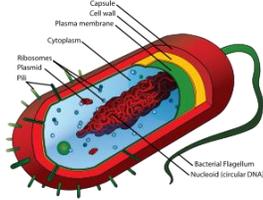
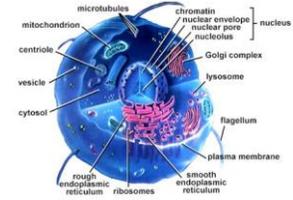


Cut out the cards below and glue them into the Prokaryote vs Eukaryote Table based on the type of cell they are describing.

Contain DNA as genetic material	Cell-membrane	Ribosomes present	Have nucleus
No nucleus	Membrane-bound organelles	No membrane-bound organelles	Larger cells
Smaller cells	DNA in nucleus	DNA floats freely around cell	Cell division usually mitosis
Usually binary fission (simple cell division)	Cell	Majority are bacteria	Some do not have a cell wall
Usually contains a single circular chromosome	Multiple linear chromosomes	Primitive (simple)	Complex
Cytoplasm			All are unicellular organisms
Example: Cells found in you	Example: Cyanobacteria	Might be Photosynthetic	Contains nucleic acid

Use the table below to complete the endosymbiosis chart. Do not cut out the shaded boxes.

DNA found in both organelle and cells	<u>Mitochondria has a</u> Single, circular chromosome <u>This cell has a</u> Single, circular chromosome	<u>Chloroplast has a</u> Single, circular chromosome <u>This cell has a</u> Single, circular chromosome
Replication found in both organelle and cells	<u>Mitochondria reproduces by</u> Binary Fission <u>This cell reproduces by</u> Binary Fission	<u>Chloroplast reproduces by</u> Binary Fission <u>This cell reproduces by</u> Binary Fission
Ribosomes in both (you will need to look this one up)	<u>Mitochondria have</u> "70 S" configuration <u>This cell has</u> "70 S" configuration	<u>Chloroplast have</u> "70 S" configuration <u>This cell has</u> "70 S" configuration

Name: _____

Date: _____

Period: _____

Evidence 1: Cell Comparison

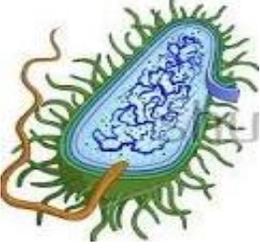
Option 3: manipulative

Prokaryote vs. Eukaryote

Prokaryote	Eukaryote	Both

1. Look at the characteristics of **both** prokaryotes and eukaryotes. Which ones also describe viruses?

2. In the box next to the cell label the type of cell (prokaryote or eukaryote). Cut out the endosymbiosis cards along the dotted lines. Using the table you created on the other side and your notes, glue these descriptions of the mitochondria and chloroplast underneath the cell that has that same characteristic. Answer the questions.

 <input data-bbox="435 430 714 520" type="text"/>	 <input data-bbox="1209 472 1485 562" type="text"/>

3. Based on your answer above and what you know, what type of cell was the mitochondria and chloroplast at one time?
4. However, what type of cell (prokaryote or eukaryote) contains mitochondria and chloroplast?
5. Explain the theory of endosymbiosis.