## Respiratory System Functions

During inspiration, the rib cage moves outwards and upwards and the diaphragm lowers increasing the volume of the thoracic cavity. This causes the internal pressure in the lungs to be lower than the atmospheric pressure. The difference in pressure forces air (introducing oxygen to the alveoli) in to the lungs.

During expiration, the opposite of inspiration occurs. The rib cage relaxes to its normal position and the diaphragm moves upwards reducing the volume of the thoracic cavity. This causes the internal pressure in the lungs to be greater than the atmospheric pressure. The difference in pressure forces air out of the lungs expelling carbon dioxide.

**Mouth and Nasal Cavity:** Incoming air is filtered, warmed and moistened in this part of the respiratory system.

**Pharynx:** The pharynx is located posterior to the larynx. It opens into the esophagus for food passage. It also opens into the trachea for air passage.

**Larynx:** it connects the lower section of the pharynx with the trachea. The larynx also helps to warm and moisten incoming air.

**Trachea:** The trachea is vertical tube of 2.5 cm in diameter and ten centimeters in length and it made of the hyaline cartilage. It conducts air from the larynx to the bronchi.

**Bronchi:** The trachea divides into the right and left bronchi. The bronchi further divides to give rise to bronchioles.

**Bronchioles:** The bronchi further divides into finer branches and give rise to the bronchioles. The bronchioles terminate in circular sacs called alveoli.

**Alveoli:** Gaseous exchange occurs in the alveoli of the lungs through diffusion. The alveoli are surrounded by blood vessels. This is where oxygen diffuses from air in to the blood.