34 Circulatory, Respiratory, and Excretory Systems

2 Respiratory System

10(A) MAINIDEA Write the Main Idea for this lesson. **REVIEW VOCABULARY** Recall the definition of the Review Vocabulary term. ATP ATP **New Vocabulary** Use your book to define each term. breathing breathing external respiration external respiration internal respiration trachea internal respiration bronchus lung alveolus trachea bronchus lung alveolus

2 Resp

Contrast breathing and respiration.	
Identify three structures that filter air way to the lungs.	r as it enters through the nose on its
Sequence the process of gas exchang the flow chart below.	ge by completing the sentences in
enters the lungs from the atmosphere through the	
process of	The blood transports the
	waste to the to be returned to
diffuses into	the
capillaries through the and then into	
	Identify three structures that filter air way to the lungs. 1. 2. 3. Sequence the process of gas exchange the flow chart below.

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walls and

Meanwhile,

moves in the opposite direction, crossing

diffusing into the

Science Notebook • Circulatory, Respiratory, and Excretory Systems 486

The blood carries the

release to the body's

for

2 Respiratory System (continued)

Model the lungs during inhalation and exhalation. Label and describe the position of the diaphragm during each process.

Inhalation	Exhalation

Summarize each of the following common respiratory disorders.

Respiratory Disorder	Description
Pneumonia	
Emphysema	
Lung cancer	
Asthma	
Bronchitis	
Pulmonary tuberculosis	

SUMMARIZE

Discuss the importance of respiration to the body.

2 Respiratory System (continued)

REVIEW IT!

- **1. MAINIDEA Identify** the main function of the respiratory system.
- 2. Distinguish between internal and external respiration.
- 3. Sequence the path of air from the nasal passages to the bloodstream.

4. **Describe** the mechanics of inhalation and exhalation.

- 5. Infer how the respiratory system would compensate for a circulatory disorder.
- 6. Describe three disorders of the respiratory system.

- 2 Respiratory System (continued)
- 7. Hypothesize an advantage of heating and moisturizing air before it reaches the alveoli.
- 8. The total surface area of the alveoli tissue in your lungs is approximately 70 m². This is more than 40 times the surface area of the skin. What is the surface area of your skin?