

Planet Earth is Dominated by Oxygen and Water



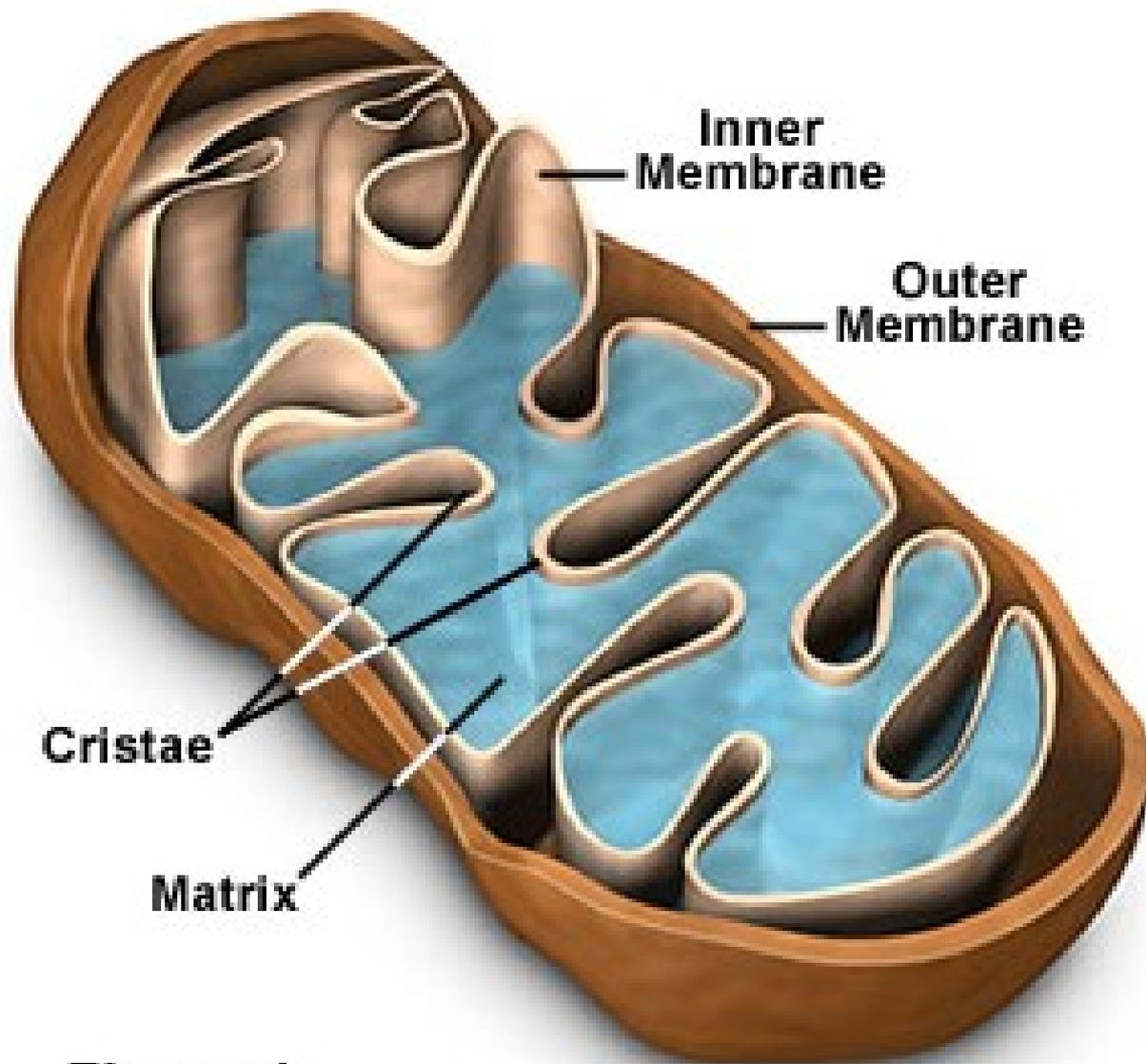


Figure 1

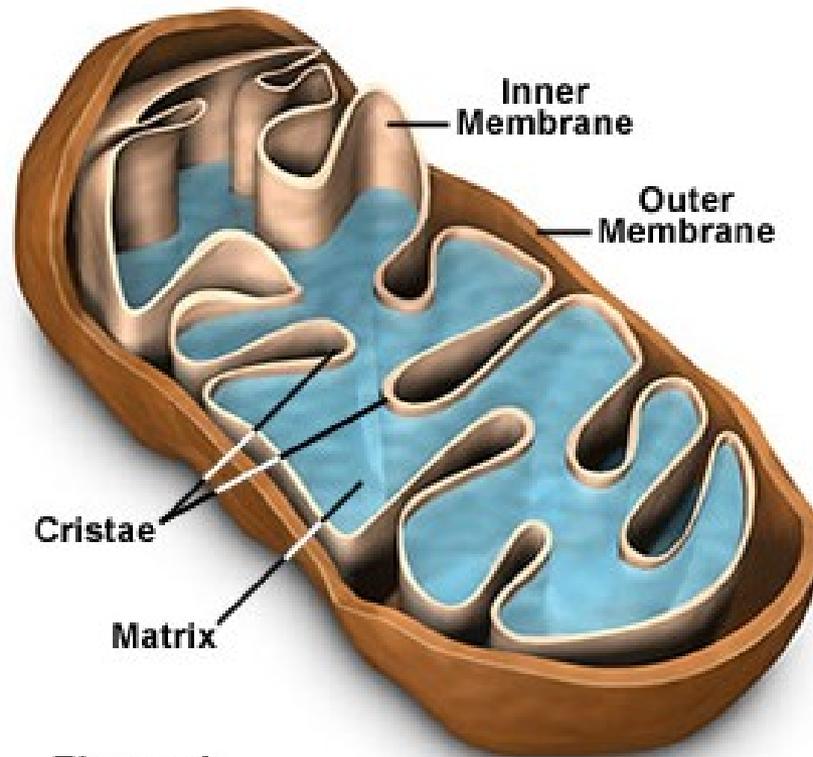
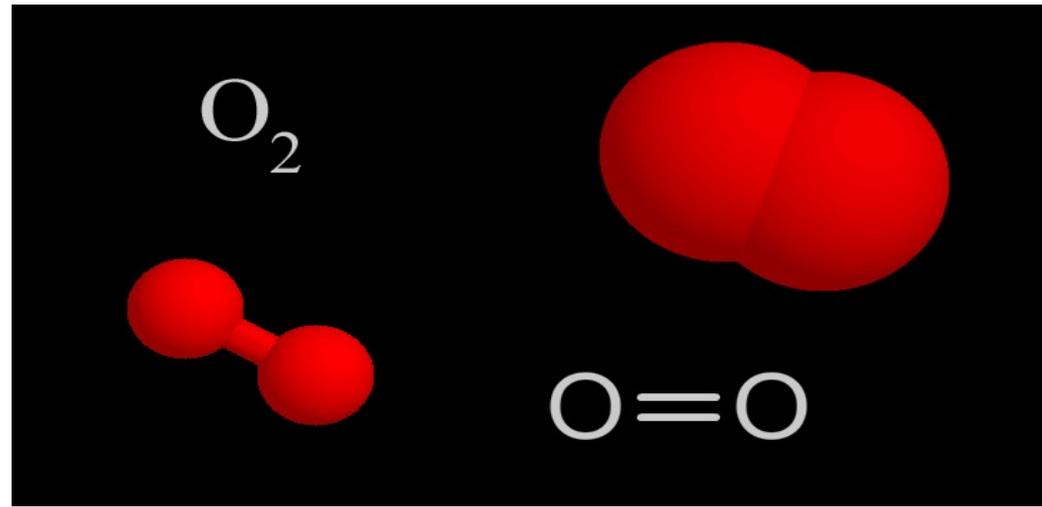
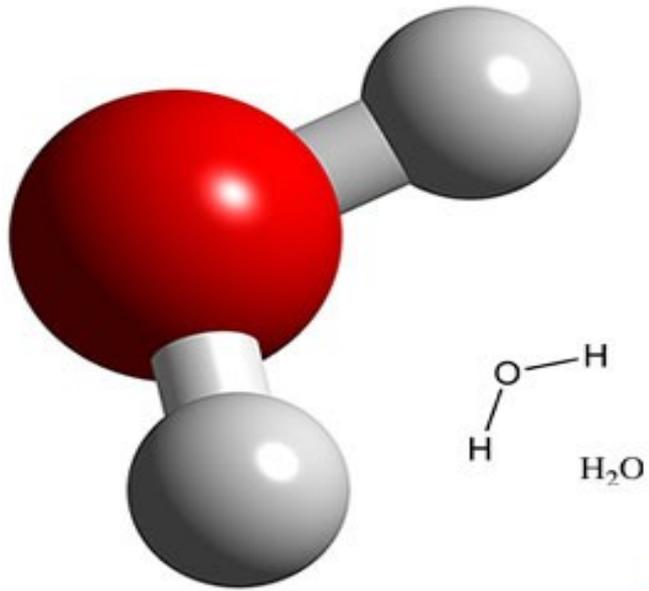
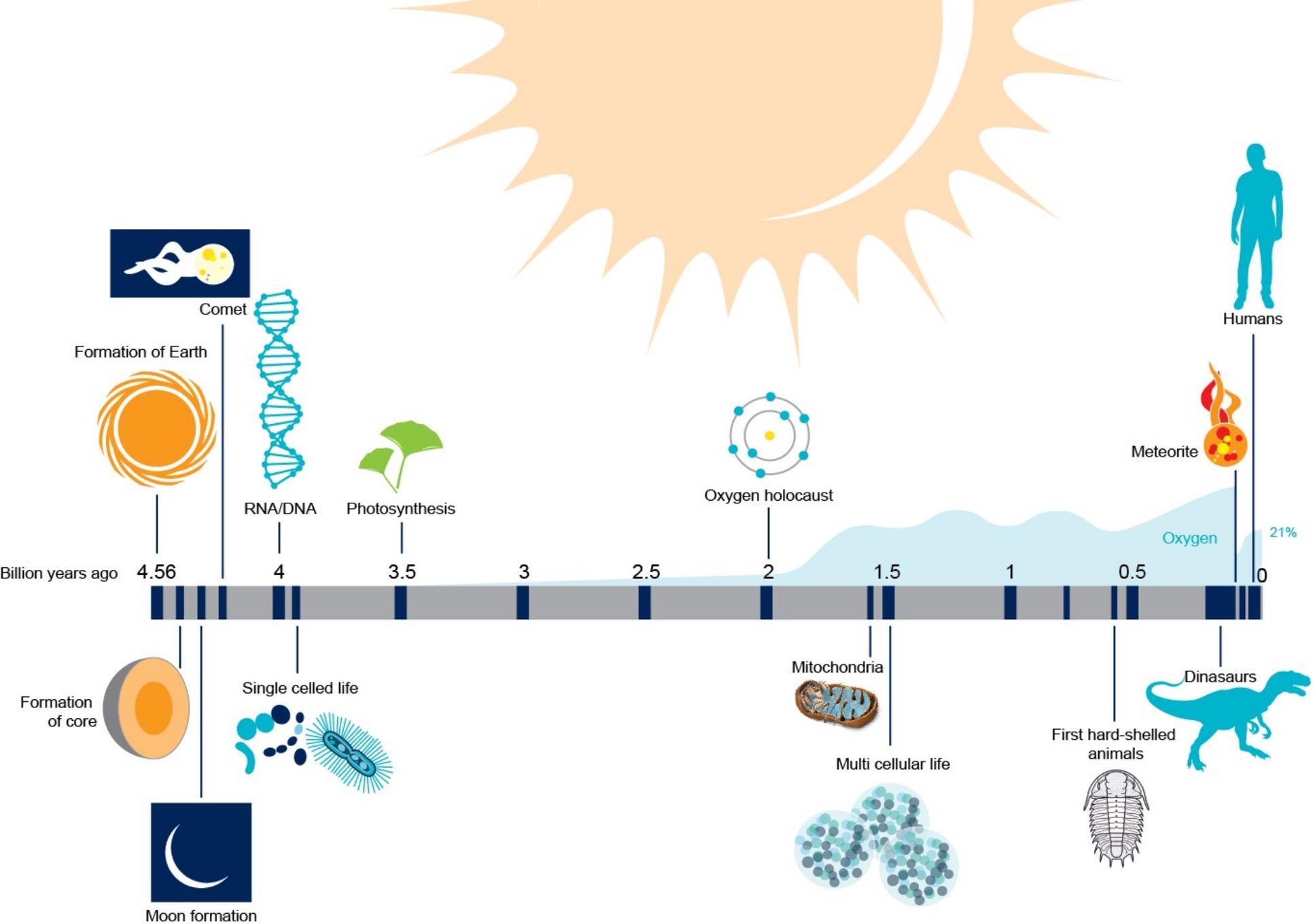
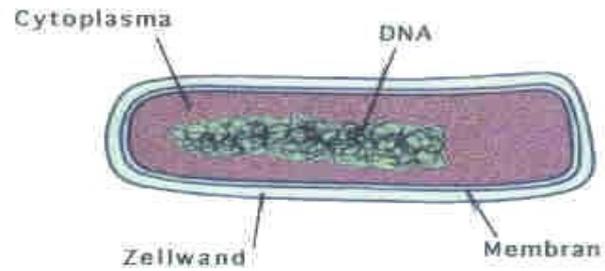


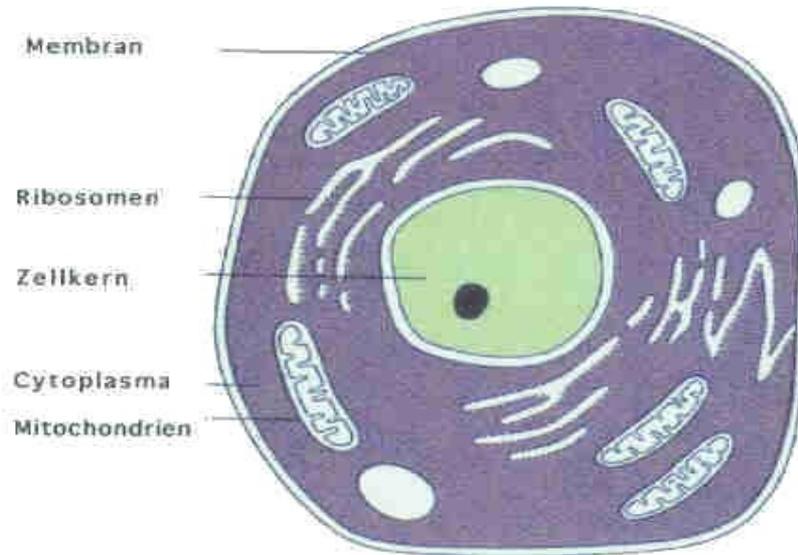
Figure 1



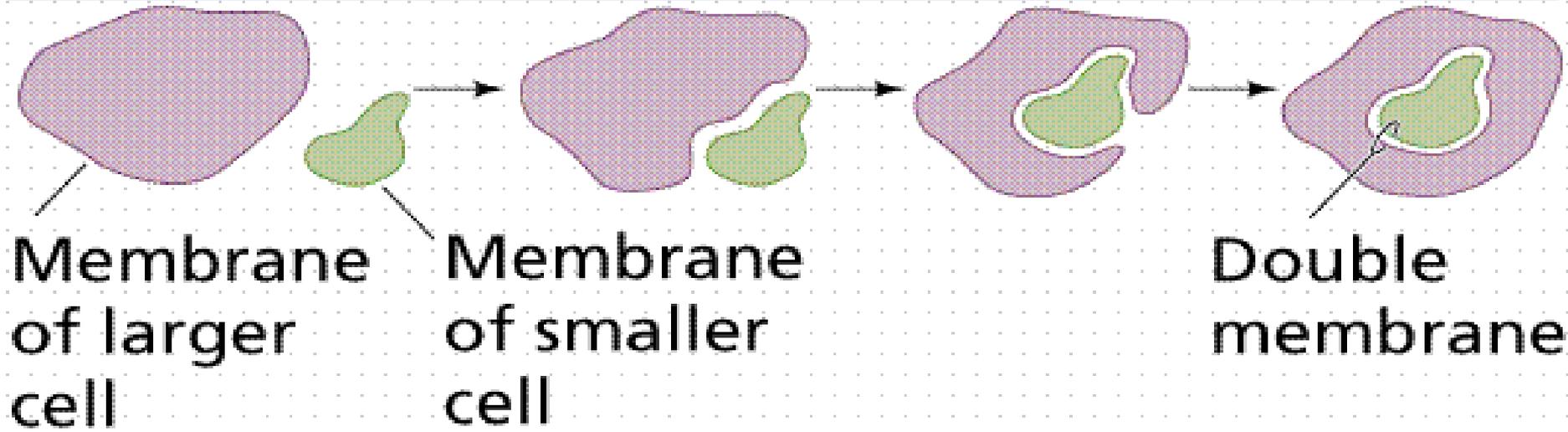
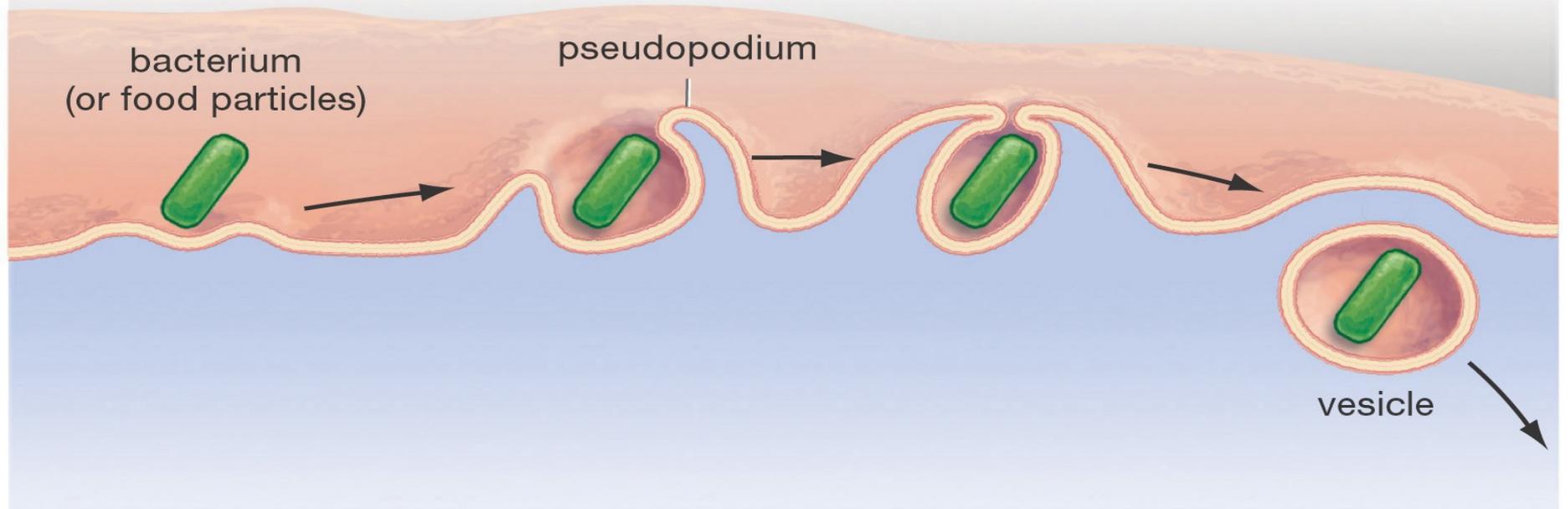
Procaryotische Zelle



Eucaryotische Zelle



(c) Phagocytosis



Mitochondria Structural Features

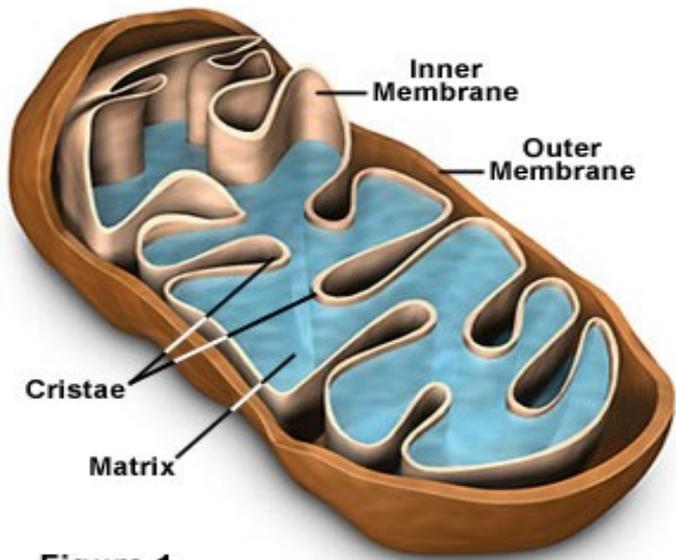
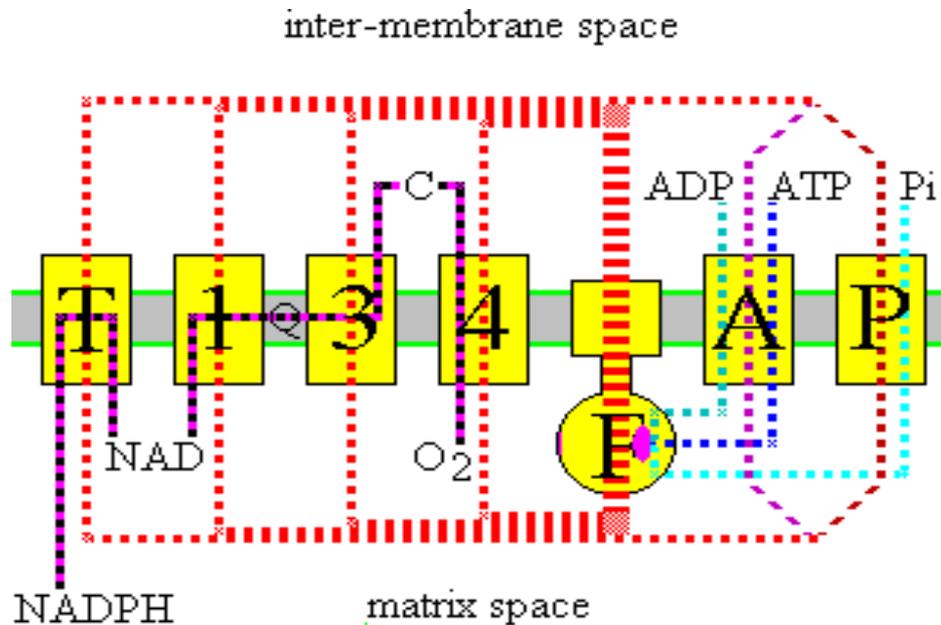
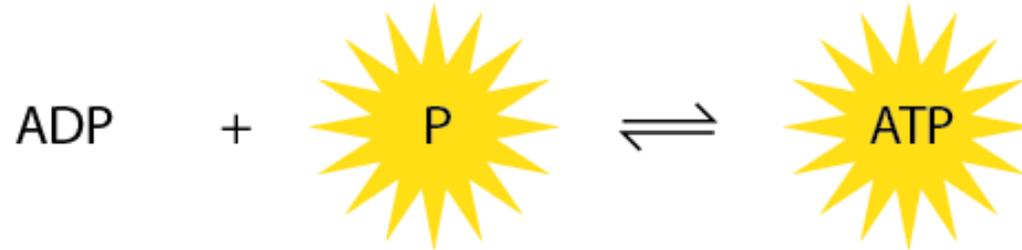


Figure 1



Power



How are mitochondria organized to be powerhouses?

Sugars

Amino
Acids

Fatty
acids

Acetyl
Co-A

Kreb's cycle

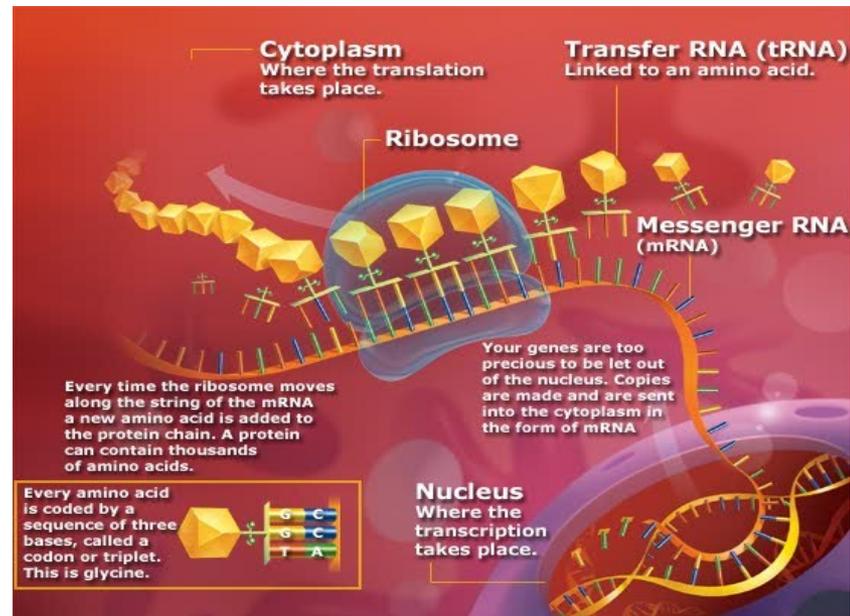
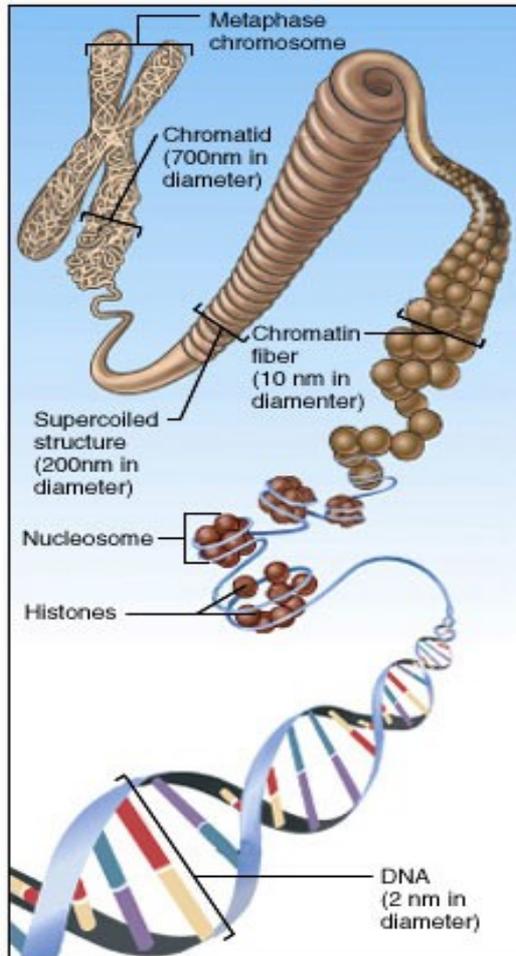
CO₂

Glucose is converted into pyruvate by glycolysis in cytoplasm (anaerobic metabolism). Then pyruvate enters mitochondria and is converted into Acetyl Co-A.

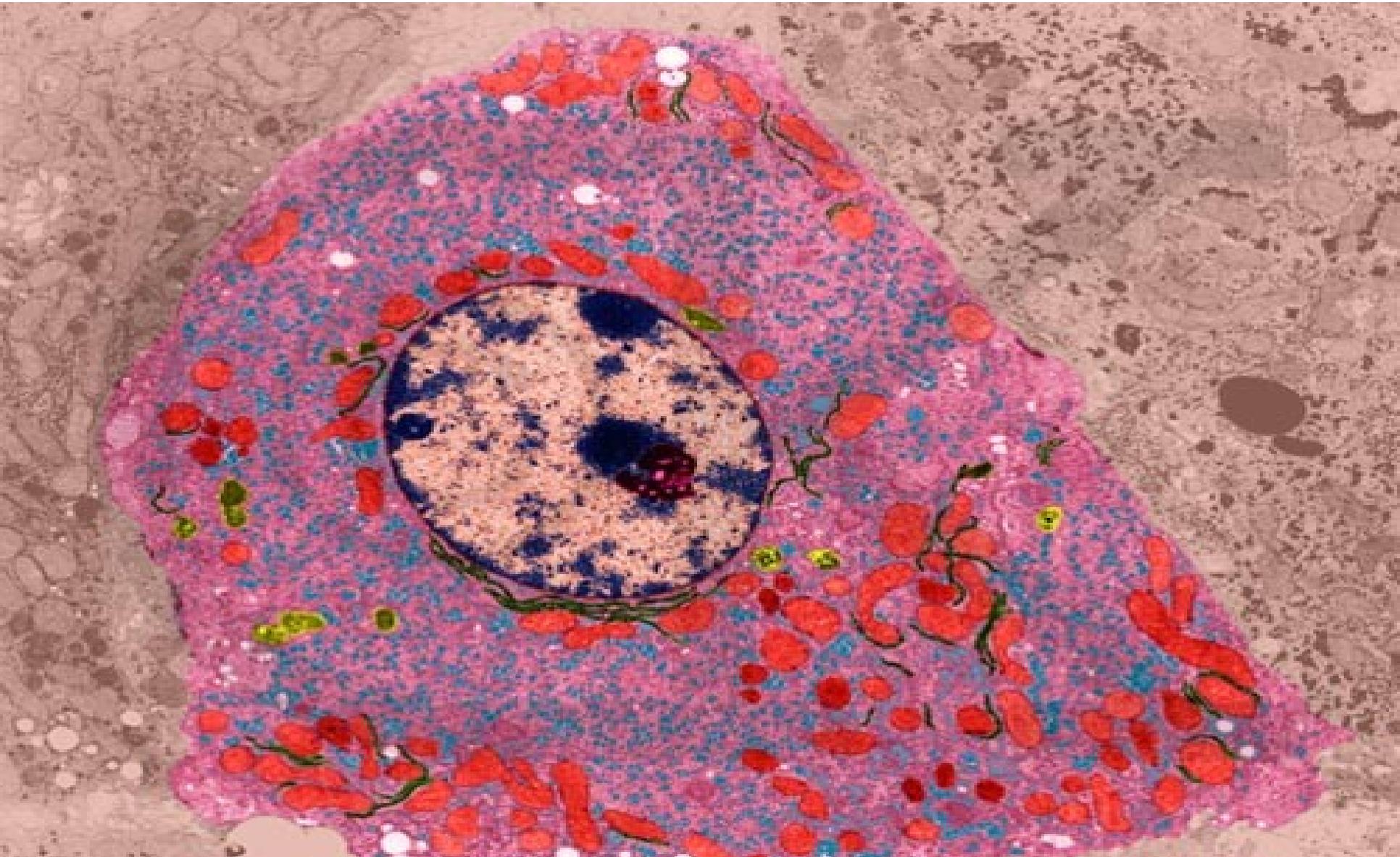
Acetyl Co-A joins with oxaloacetate to form citric acid and this begins the Kreb's cycle

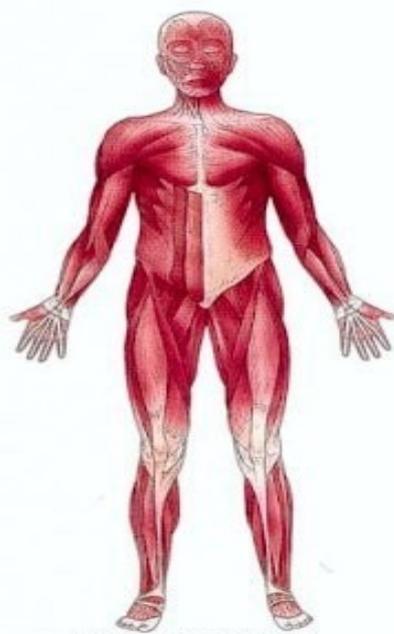


Sex



Suicide





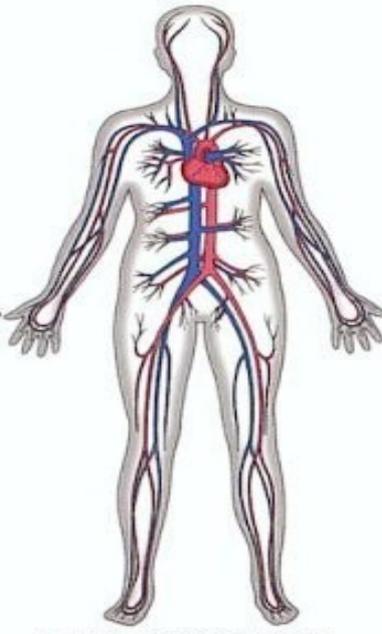
▲ **MUSCULAR SYSTEM**

The muscular system consists of layers of muscles that cover the bones of the skeleton, extend across joints, and can contract and relax to produce movement.



▲ **SKELETAL SYSTEM**

The skeleton is a strong yet flexible framework of bones and connective tissue. It provides support for the body and protection for many of its internal parts.



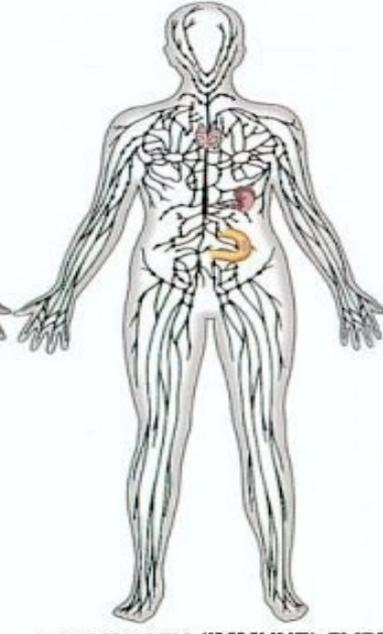
▲ **CIRCULATORY SYSTEM**

This system consists of the heart and a network of vessels that carry blood. It supplies oxygen and nutrients to the body's cells and removes waste products.



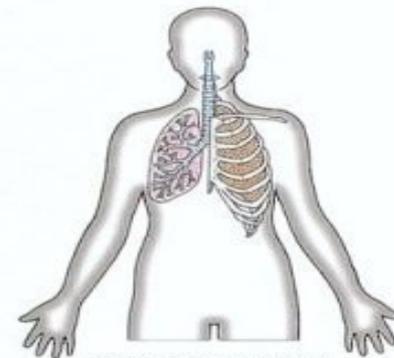
▲ **NERVOUS SYSTEM**

The nervous system is the body's main control system. It consists of the brain, the spinal cord, and a network of nerves that extend out to the rest of the body.



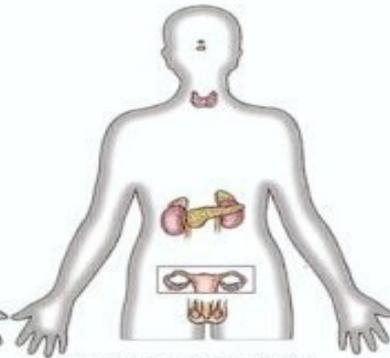
▲ **LYMPHATIC (IMMUNE) SYSTEM**

This system is a network of vessels that collects fluid from tissues and returns it to the blood. It also contains groups of cells that protect the body against infection.



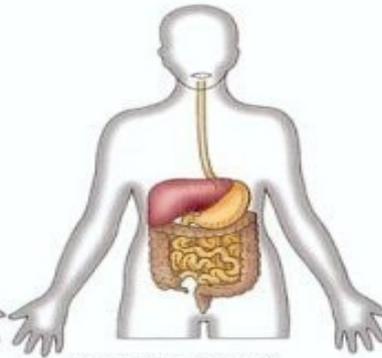
▲ **RESPIRATORY SYSTEM**

The respiratory system is centered on the lungs, which work to get life-giving oxygen into the blood. They also rid the body of a waste product, carbon dioxide.



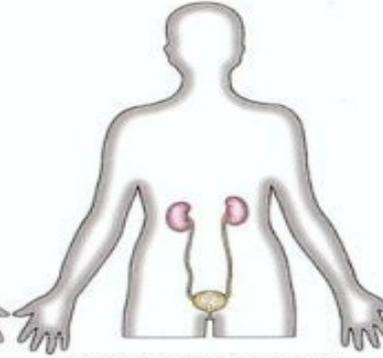
▲ **ENDOCRINE SYSTEM**

Many body processes, such as growth and energy production, are directed by hormones. These chemicals are released by the glands of the endocrine system.



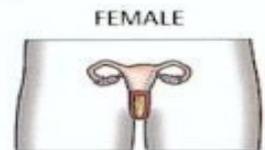
▲ **DIGESTIVE SYSTEM**

The digestive system takes in the food the body needs to fuel its activities. It breaks the food down into units called nutrients and absorbs the nutrients into the blood.



▲ **EXCRETORY SYSTEM**

The body's cells produce waste products, many of which are eliminated in urine. The job of the urinary system is to make urine and expel it from the body.



FEMALE



MALE

▲ **REPRODUCTIVE SYSTEM**

The male and female parts of the reproductive system produce the sperm and eggs needed to create a new person. They also bring these tiny cells together.

The Origin of Species

By Means of Natural
Selection

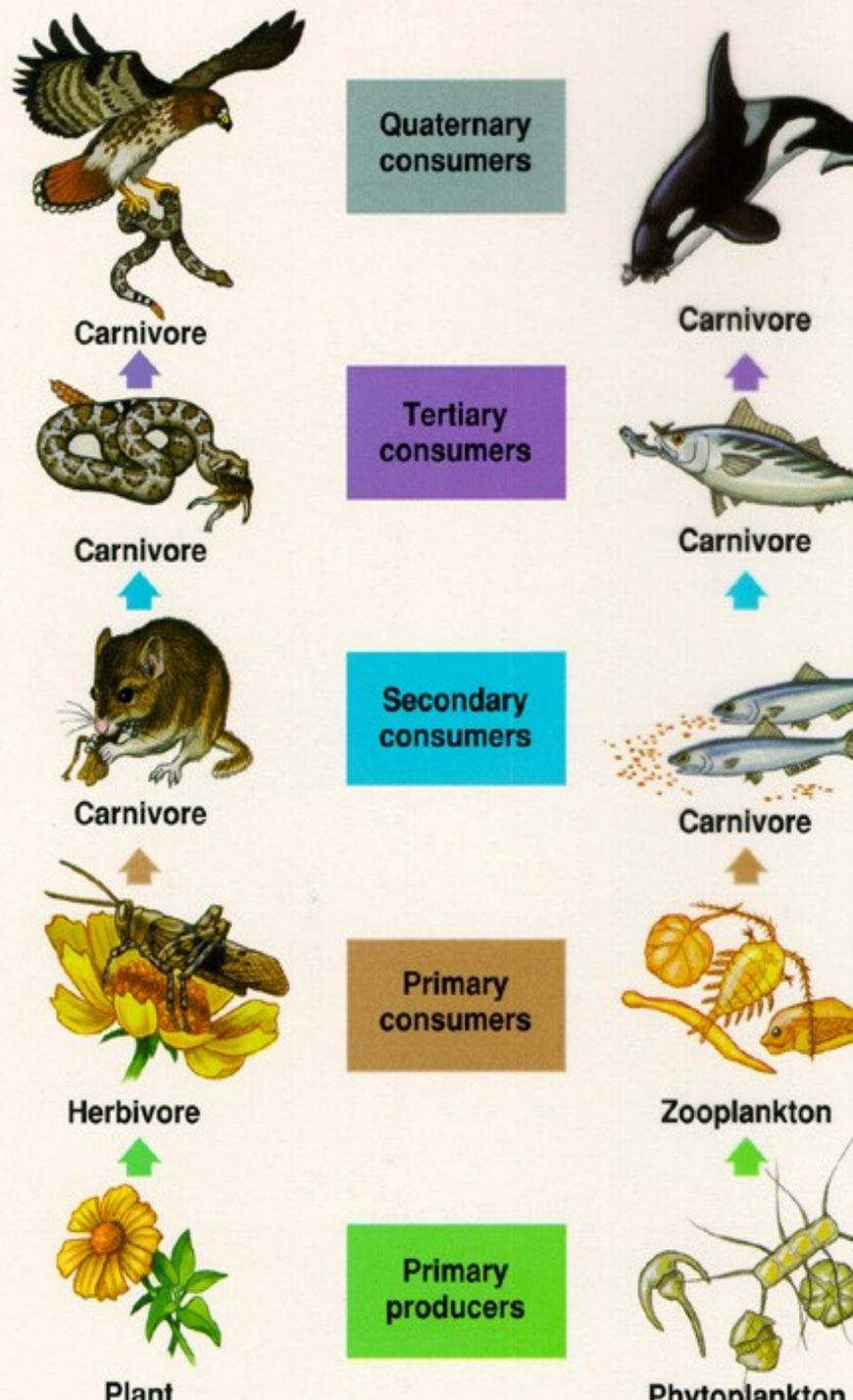
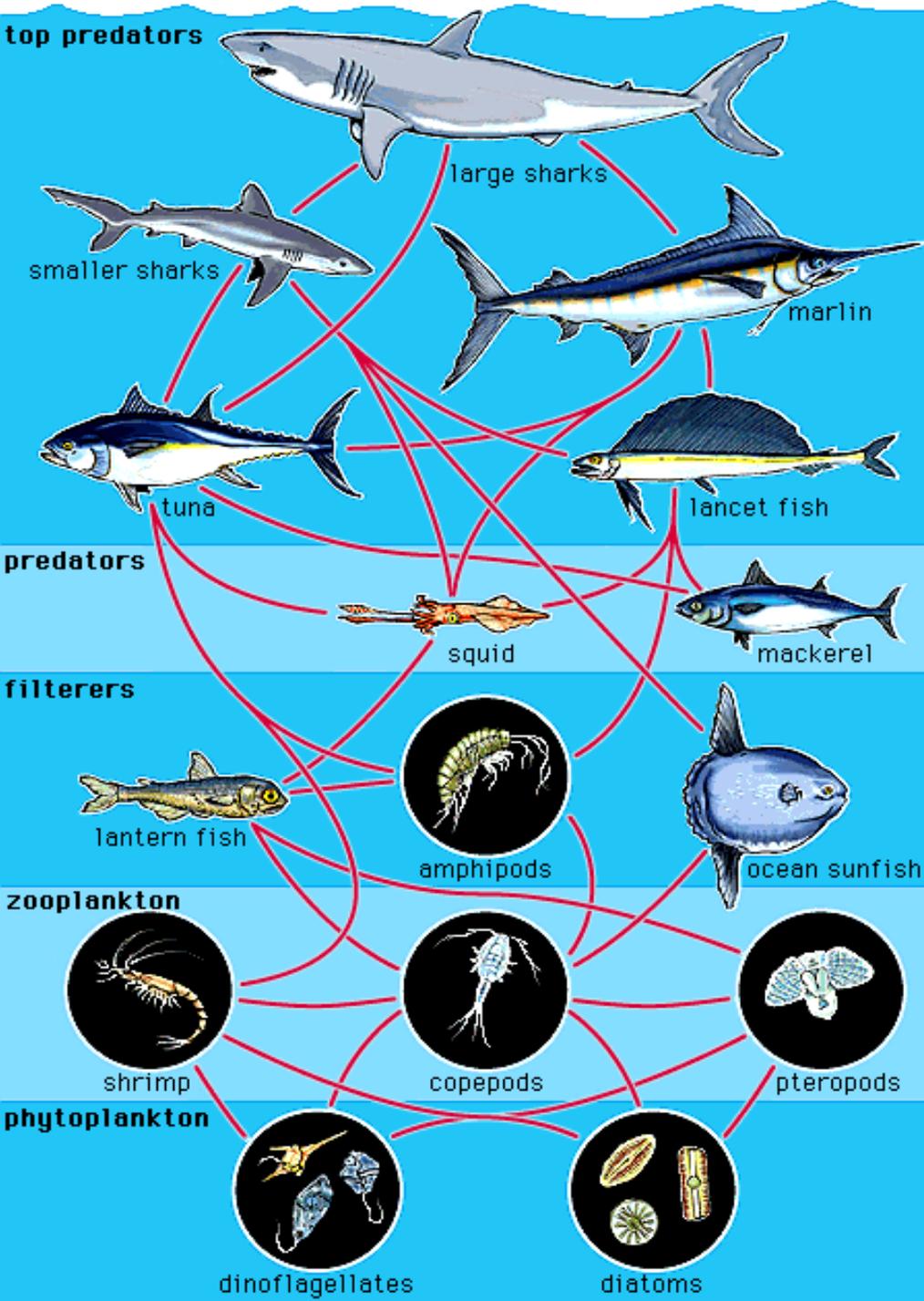
Or the Preservation of Favored Races
in the Struggle for Life

By
Charles Darwin,

M. A., F. R. S., F. L. S.

Two Volumes in One.







Humming mitos

Reduce free radical leakage

Increase the amount of mitochondria

- Calorie restriction
- Exercise speeds up the rate of electron flow

- Avoid stress
- Eat healthy, calorie restrictive
- Spirituality/ mindfulness
- Meditate
- Exercise
- Reduce inflammation
- Play, laugh, love