



Plants do respiration, too – cellular respiration, making ATP in a plant cell’s mitochondria!

**Respiration is a Combustion Reaction because it uses oxygen and makes water!**

**A Little About Bacteria (which are very little, themselves)...**

- ...cause diseases such as streptococcus and diphtheria
- ...adapt, so overuse of antibiotics is bad
- ...are necessary for good health, especially in digestion
- ...“too clean” can kill good bacteria, too.

**Viruses**

**Virus** – Surrounded by hard protein coat with DNA or RNA fragments inside (no genes).

No organelles; needs a host to reproduce, so are not alive!

Causes AIDS, colds, warts, and other diseases.

**Bacteria** – have cell membrane, actual DNA, ribosomes, but no organelles.

**Antibiotics** (and antibacterial) – breaks up cell membrane. Can destroy cells with cell membranes. Antibiotics DO NOT KILL VIRUSES

**Body Systems** (Study Helps Available)

**Skeletal system** – supports body, place for muscle attachment, protects organs

**Nervous system** – interprets and sends information throughout the organism.

**Excretory/ Urinary system** – used to remove waste products from organism.

**Muscular system** – used for locomotion, support, and protection

**Reproductive System** – produces egg and sperm to propagate species.

**Circulatory system** – moves water, oxygen, and nutrients around the organism;

Can be open (no arteries or veins) or closed.

**Immune System** – protects from and fights infections

**Respiratory System** – used to change CO<sub>2</sub> and O<sub>2</sub> between blood and air.

**Digestive System** – breaks down food to be absorbed by body.

**Integumentary System** (the skin) – protects from external environment;

maintains temperature; sensory perception (secondary function [so part of nervous system, too]).

**Endocrine System** – secretes hormones to regulate body functions.