Chp 2
Biology
Heart

- Heart is the circulatory system

Circulatory system

Circulatory system carries food and oxygen to Every cell

The heart- double circulatory system

Human heart is the part of double circulatory system

Circulatory system includes

- blood vessels
- pump means heart
- Valves keep blood moving in one direction
- Heart has four Chambers, 2 in each side
- Right side and left side
- right side pumps the blood to lungs for gas exchange and it is called pulmonary circuit
- left side pumps blood under high pressure to the rest of the body and is called systematic circuit

Structure of the heart

Right side

- It Gets deoxygenated blood from the body

- it pumps blood to the lungs where oxygen enter from alveoli and carbon dioxide leaves

Left side

- it will get oxygenated blood from the lungs
- it pumps blood to the whole body

Chambers

There are two chambers

1. Atria
2. bottom Chambers

Atria

There is right Atrium and left Atrium

Bottom Chambers

There are right ventricle and left ventricle

Pathway of blood through the heart

- Deoxygenated blood enters heart through Vena cava and then goes to the right Atrium
- Blood moves through the valves and then enter into the right ventricle
- right ventricle contracts and blood goes to the Pulmonary artery to the lungs
- In lungs gas exchange happens and blood will become oxygenated
- oxygenated blood returns through Pulmonary vein into left atrium

- blood move through the wall into the left ventricle
- left ventricle contracts and then blood go through aorta to the whole body

Heart the pacemaker

Natural pacemaker

- it is a group of cells containing resting heartbeat
- they Send tiny electrical impulses to the heart muscles making them contract

Artificial pacemaker

- It is used when natural pacemaker doesn't work properly irregular heartbeat
- It is used when natural pacemaker doesn't work properly
- it is a small device that is put under the skin with wire to the heart
- It sends electrical impulses that keeps heartbeat regular