



Anatomy & Physiology by Visible Body

Visual and interactive learning objectives available for teaching the respiratory system

Pick a learning objective and [request a trial](#) that includes the animations and interactive virtual 3D models for teaching that content!

INTERACTIVE LESSON ASSET

CHAPTERS AND LEARNING OBJECTIVES

34. Introduction: Respiratory System

- 34.1, 34.2** Identify and describe the basic functions of respiratory system structures.
- 32.3** Describe pulmonary ventilation and identify the structures involved.
- 34.4** Describe external respiration and identify the structures involved.
- 34.5** Describe internal respiration and identify the structures involved.

35. Upper Respiratory System

- 35.1, 35.6** Locate and identify structures that make up the upper respiratory system.
- 35.2, 35.3, 34.4, 35.5** Locate and identify structures of the nose and nasal cavity.
- 35.7, 35.8, 35.9** Describe the functions of the nasal mucosa.
- 35.10** Describe the process and function of sneezing.
- 35.11, 35.12** Describe the process of olfaction.
- 35.13** Locate and identify structures of the pharynx.
- 35.14** Describe the function of the epiglottis.
- 35.15, 35.16** Locate and identify structures of the larynx.
- 35.17** Describe the process of phonation.
- 35.18** Describe the relationship between vocal fold tension and sound pitch.

36. Lower Respiratory System

- 36.1** Locate and identify structures that make up the lower respiratory system.
- 36.2, 36.9** Locate and identify the airways of the lower respiratory system.
- 36.3** Describe the structure and function of the trachea.
- 36.4** Describe bronchodilation and bronchoconstriction.
- 36.5** Describe the location and shape of the lungs in relation to surrounding organs.
- 36.6, 36.7, 36.8** Locate and identify each lobe and external feature of the lungs.
- 36.10** Describe the location and structure of alveoli.
- 36.11** Describe the location and functions of type I alveolar cells, type II alveolar cells, and alveolar macrophages.
- 36.12** Describe the internal structures of the lungs.
- 36.13** Locate and identify the vessels of pulmonary circulation.

37. Respiration

- 37.1** Explain how Boyle's Law relates to breathing.
- 37.2** Describe pulmonary ventilation and identify the structures involved.
- 37.3** Locate and identify the muscles used during normal and forced inhalation.
- 37.4** Locate and identify the muscles used during normal and forced exhalation.
- 37.5** Explain how the respiratory and circulatory systems work together during external respiration.
- 37.6** Describe external respiration and identify the structures involved.
- 37.7** Using Dalton's Law, explain why oxygen and carbon dioxide are exchanged between the lungs and the bloodstream.
- 37.8, 37.9** Describe internal respiration and identify the structures involved.
- 37.10** Explain how imbalances of oxygen and carbon dioxide in the bloodstream affect respiratory rate.
- 37.11** Locate and identify the nervous system structures that regulate respiration.