



- Deoxygenated blood enters the right Atrium via the vena cava

- The deoxygenated blood then travels through the tri-cuspid valve into the right ventricle. It then travels through the semi-lunar valve into the pulmonary artery.

- The deoxygenated blood travels through the pulmonary artery to the lungs where gaseous exchange occurs. The blood releases its carbon dioxide whilst gaining oxygen.

- Once the blood has become oxygenated it travels back to the heart via the pulmonary vein.

- The deoxygenated blood enters the left atrium. After this it travels through the bicuspid valve into the left ventricle.

- The heart contracts and squeezes the oxygenated blood through the semi-lunar valve into the aorta where it travels to the working muscles.

- Once the blood has travelled through the arteries it enters into the capillaries within the working muscle. Gaseous exchange occurs and the blood becomes deoxygenated.

- Now the blood is rich in carbon dioxide it travels back through the veins to the vena cava for the cycle to start again.

HEART RATE

This is the amount of times the heart beats in a minute. It is measured in beats per minutes (BPM)

STROKE VOLUME

The amount of blood pumped out of the heart (left ventricle - to the body) during each contraction. It is measured in (ml).

CARDIAC OUTPUT

The volume of blood pumped per minute by each ventricle of the heart.

Cardiac output = stroke volume x heart rate.

