NAME:_____ DATE:_____

GAS EXCHANGE

1. Define the term gaseous exchange in your own words.

_____

_____

2. Paragraph about the features of a gas exchange surface drop box choice

Once at the alveoli, gaseous exchange occurs. Blood is brought to and taken away from each alveolus in the smallest of the blood vessels called the _____which are wrapped around each alveolus.

9. _____gas is at a _____concentration inside the alveoli, so it will diffuse into the capillary and into the _____ to be taken to all the body cells for aerobic respiration. This blood is said to be _____ because it is now rich in oxygen.

10. When the body cells use up the oxygen, they produce the waste gas _____ which is at a _____concentration in the blood. So when the blood returns to the alveoli in the lungs, the _____ gas diffuses back into the _____ from the capillaries. The gases are therefore _____ in this way. Gaseous exchange also occurs between the cells and the _____.

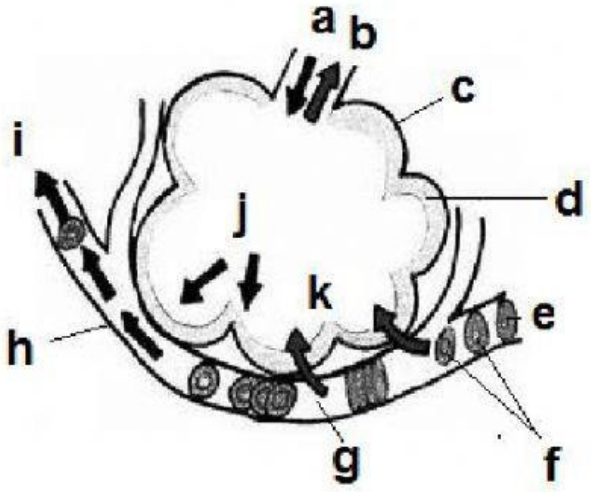
3. Match the GE surface to the organisms by drawing straight lines.

GASEOUS EXCHANGE SURFACE	**ORGANISM**
internal gills	mammals
spiracles and tracheoles	amphibians
lenticels and stomata	unicellular organisms
external gills	fish
cell membrane	plants
alveoli	insects

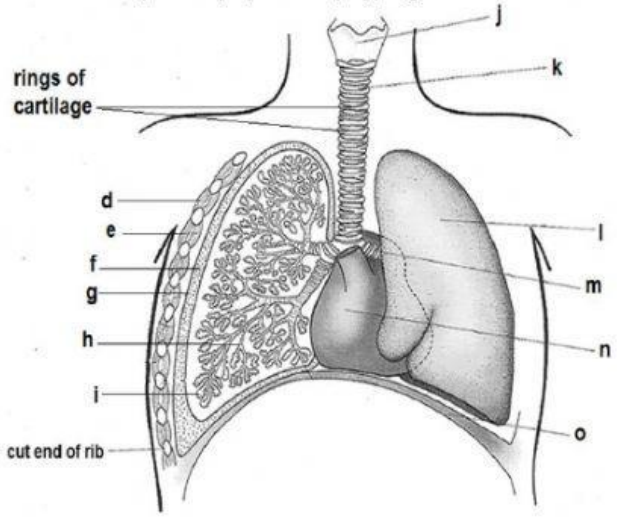
4. Label of the alveoli drag and drop

Select from the words and molecules in the box below to complete the diagram showing gaseous exchange occurring between alveoli and the blood.

blood capillary	from heart	water vapour		plasma		red blood cells
	wall of alveolus	to heart	CO_2	O_2	CO_2	O_2



5. Label of the respiratory system by typing the correct letter into the table.



Structure	Letter
Diaphragm	
Bronchus	
Heart	N
Lung	
Pleural fluid	
Alveoli	
External Intercostal muscles	
Trachea	
Internal Intercostal muscles	
Larynx	
Pleural membrane	

6. Complete the following table to show the comparison of gases in inspired (inhaled) and expired (exhaled) air.

COMPONENT	INHALED AIR	EXHALED AIR	REASONING
	78%		Nitrogen gas in not used by cells.
Oxygen		16%	
	0.03%		Produced during aerobic respiration.
Inert gases	<1%	<1%	Gases not used by cells.
Water vapour		Increased	
		Increased	Warmed by body temperature.

7. Table of what happens when we breath in and out (drop box) choice

Complete the table below to outline how the parts of the respiratory system behave when inhaling and exhaling.

PART OF RESPIRATORY SYSTEM	INHALED / INSPIRED AIR	EXHALED / EXPIRED AIR
External Intercostal Muscles		
Internal Intercostal Muscles		
Ribcage		
Diaphragm		
Volume of lungs		
Pressure in lungs		