Body Systems

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The activities in this book explain elementary concepts in the study of the human body, including the respiratory, digestive, excretory, circulatory, nervous, skeletal, and muscular systems.

General background information, suggested activities, questions for discussion, and answers are included.

Encourage students to keep completed pages in a folder or notebook for further reference and review.

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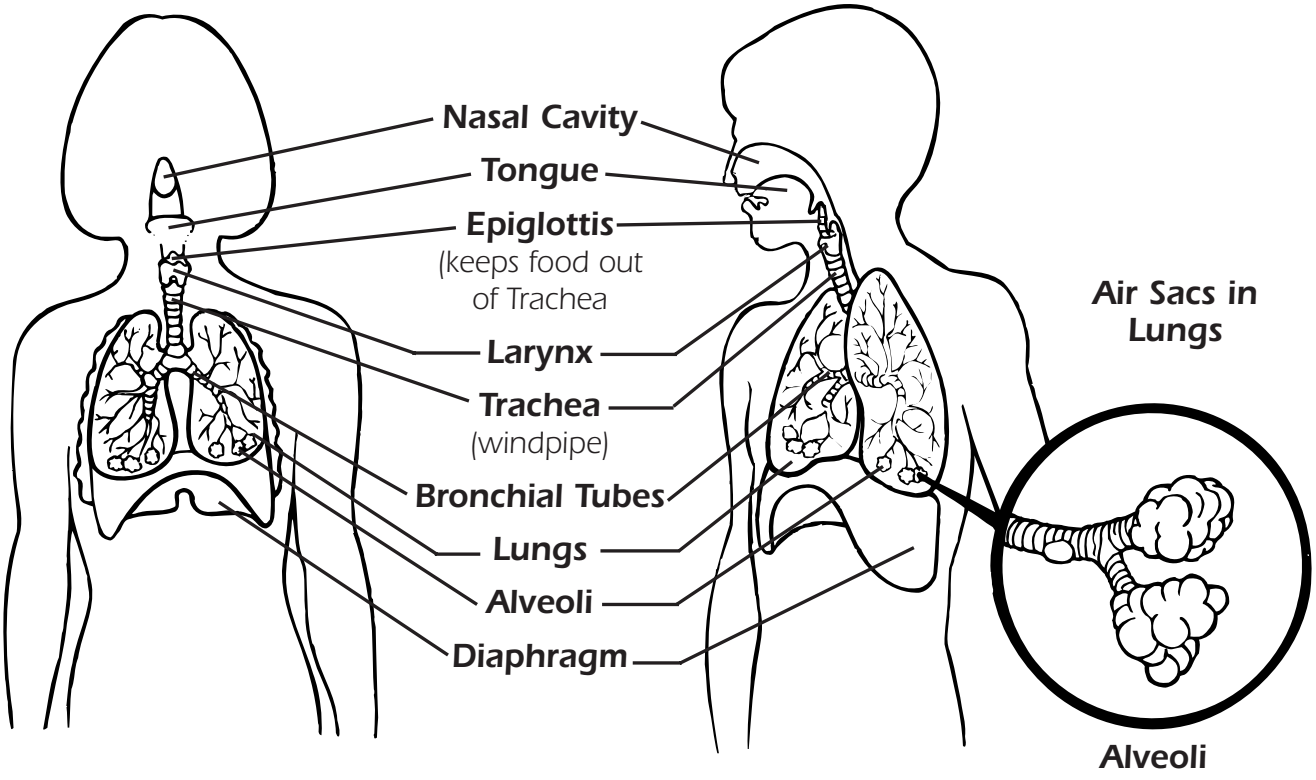
Name _____ Date _____

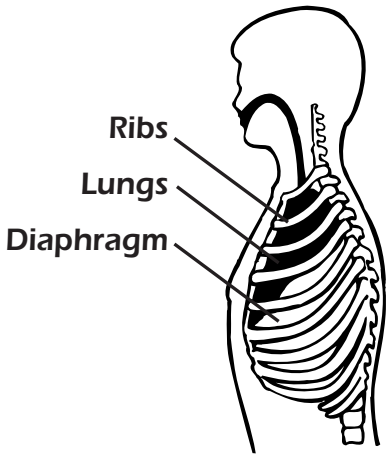
Respiratory System

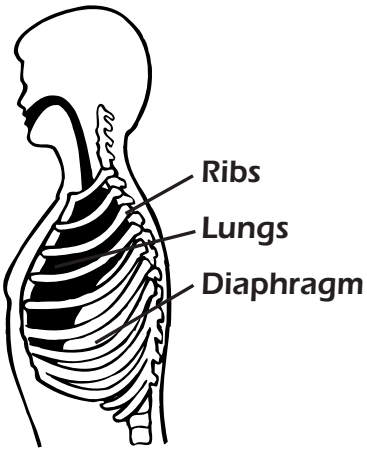
The respiratory system brings oxygen into the body and removes carbon dioxide and other gases.



Breathing

When you breathe in, the diaphragm contracts (becomes smaller) and drops down. The ribs expand outward. Air rushes in to fill the space.





When you breathe out, the diaphragm relaxes into an upward position. The ribs settle downward. The space now shrinks and air is forced out of the lungs.

The air you inhale is warmed in the passages, filtered by the coarse hairs and mucus inside the nose, and moistened by mucus in the nasal passages, throat, and trachea (windpipe) before it reaches your lungs.

Name _____ Date _____

Oxygen Intake

Your blood contains about one quart of oxygen. When you are very active you breathe faster to take in extra oxygen needed for the increased activity. You can measure how fast your cells are working by measuring how fast your cells use oxygen. Test your rate at various times during the day and after different activities. Your oxygen intake is measured by the number of breaths you take per minute.

Compare your chart with others.

OXYGEN INTAKE		
ACTIVITY	**RATE (breaths per minute)**	**TIME**
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Name _____ Date _____

RESPIRATION

1. Explain the main function of the respiratory system. _____

   _____

   _____

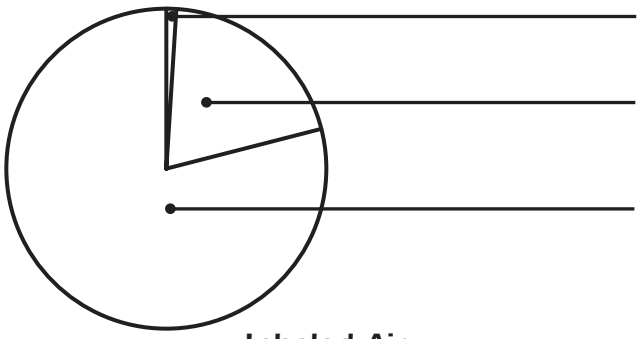
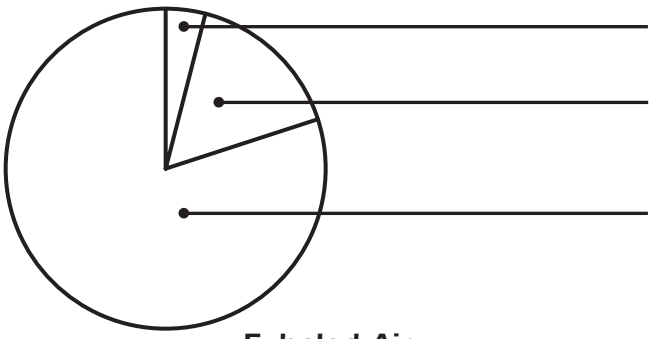
2. Explain why you breathe faster during increased activity. _____

   _____

   _____

3. Cold air is _____ in the passages, _____ by the hairs and mucus in the linings, and _____ by the mucus on its way to the lungs.
4. You breathe _____ in and breathe out _____.

Fill in the blanks with the following information:

Carbon Dioxide 1%	Oxygen 4%
Oxygen 20%	Nitrogen 16%
Nitrogen 79%	Carbon Dioxide 80%
	
Inhaled Air	**Exhaled Air**

Complete three activities.

1. Explain what causes yawning.
2. Report on what hay fever is and what can be done for those who suffer from this condition.
3. Go to a store and make a list of several of the remedies available for the common cold. Tell what each one claims it can do to relieve the symptoms.
4. Describe what a cold is and what causes coughs.
5. Explain what causes hiccups.
6. Draw a side-view diagram of the inside of your mouth and nasal cavity. Include and label the soft and hard palate, tongue, tonsils, trachea, esophagus, adenoids, epiglottis, and mandible.