



UKS2 Science Knowledge Organiser

Island Invaders and Settlers

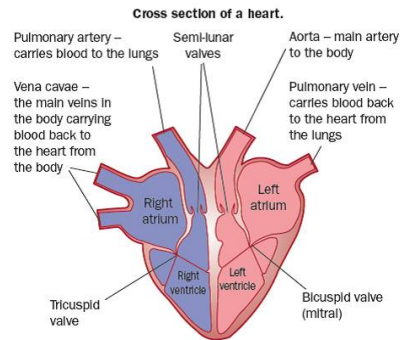
Key Knowledge and Skills

The Circulatory System

- The circulatory system is made up of the heart, lungs and blood vessels. It allows blood to circulate and transport nutrients, oxygen, hormones and blood cells to and from the cells in the body to provide nourishment and help fight diseases.

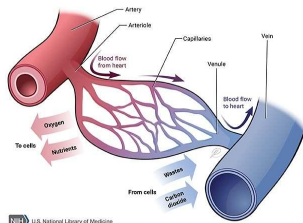
The Heart

- The heart is composed of four chambers; the right atrium, the right ventricle, the left atrium and the left ventricle.
- The heart pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.



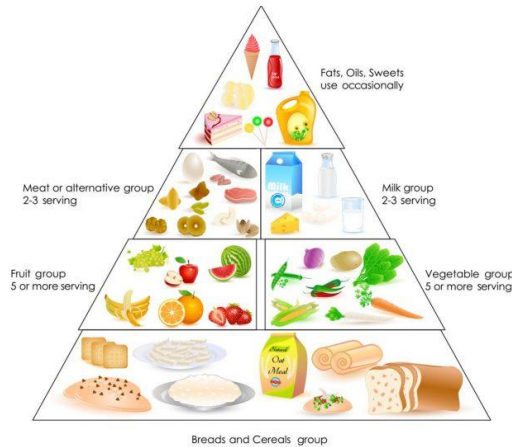
Blood

- Blood brings oxygen and nutrients to all the parts of the body so they can keep working.
- Blood carries carbon dioxide and other waste materials to the lungs, kidneys, and digestive system to be removed from the body.
- Blood fights infections, and carries hormones around the body.



Healthy Diet and Lifestyle

- A healthy diet involves eating the right types of nutrients in the right amounts.



The benefits of regular exercise:

- It strengthens muscles including the heart muscle.
- It improves circulation.
- It increases the amount of oxygen around the body
- It releases brain chemicals which help you feel calm and relaxed.
- It helps you sleep more easily.
- It strengthens bones.

Things that can harm the circulatory system:

- Smoking and drinking alcohol can be harmful to our health.
- Tobacco can cause short-term effects such as shortness of breath and loss of taste and long term effects such as lung disease and cancer.
- Alcohol can cause short term effects such as addiction and long term effects such as organ damage and cancer.

Key Vocabulary

Word	Definition
alcohol	a drug produced from grains, fruits or vegetables when they are put through a process called fermentation
arteries	tubes in your body that carry oxygenated blood from your heart to the rest of your body.
atrium	the part of the heart that receives blood from the veins.
blood	red liquid that circulates in arteries and veins, carrying oxygen to and carbon dioxide from tissues in the body.
blood vessels	narrow tubes that your blood flows through.
capillaries	the smallest blood vessels connecting arterioles with venules and forming networks throughout the body.
carbon dioxide	a gas produced by animals and people breathing out.
circulatory system	the system responsible for circulating blood through the body, that supplies nutrients and oxygen to the body and removes waste products such as carbon dioxide.
deoxygenated	blood that does not contain oxygen.
drug	a substance containing natural or man-made chemicals that has an effect on your body when it enters your system.
heart	the organ in your body that pumps blood around the body .
lungs	two organs in your chest which fill with air when you breathe in - they oxygenate the blood and remove carbon dioxide from it.
nutrients	substances that help animals and plants grow.
oxygen	a colourless gas that plants and animals need to survive.
oxygenated	blood that contains oxygen.
pulse	the regular beating of blood through your body.
stimulant	A substance that raises levels of activity in the body, making people feel more awake, alert or energetic.
veins	a tube in your body that carries deoxygenated blood to your heart from the rest of your body.
ventricles	the part of the heart from which blood passes into the arteries.