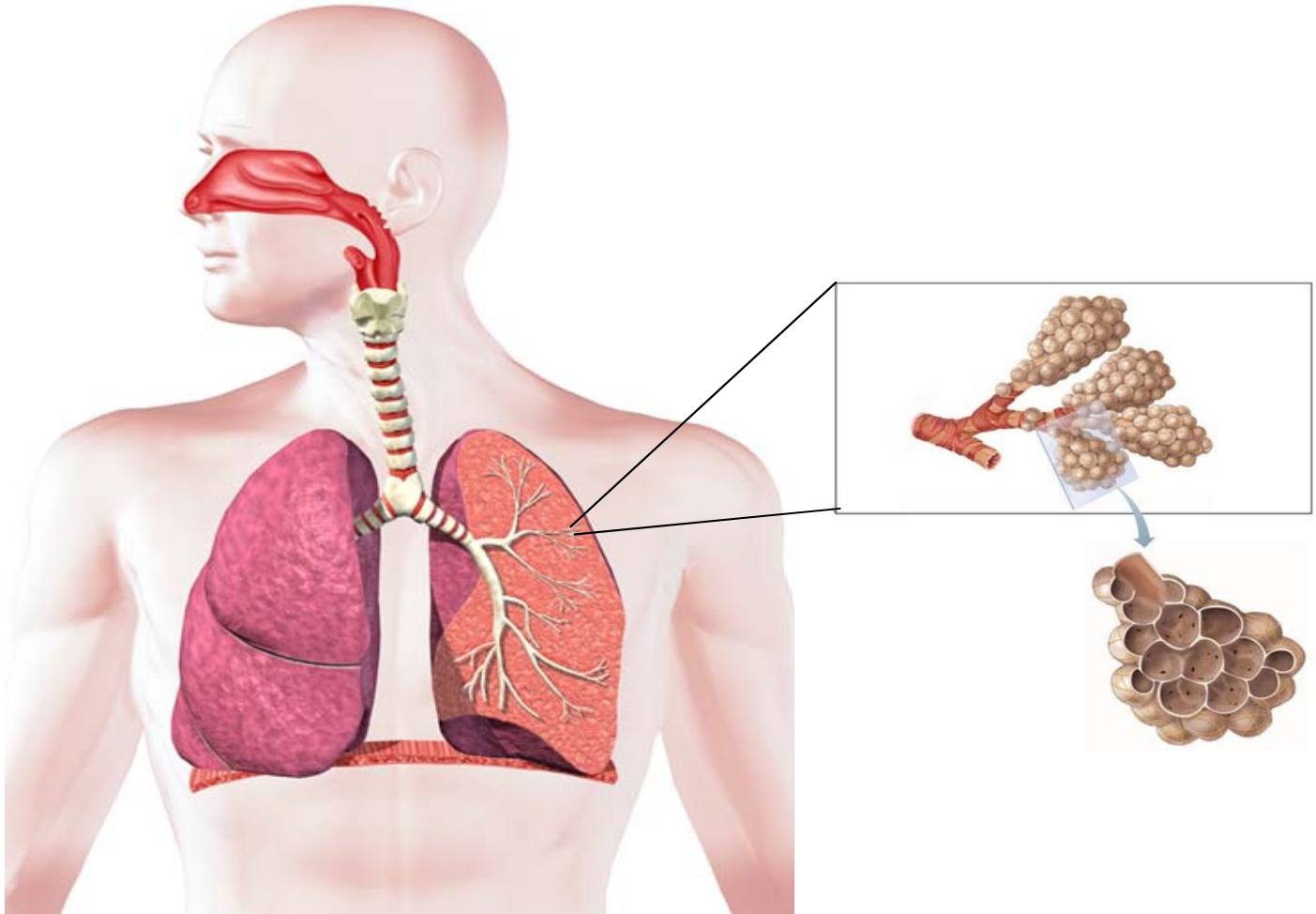


Anatomy of the Respiratory System Worksheet Honors Anatomy

Using the list below, label the different parts of the respiratory system.



Alveolar ducts
Alveoli
Bronchioles

Larynx
Lung
Nasal cavity

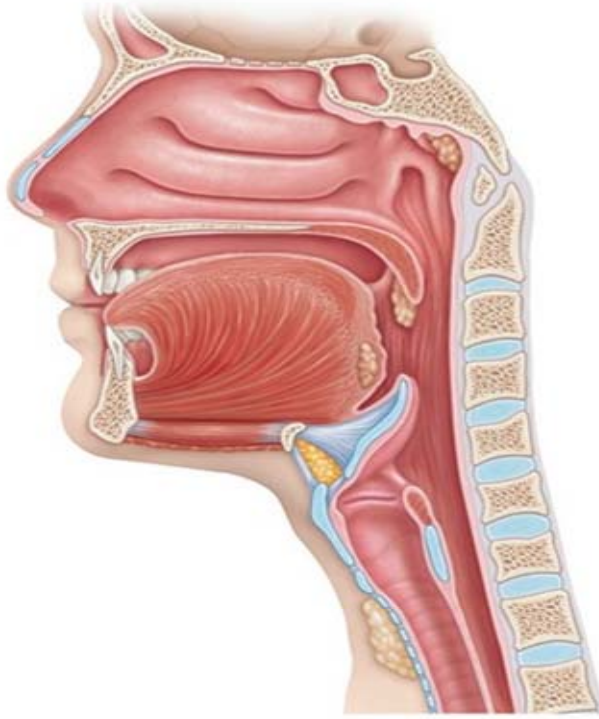
Pharynx
Primary bronchi
Secondary bronchi

Tertiary bronchi
Trachea
Terminal bronchioles

Using the list above (except for Lung), draw a flow map illustrating the order of the organs in which air flows into the body.

Using the list below, label the different parts of the upper respiratory tract.

- Epiglottis
- Nasal cavity
- Nasal conchae
- Nose
- Nostril
- Pharynx
 - Laryngopharynx
 - Nasopharynx
 - Oropharynx



1. List 3 structures within the nasal cavity that filters the air we breathe.

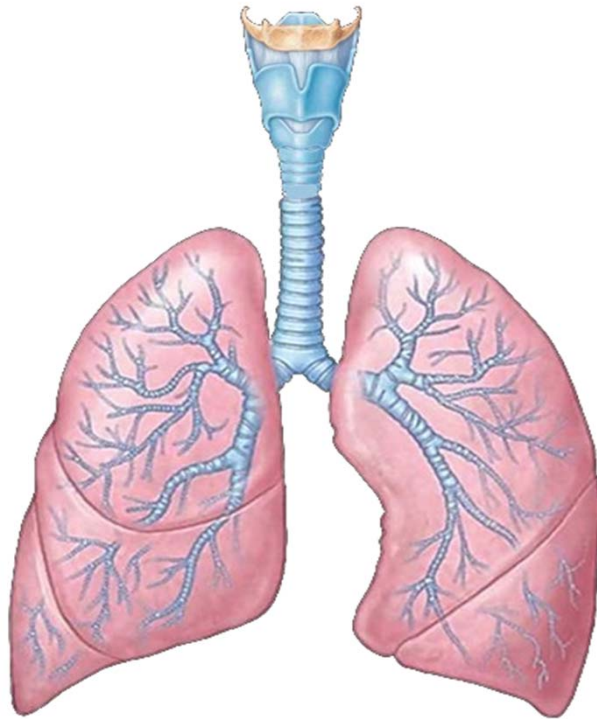
2. Structures found within the nasal cavity that cause air particles to collide, through turbulence, thus warming the air we breathe, are called _____.

3. Explain how the epiglottis prevents choking on food.

4. Voice production occurs because air moves through the glottis causing the "True" _____
_____ (vocal folds) to vibrate.

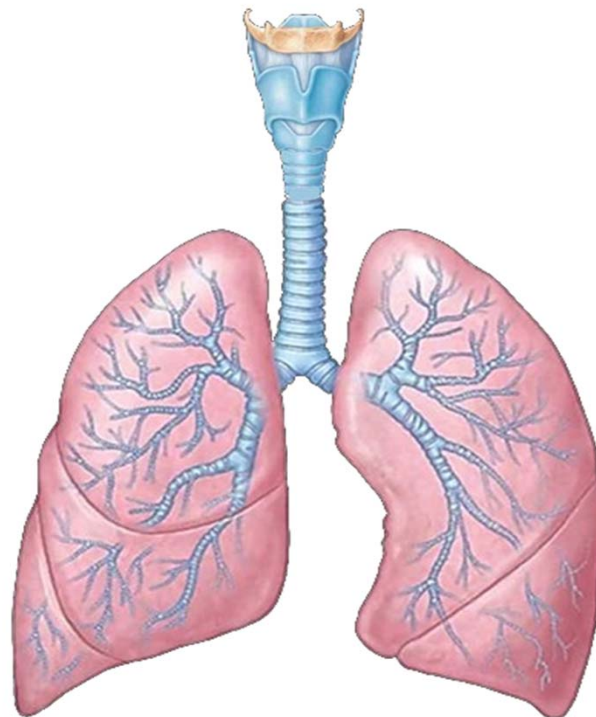
Using the list below, draw and label the different parts of the pleural membranes.

- Parietal pleura
- Visceral pleura
- Pleural cavity
- Pleural fluid



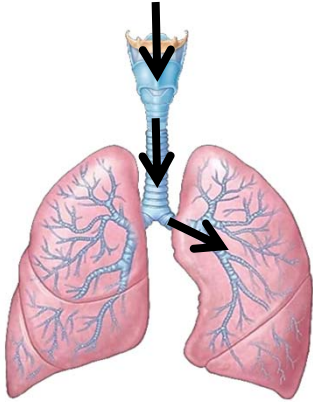
Using the list below, label the different parts of the lower respiratory tract.

- Larynx
- Lung
- Primary bronchus
- Secondary bronchus
- Tertiary bronchus
- Trachea



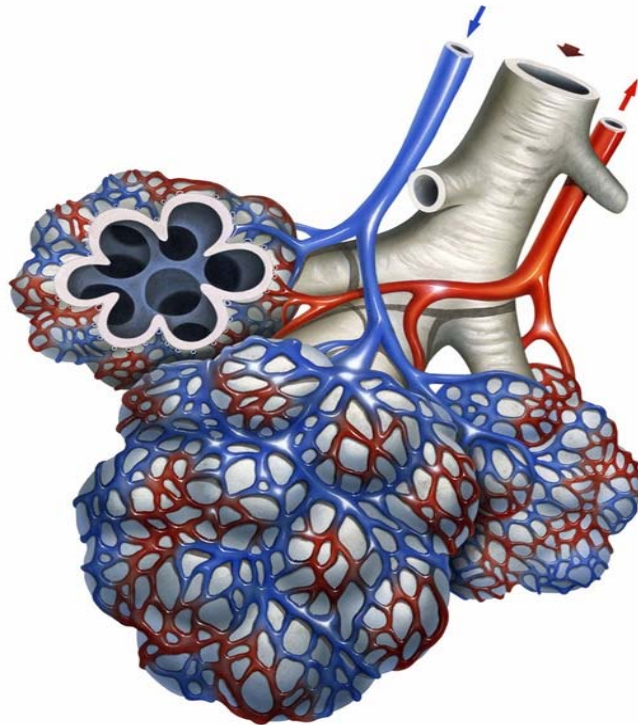
1. A dome-shaped muscle that when contracted aids in inspiration during respiration is called the _____.
2. Draw and label the muscle from Question 1 above onto the lower respiratory tract diagram.

3. As air moves from the trachea to the primary bronchi to the bronchioles the tissue composition of each structure changes. The trachea is composed mostly of hyaline cartilage, whereas the bronchioles have no cartilage and are composed mostly of smooth muscle. Explain why the composition of each passageway changes from a rigid tissue to a less rigid tissue.



Using the list below, label the different parts of the alveoli.

- alveoli
- blood capillary
- terminole bronchiole



1. Using the cross section of the alveoli, draw 2 arrows to signify the direction of movement of Oxygen and Carbon Dioxide. Be sure to label which arrow represents Oxygen and which arrow represents Carbon Dioxide.
2. The lipoprotein secreted by the walls of the alveoli that reduces surface tension between fluids in the alveoli is called _____.
3. Explain why the tissue for the alveoli and the blood capillary is simple squamous epithelial tissue.

Complete the paragraph below about the air flowing through the respiratory system.

Air first enters the respiratory system through the 1 of the nose.

Within the nose are two 2 _____ that are separated by a septum.

Air in the nasal cavities is cleaned by two things. The first thing is 3 , which filters the air as it enters through the nostrils. The

second thing is 4 , which traps dirt and dust by its stickiness.

Also, within the nasal cavity, air is warmed by 5 _____ that

creates turbulence, which causes air particles to collide with one

another thereby generating heat. From the nasal cavity air passes

through the 6 before entering the 7 , which houses the voice

box. Within the voice box are 8 _____, which vibrate as air passes

by them, creating sound. From the larynx, air then moves into the

 9 , before being divided by the left and right 10 _____ that

enter the 11 . The bronchi then divide, and continue to divide until

they are smaller passageways called 12 . The composition of the

passageways change from 13 to 14 _____ to allow the

lungs to expand and contract during breathing. Finally, the bronchioles

terminate at tiny air sacs called 15 , where gas exchange occurs.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____