

Endosymbiotic theory and others



**ASSIGN
BUSTER**

Endosymbiotic Theory

1. Mitochondria formed through the endosymbiosis of a proteobacteria

2. Chloroplast formed from the endosymbiosis of a cyanobacteria

Primary Endosymbiosis

When a proteobacteria or a cyanobacteria is engulfed by a eukaryote

ON ENDOSYMBIOTIC THEORY AND OTHERS SPECIFICALLY FOR

YOU FOR ONLY \$13.90/PAGE Order Now

Second Endosymbiosis

Is when a eukaryote is engulfed by another eukaryote

Evidence of Endosymbiosis-

Mitochondria and chloroplast have own DNA that is circular and led scientists to believe that they were separate organisms at one point.

- Sequence of that DNA is similar to bacteria

- They also have double membranes which shows evidence of being engulfed

- New mitochondria and plastids are formed only by a process similar to

binary fission

- Internal structure and biochemistry of plastids is similar to

cyanobacteria

What are some key evolutionary changes in the eukaryote cell

that allowed for endosymbiosis?

1. Protective cell wall is lost

2. Plasma membrane infold to increase SA

3. Cytoskeleton is formed

4. Internal membranes with ribosomes formed

5. DNA enclosed in a membrane

6. Microtubules form flagella enabling movement

Cytoskeleton was added

Internal membrane (allowed them to specialize)

Lysosome

CFU Colony forming units

<https://assignbuster.com/endosymbiotic-theory-and-others/>