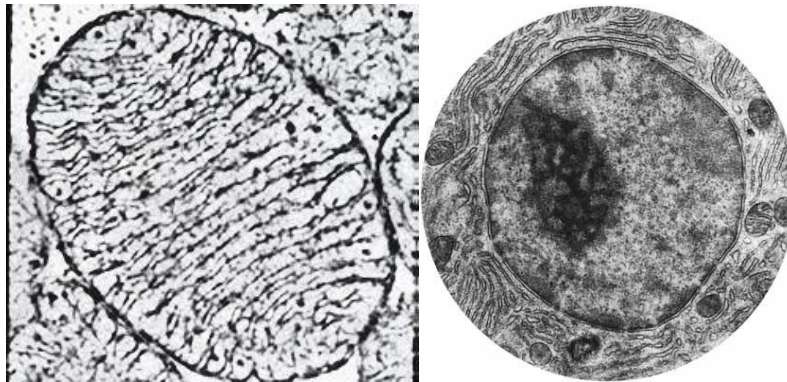


Function – synthesis of ATP

3 major pathways involved in ATP production

- 1) Glycolysis - cytoplasm
- 2) Krebs Cycle - matrix
- 3) Electron transport system (ETS) - intermembrane space

TEM



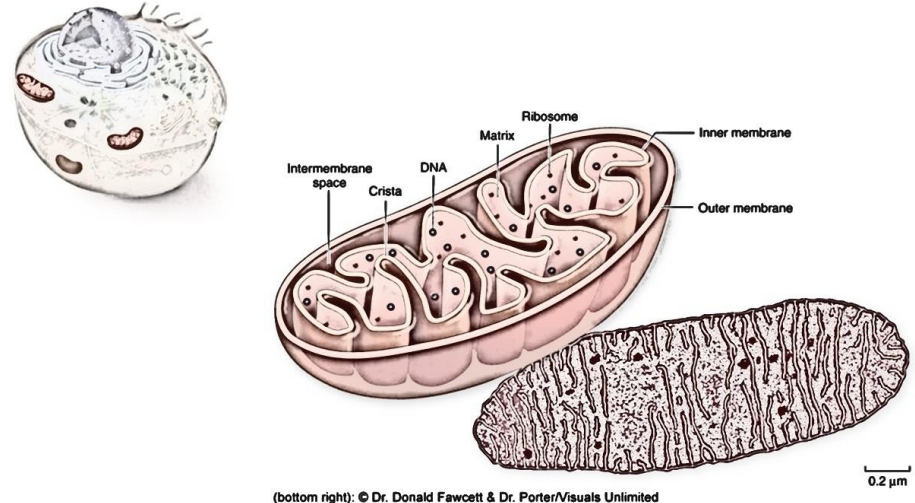
Mitochondria

- organelles present in all types of eukaryotic cells
- contain oxidative metabolism enzymes for transferring the energy within macromolecules to ATP
- found in all types of eukaryotic cells

- surrounded by 2 membranes
- smooth outer membrane
- folded inner membrane with layers called **cristae**

- matrix** is within the inner membrane
- intermembrane space** is located between the two membranes
- contain their own DNA

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END.