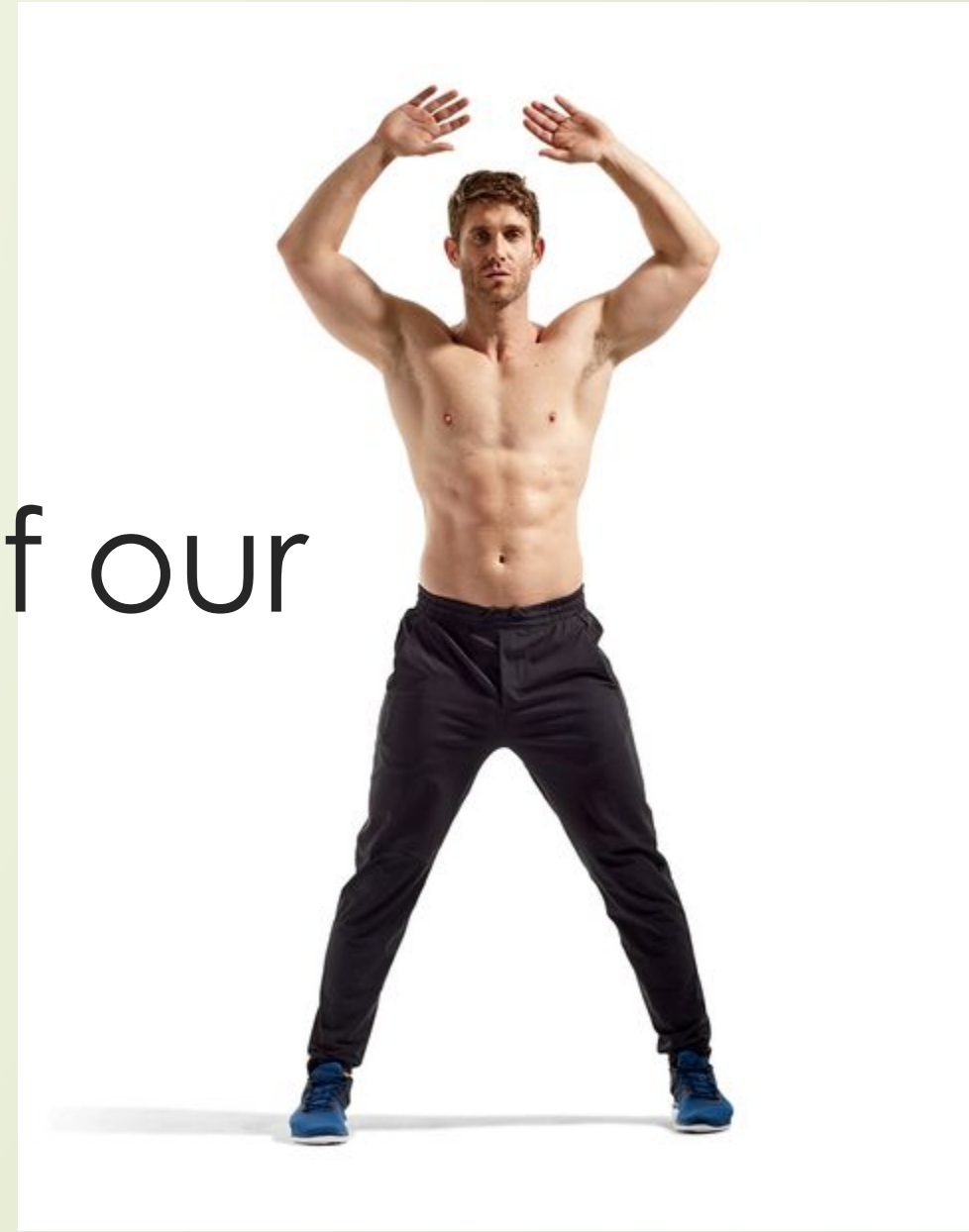
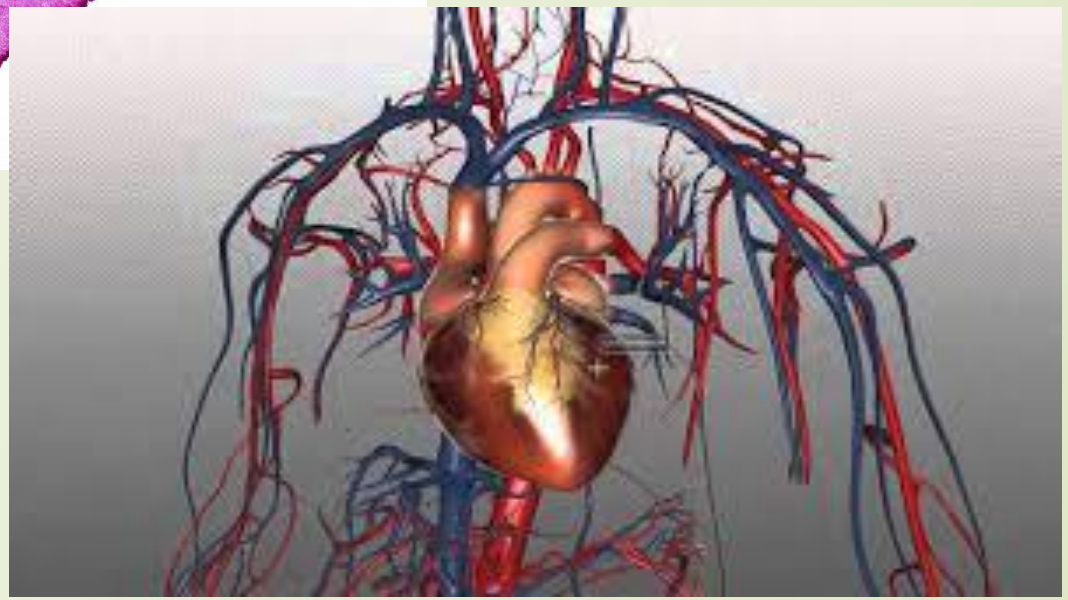
What is the engine of our body machine?

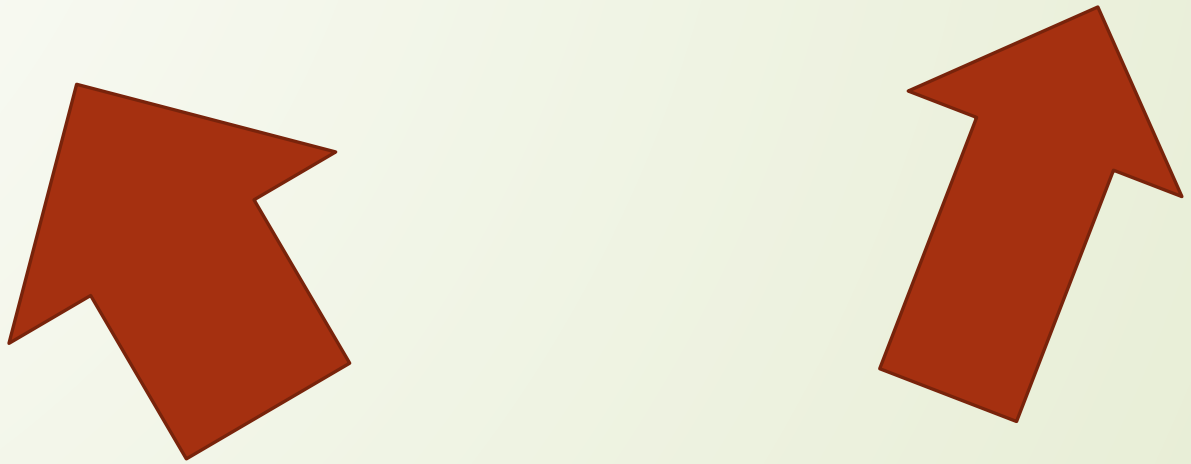


Heart and Blood Vessels



HEART

BLOOD VESSELS



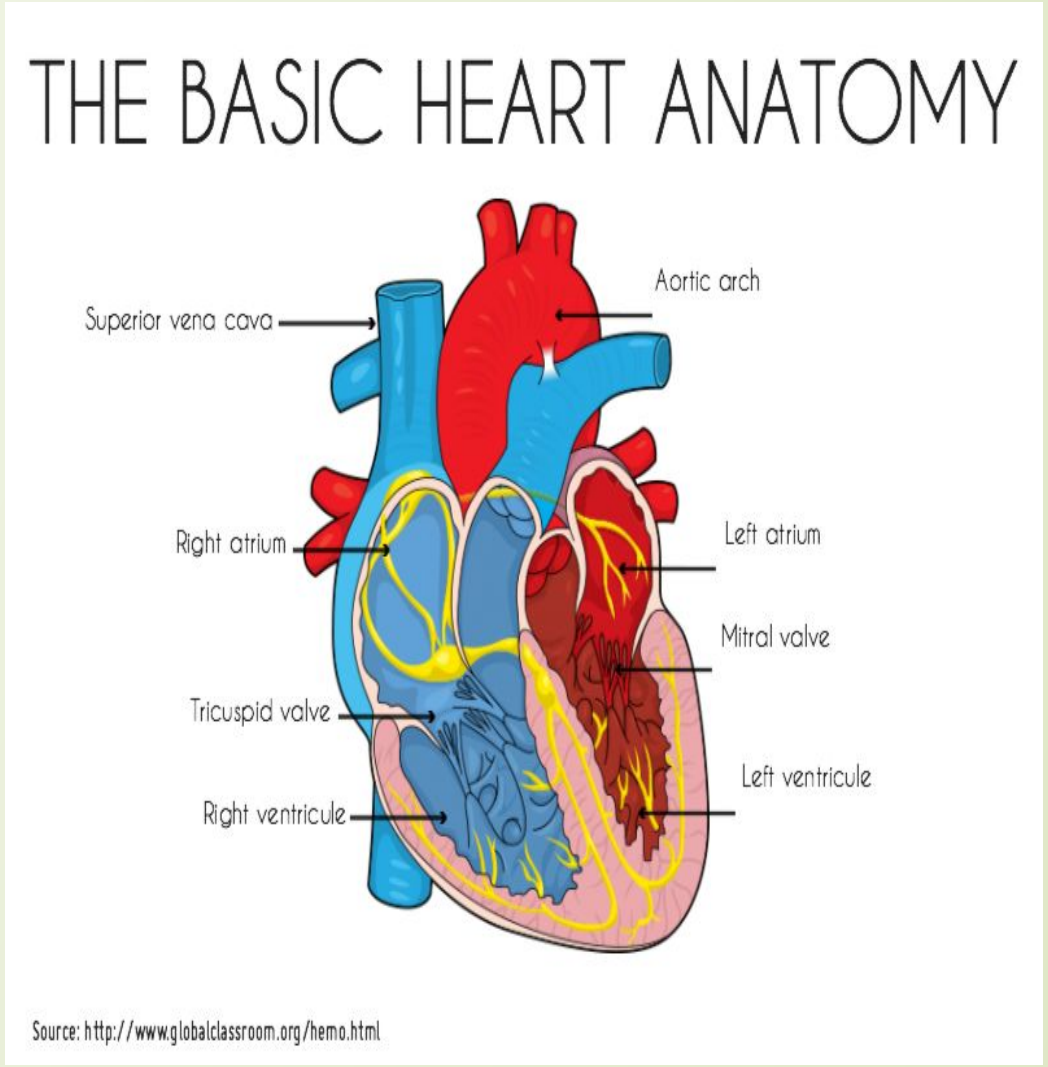
The Human circulatory system

HEART

- Is a muscular organ
- Consist 4 chambers

1. two ventricles
2. two atria

- Valves divide ventricle and atria
- Valves pretend blood going back
- Blood from atria moves to ventricles
- Ventricles pump blood out to organs



VESSELS

- Three main type blood vessel:

1. Coming from the heart are called **ARTERIAS**
2. That come to the heart are called **VEINS**
3. The small network **CAPILLARIES** connect arterias and veins

ARTERIES

- Have dense, smooth and elastic walls
- Structure of walls allows the arteries to withstand a great deal of pressure

CAPILLARIES

- Exchange of gases and substances between the blood and tissue takes place
- Walls are very thin
- It helps to oxygen and nutrients enter to tissue
- Wastes go out of the tissues

VEINS

- Flow to the heart
- Walls are thinner than arteries
- Blood pressure in them small
- Contain valves, which prevent blood in opposite direction

Earthworm Circulatory system

- Does not have a heart
- Has small body vessels
- Vessels pump the blood through the body
- Two main blood vessels: ***Dorsal and Ventral***

Mollusks circulatory system

- Have a Heart
- Consist of one **Ventricle** and one or two **Atria**
- Vessels pour blood into body
- Blood interacts with organs and tissues
- Collects to vessels again

Arthropods circulatory system

- Have tubular heart
- Blood does not always move by vessels
- Vessels pour blood into body
- Blood interacts with organs and tissues
- Collects to vessels again