

Respiratory Objectives:

Define these key terms:

respiration cellular respiration nostrils nasal passages cilia mucus pharynx
epiglottis larynx trachea cartilaginous rings bronchi bronchioles alveoli
diaphragm respiratory surface inhalation exhalation medulla oblongata

- Describe the difference between the function of the respiratory system and cellular respiration.
- State the functions of the respiratory structures: nostrils, nasal passages, cilia/mucus, pharynx, glottis, epiglottis, larynx, trachea, bronchi, bronchioles, alveoli, and diaphragm.
- Sequence the order of the respiratory structures in the human body.
- Identify the characteristics of a respiratory surface.
- Explain what happens to gases at the respiratory surface.
- Identify the muscular structure of the respiratory system.
- Explain how gases are exchanged between the alveoli and capillaries surrounding them.
- Explain the mechanical process of breathing.
- Recognize that all organisms have thin, moist membrane for the respiratory exchange of gases.
- State what triggers organisms to breathe.
- Describe the bodily changes from exercising.
- State what happens to the CO₂ and O₂ content in your body during exercise.
- State what happens to the level of CO₂ when you hold your breath.
- Explain why carbon monoxide is harmful and can lead to death.
- Describe how human respiration is regulated by the medulla through the feedback mechanism.
- List 3 negative health outcomes from smoking.
- Identify the respiratory structure affected for asthma, bronchitis, pneumonia, and emphysema.
- State the chief symptom(s), cause(s) and treatment(s) for the following malfunctions: asthma, bronchitis, pneumonia, and emphysema.