

# Important events in evolution

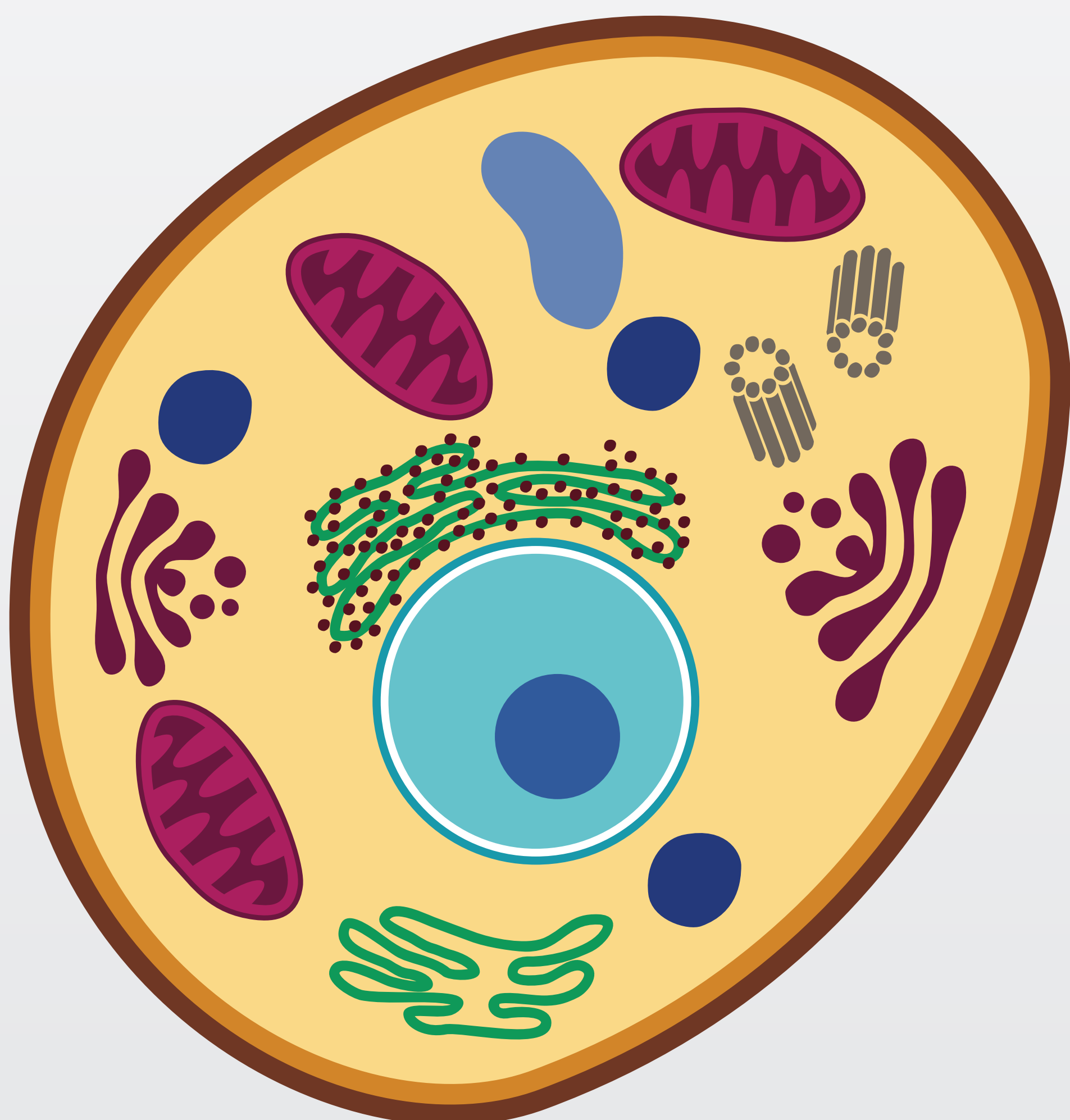
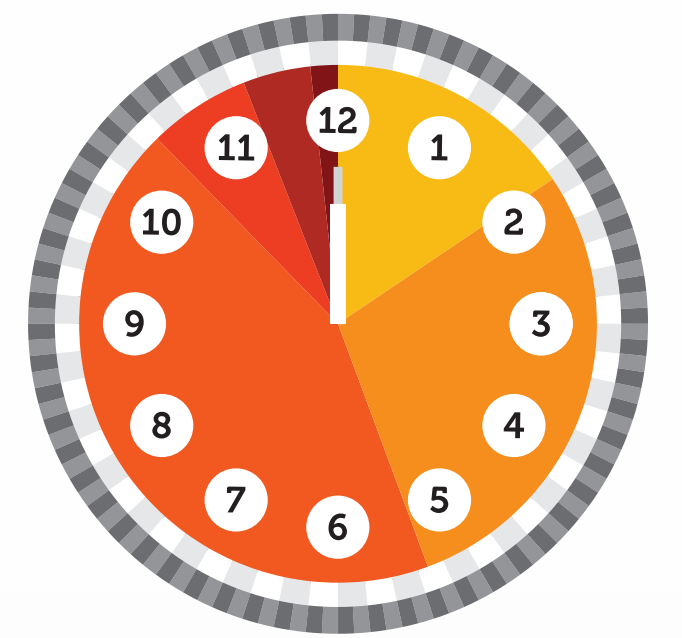
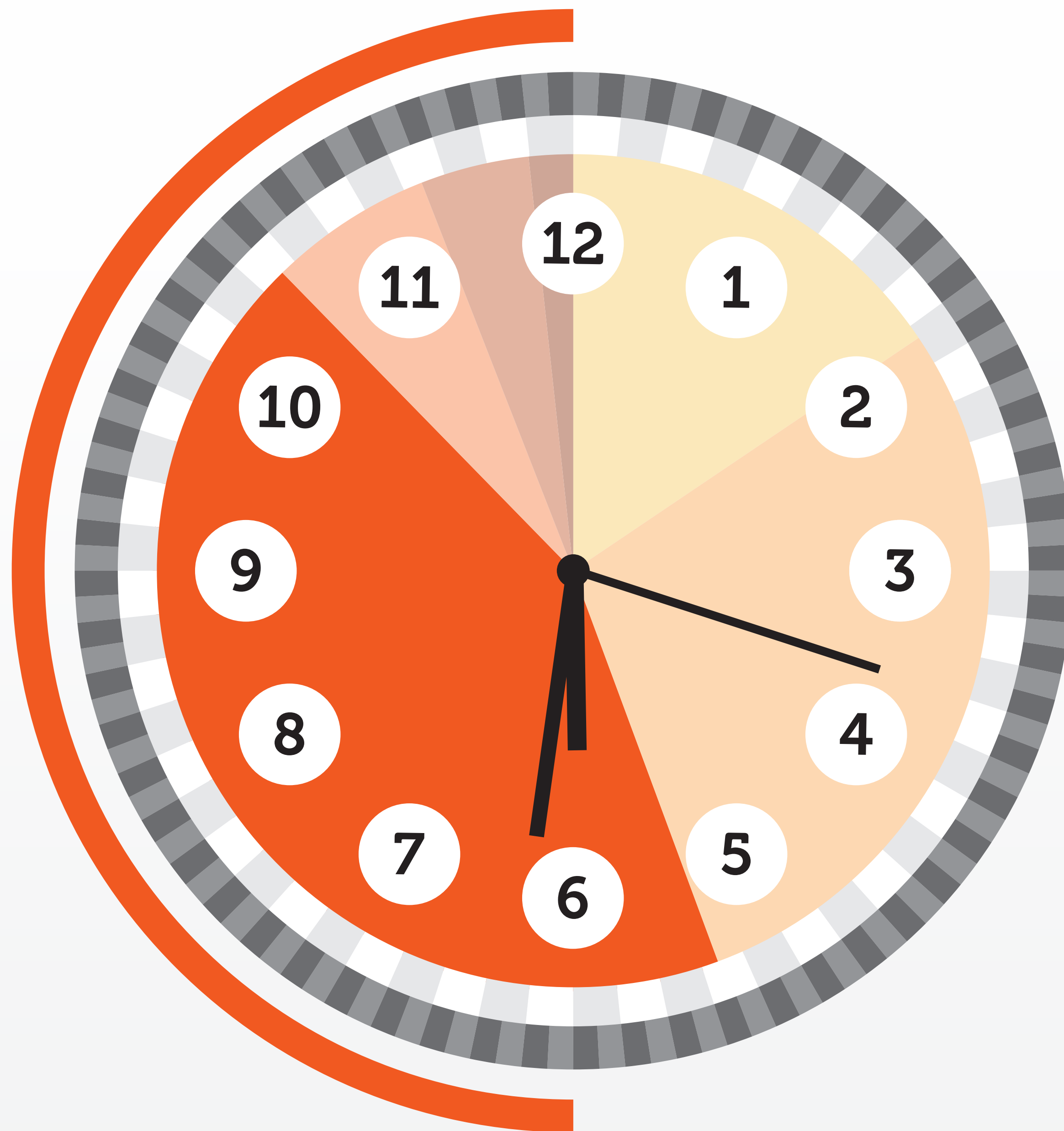
Significant events which impacted the history of Earth

2.1 billion years ago  
First eukaryotic cells

06:31:18 HRS



Eukaryotes



**Eukaryotic cells, those unicellular organisms containing membrane-bound complex structures, appeared between 2.1 and 1.8 billion years ago. The cells of these organisms differ from prokaryotes by having a nucleus containing the genetic material.**

One example of unicellular eukaryotic organisms is the amoebas. Plants and animals are multicellular eukaryotic organisms, which appeared much later.

Lynn Margulis, an American evolutionary biologist, became famous for being the first to suggest that when only single-celled organisms without any complex internal structures existed, the symbiosis between creatures of different species accelerated evolution. The result was that eukaryotes were able to acquire their cell structures.

Margulis argued that mitochondria, those cellular organelles that supply energy to the eukaryotic cell, were originally prokaryotes that symbiotically joined nucleated cells.