

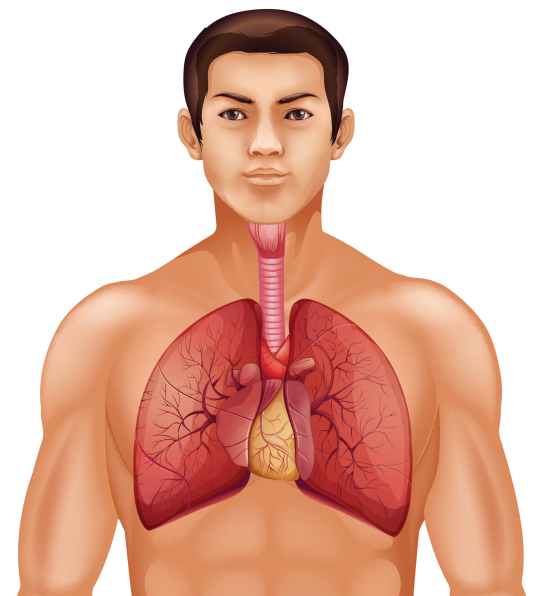
Respiration

Inhalation

- 1) Take in _____ through the _____ / _____.
- 2) _____ contracts and pulls _____.
- 3) _____ expands, produces a _____ within the cavity.
- 4) Air is drawn into the _____.

Exhalation

- 1) Diaphragm _____ and moves _____.
- 2) Thoracic cavity becomes _____.
- 3) Air is _____ out of the lungs.



External Respiration & Internal Respiration

External Respiration: *bringing _____ into and out of the lungs; exchanging _____ for air.*

- 1) Air is _____ through the alveoli.
- 2) Oxygen passes into the surrounding _____.
- 3) Oxygen is carried by _____ or red blood cells to the body cells.
- 4) Waste product, _____ is transported to the airspaces of the lungs to be _____.

Internal Respiration: *exchange of gases _____ the cells of the body organs, _____, and tissues.*

- 1) Oxygen passes from the _____ into the cells.
- 2) Cells give off the _____, carbon dioxide; it is passed into the _____.
- 3) _____ transports the carbon dioxide into the lungs.
- 4) Carbon dioxide is expelled during _____.

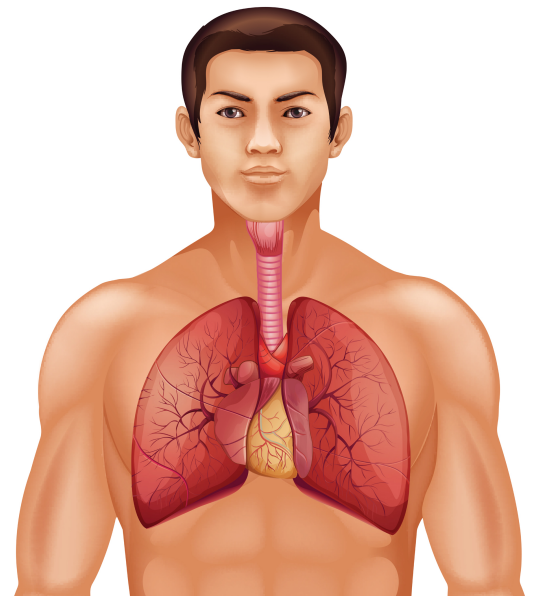
Respiration

Inhalation

- 1) Take in **air** through the **nose/mouth**.
- 2) **Diaphragm** contracts and pulls **downward**.
- 3) **Thoracic Cavity** expands, produces a **vacuum** within the cavity.
- 4) Air is drawn into the **lungs**.

Exhalation

- 1) Diaphragm **relaxes** and moves **upward**.
- 2) Thoracic cavity becomes **narrow**.
- 3) Air is **forced** out of the lungs.



External Respiration & Internal Respiration

External Respiration: bringing **air** into and out of the lungs; exchanging **gases** for air.

- 1) Air is **inhaled** through the alveoli.
- 2) Oxygen passes into the surrounding **capillaries**.
- 3) Oxygen is carried by **erythrocytes** or red blood cells to the body cells.
- 4) Waste product, **carbon dioxide** is transported to the airspaces of the lungs to be _____.

Internal Respiration: exchange of gases **within** the cells of the body organs, **cells**, and tissues.

- 1) Oxygen passes from the **bloodstream** into the cells.
- 2) Cells give off the **waste product**, carbon dioxide; it is passed into the **bloodstream**.
- 3) **Blood** transports the carbon dioxide into the lungs.
- 4) Carbon dioxide is expelled during **exhalation**.