Homework

Q1) How are the lungs designed in human body to maximize the area for exchange of gases?

Ans - Within the lungs when the air enters the passage divides into smaller and smaller tubes which finally terminate into balloon-like structure which are called alveoli. The alveoli provides a surface where exchange of gases take place. The walls of alveoli contains an extensive network of blood vessels.

When we breathe in we flatten our diaphragm and lift our ribs. and the chest cavity becomes larger as a result.

The blood brings carbondioxide from rest of the body for release into the alveoli, the oxygen and the alveolar air is taken in and let out, the lungs always contain a

residual volume of air so that there is sufficient time for oxygen to be absorbed and for the carbon dioxide to be released.

Q2) What are the functions of lymph in our body?

* Lymph is a type of fluid involved in transportation.
* Lymph drains into lymphatic capilaries form the inter cellular spaces which join to form large lymph vessels that finally open into larger veins.
* Lymph carries digested and absorbed fat from intestine and drains excess fluid from extra cellular space back into the blood.

Q3) How is haemoglobin associated with respiration?

Haemoglobin is present in RBCs combines with oxygen in the lungs and is converted into oxyhaemoglobin. This blood is termed pure oxygenated

blood. Haemoglobin is the carrier of oxygen to all living cells for cellular respiration. Oxygen present in haemoglobin is used and carbondioxide released during cellular respiration combines with haemoglobin. This blood is termed as impure blood.