

Name: \_\_\_\_\_

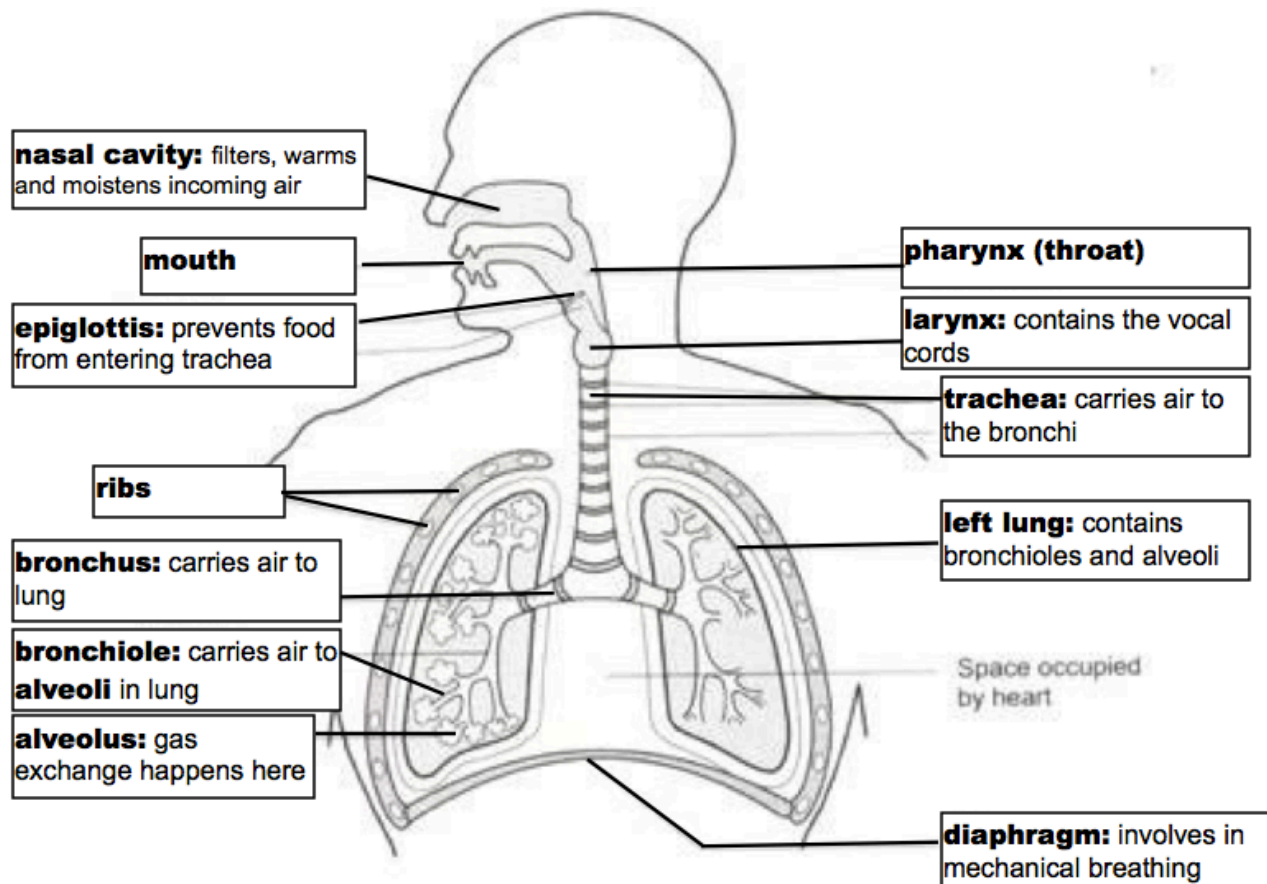
Date: \_\_\_\_\_

## Lesson 11 Respiratory System (Nelson p.79-83)

**Learning Goals:**

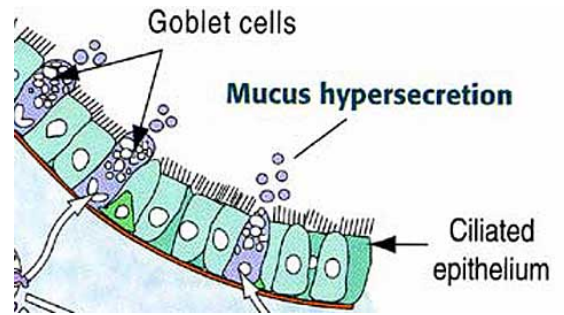
- A. I can explain the primary functions of the respiratory system in animals.
- B. I can identify and explain parts of the respiratory system, and their functions.
- C. I can explain some diseases and disorders related to human respiratory system.

- The respiratory system
  - \_\_\_\_\_ needed by the body
  - \_\_\_\_\_ produced as your body
- The respiratory system \_\_\_\_\_ with circulatory system.
- The main parts are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ ( \_\_\_\_\_, \_\_\_\_\_), \_\_\_\_\_ + \_\_\_\_\_, and \_\_\_\_\_.
- Air enters through:
  - \_\_\_\_\_ or \_\_\_\_\_ (nasal cavity)
  - passes through the \_\_\_\_\_ (throat)
  - travels down the \_\_\_\_\_ (windpipe)
  - to either the right OR left \_\_\_\_\_, which continues to branch into
  - \_\_\_\_\_, each of which ends with a cluster of:
  - \_\_\_\_\_ (air sacs) for gas exchange, which are surrounded by \_\_\_\_\_.



**Structural Features**

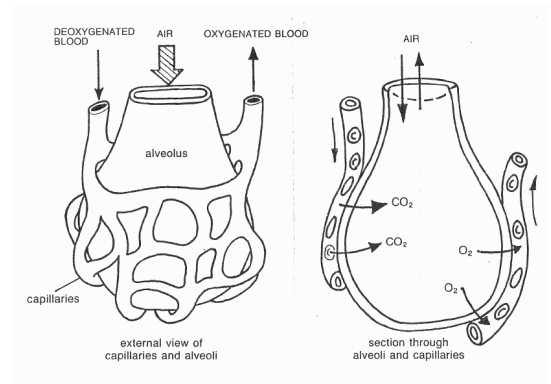
- **Goblet cells** produce \_\_\_\_\_ (slippery liquid).
- **Mucus:** \_\_\_\_\_ and \_\_\_\_\_  
\_\_\_\_\_ and some \_\_\_\_\_
- Many epithelial cells have \_\_\_\_\_ (hair-like)
- **Cilia:** \_\_\_\_\_ upwards away from lungs



**Gas Exchange**

**Oxygen Transport**

- Air we breathe into our lungs has a \_\_\_\_\_ concentration of \_\_\_\_\_ than the blood in the capillaries around the alveoli.
- Oxygen \_\_\_\_\_ through \_\_\_\_\_ in lungs into \_\_\_\_\_ in \_\_\_\_\_
- Blood carries oxygen to the \_\_\_\_\_.



**Removing Carbon Dioxide**

- Blood carries carbon dioxide to the \_\_\_\_\_.
- Carbon dioxide \_\_\_\_\_ from \_\_\_\_\_ in \_\_\_\_\_ into \_\_\_\_\_ in lungs.
- Carbon dioxide is then released through the mouth or nose when we \_\_\_\_\_

**Control of Breathing**

Breathing air in and out is a mechanical process related to \_\_\_\_\_ caused by the \_\_\_\_\_ and \_\_\_\_\_ of the \_\_\_\_\_.

**Inhalation (Breath In)**

Muscles move the ribs \_\_\_\_\_ and \_\_\_\_\_  
Diaphragm \_\_\_\_\_, moving it \_\_\_\_\_  
Volume \_\_\_\_\_  
Pressure in lungs \_\_\_\_\_ → \_\_\_\_\_

**Exhalation (Breath Out)**

Muscles move the ribs \_\_\_\_\_ and \_\_\_\_\_  
Diaphragm \_\_\_\_\_, moving it \_\_\_\_\_  
Volume \_\_\_\_\_  
Pressure in lungs \_\_\_\_\_ → \_\_\_\_\_

