**Respiratory System**

Label the respiratory system below:

**What is respiration?**

In biology, *respiration* means different things.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the release of energy from the breakdown of food in the presence of oxygen in occurs in which organelle?) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

At the organism level, **respiration** is the process of \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_—the release of carbon dioxide and the uptake of oxygen that occurs between RBCs and alveoli

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the actual mechanical intake of air.

**Breathing**

Lungs are sealed in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ membranes inside the chest cavity.

At the bottom of the cavity is a large, flat muscle known as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

***Inhalation***

During inhalation, the diaphragm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and the rib cage rise up. This expands the volume of the chest cavity.

The chest cavity is sealed, so this creates a partial \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ inside the cavity.

Atmospheric pressure fills the lungs as air \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_the breathing passages.

***Exhalation***

Often exhaling is a event.

When the rib cage lowers and the diaphragm , pressure in the chest cavity is greater than atmospheric pressure.

Air is of the lungs.



**How is breathing controlled?**

Breathing is controlled by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The medulla oblongata monitors \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in the blood.

As carbon dioxide increases, nerve impulses make the diaphragm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, bringing air into the lungs.

The higher the carbon dioxide level, the stronger the impulses.

**What happens after you inhale?**

 are clusters of tiny sacs at the ends of air passages.

A network of surrounds each alveolus.

\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ takes place in the alveoli.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ diffuses the blood.

 in the blood diffuses the blood to the alveolus.

 Label the parts of the alveoli  In the picture, label the flow of gasses