Mechanism of Breathing Virtual Lab Key Points

Key Concepts

* Skeletal muscles, especially the diaphragm, change the volume of the thoracic cage.
* The lungs change volume with the thoracic cage because the parietal and visceral pleurae attach the lungs to the inside of the pleural cavity.
* Air pressure gradients are developed between the lungs and external environment due to volume changes.
* Air flows into and out of the lungs down its pressure gradient.
* The concepts related to these changes are described in Boyle’s law.
* Boyle's law

A picture containing text, kitchen appliance, food processor

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* Normal inspiration

Diagram

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Make sure you are familiar with the following terms:

**Atmospheric pressure**

Pressure of air in the atmosphere; i.e., outside of the body and lungs.

**Intra-alveolar pressure**

Pressure of air in the alveoli (air sacs) of the lungs; i.e., inside the body and lungs.

**Intrapleural pressure**

Pressure existing in the pleural cavity between the parietal pleura lining the pleural cavity and the visceral pleura covering the outside of the lungs.