

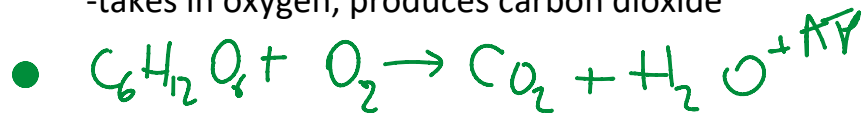
Respiration Review

November 4, 2019 9:52 AM

- Types of Respiration

1. Cellular

- Inside of cells, in the mitochondria
- using glucose to form energy (ATP)
- takes in oxygen, produces carbon dioxide



2. External

- In the lungs, at the alveoli and pulmonary capillaries
- Taking in air (oxygen), breathing out carbon dioxide
- Gases exchange/move via diffusion
- *outside air coming into our bodies via the lungs

3. Internal

- In body tissues, at the blood vessel and cell walls
- The gas exchange between cells and the blood vessels
- Gases exchange/move via diffusion

- Structures and Functions

- Include:

- Oral cavity
- Nasal cavity
- Sinuses
- Pharynx
- Epiglottis
- Larynx
- Trachea
- Bronchi
- Bronchioles
- Alveoli
- Pulmonary capillaries
- Lungs
- Pleura
- diaphragm
- Ribs
- Intercostal muscles

- Respiration and Defense
 - Know the purpose and process of:
 - Coughing
 - ◆ Get rid of particle in airway (trachea)
 - ◆ Forceful expired breath of air
 - ◆ Involuntary or voluntary
 - Sneezing
 - ◆ Clear the airway (sinuses/nasal passage)
 - ◆ Convulsive blast of air from lungs
 - ◆ Involuntary
 - Hiccupping
 - ◆ Purpose unknown
 - ◆ Spasm of the diaphragm and larynx (sound)
 - ◆ Involuntary
 - Yawning
 - ◆ Purpose unknown
 - ◆ Involuntary or voluntary
 - ◆ Stretching of the eardrums with a deep breath in

- Homeostasis and Respiration
 - How is respiration involved in the maintenance of blood pH?
 - Think of carbon dioxide levels and whether to increase breathing or decrease
 - ◆ Increase breathing - lowers carbon dioxide
 - ◆ Decrease breathing - heightens carbon dioxide levels
 - How is respiration involved in the maintenance of body temperature?
 - When you exhale, you lose body heat
 - Too hot - increase breathing
 - Too cold - decrease