The respiratory system is responsible for the exchange of oxygen and carbon dioxide between the blood and the environment.

**Terms**

- **alveoli**: tiny air sacs located at the ends of the bronchioles where gas exchange with the blood occurs
- **bronchi** (left and right): divisions of the trachea that direct air into the left or right lung
- **bronchioles**: divisions of the bronchi that branch throughout the lungs, carrying air throughout them
- **diaphragm**: large muscle that crosses the thoracic cavity and separates the lungs from organs in the abdomen; facilitates breathing
- **exhalation**: the second stage of breathing in which the thoracic cavity contracts and the diaphragm relaxes, allowing air to leave the lungs, expelling carbon dioxide
- **external respiration**: the process of gas exchange between the alveoli and the blood
- **inhalation**: the first stage of breathing in which the thoracic cavity expands and the diaphragm contracts, decreasing pressure on the lungs and allowing air to flow into the body
- **larynx**: location of the vocal cords at the top of the trachea
- **lungs**: paired organs that breathe and exchange gases
- **pulmonary ventilation**: breathing
- **respiration**: process of exchanging gases between the atmosphere and animal cells
- **thoracic cavity**: space enclosed by the ribs that contains the lungs and the heart
- **trachea**: branch that delivers gases to the lungs