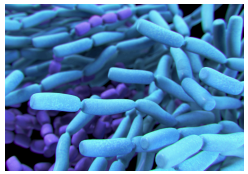
Stages of the formation of life on Earth Timeline

4.6 bya

Formation of Earth

3.5 bya

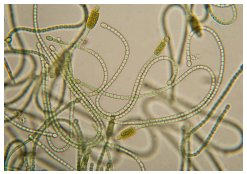
Earliest forms of life, prokaryotes inhabited the Earth



2.7 bya

First photosynthetic prokaryotes

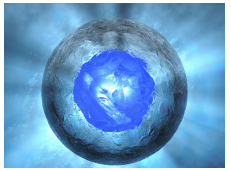
Photosynthetic prokaryotes formed and released oxygen into the ocean and atmosphere.



1.8 bya

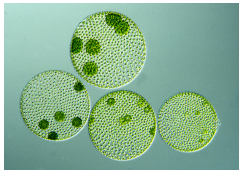
First eukaryotic organisms

Cells with nuclei and organelles evolved through endosymbiosis (one cell living inside another)



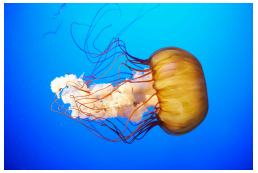
1.2 bya

Early small multicellular algae appeared



600 mya

Larger multicellular organisms evolved



535-525 mya

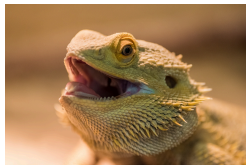
Marine species

Cambrian explosion: many present marine animal species suddenly appeared.

420 mya

Colonization of land

Plants and animals started migrating from Oceans to the land. First reptiles, insects, and vascular plants evolved. Dinosaurs evolved and first mammals appeared. Angiosperms appeared.



66 mya

The Cretaceous mass extinction

Cretaceous mass extinction due to an asteroid; dinosaurs and many species died. Mammals, birds, pollinating insects dominated the land.

300,000 ya

Appearance of Modern Humans (Homo sapiens)

Humans with modern anatomy evolved and spread across the globe.