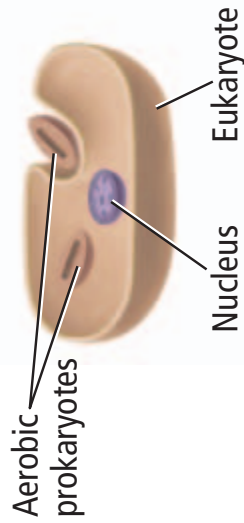


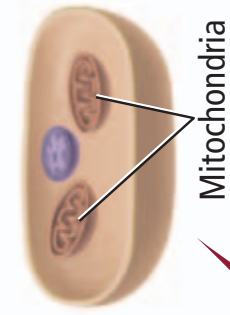
# Biology Concepts 49

## Endosymbiont Theory

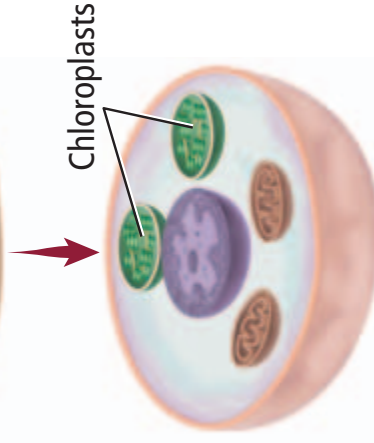
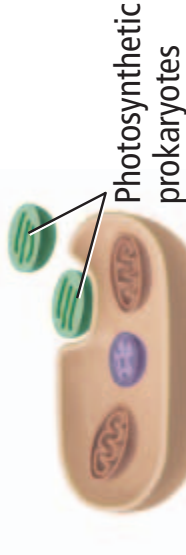
An early eukaryote was parasitized by or ingested some aerobic prokaryotes. The cells were protected and produced energy for the eukaryote.



Over millions of years, the aerobic prokaryotes became mitochondria, no longer able to live on their own.



Some eukaryotes also formed symbiotic relationships with photosynthetic bacteria, which contain photosynthetic pigments.



The aerobic prokaryotes became mitochondria in all eukaryotic cells.

The photosynthetic bacteria became chloroplasts in protist or plant cells.