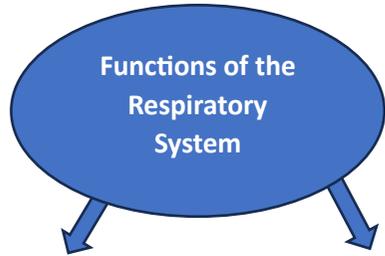


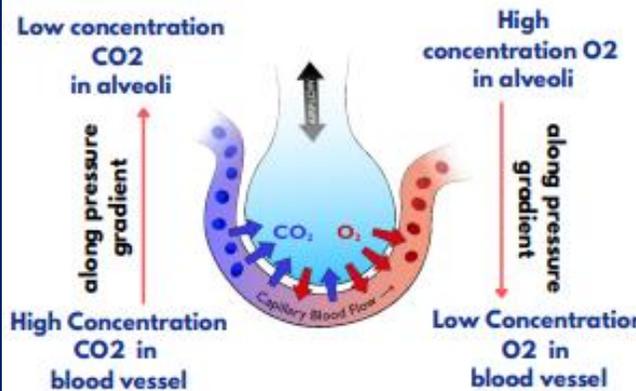
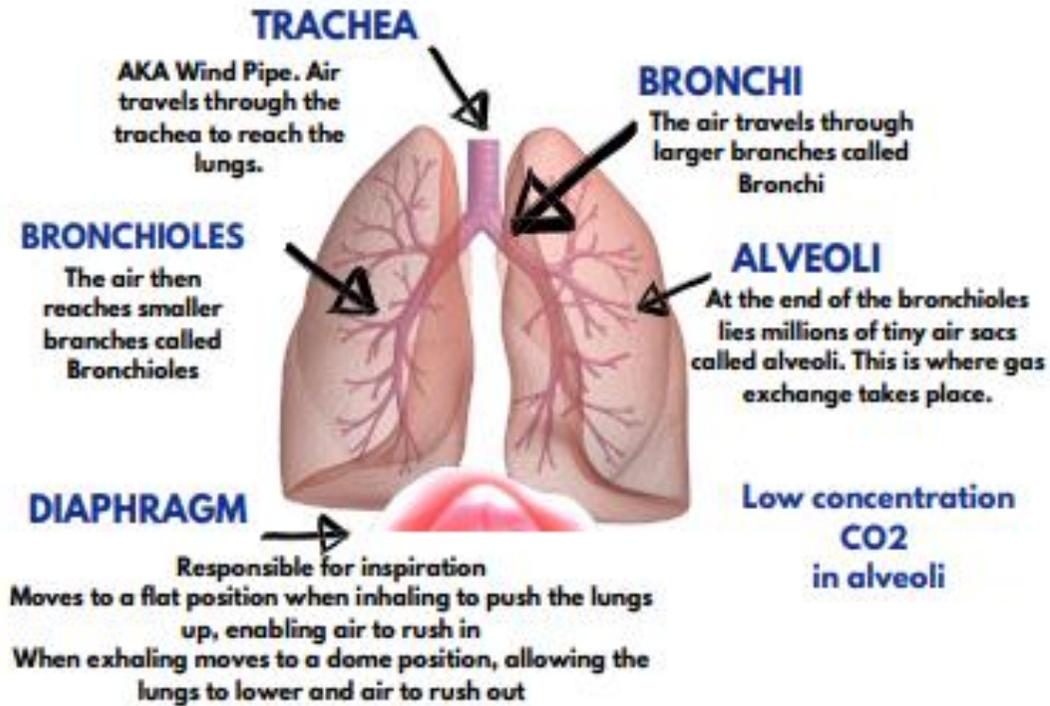


Respiratory System

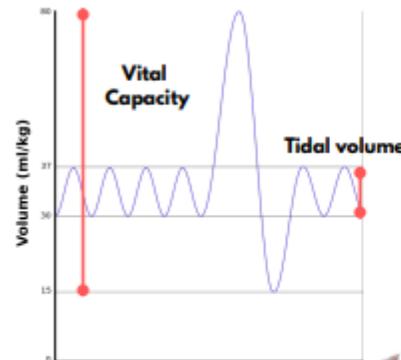
- Composition of inhaled and exhaled air
- Vital capacity and tidal volume
- Location and structure of the respiratory system
- Structure of the alveoli to enable gas exchange
- How the cardiovascular and respiratory systems work together



Inhale oxygen Exhale carbon dioxide



Labelling a Spirometer Trace



	Inhaled Air	Exhaled Air
Oxygen	21%	16%
Carbon Dioxide	0.04%	4%



- Alveoli**
- ⇒ Tiny sacs of air that have a high concentration of oxygen after breathing in
 - ⇒ Oxygen diffuses through the moist, thin walls & into the blood stream
 - ⇒ Alveoli have a large surface area and are surrounded by capillaries

- Gas Exchange at the Alveoli**
- ⇒ The oxygen in the alveoli diffuses into the bloodstream and is transported to the working muscles
 - ⇒ The CO₂ from the bloodstream diffuses into the alveoli in order to be exhaled by the lungs