



Year 6 - Summer - Science Knowledge Organiser

What I already know...

- What is needed for a healthy and balanced diet.
- That there are four different food types.
- How bodies change and develop through childhood into adulthood.
- That muscles move different parts of our body, inside and out.

What I will learn...

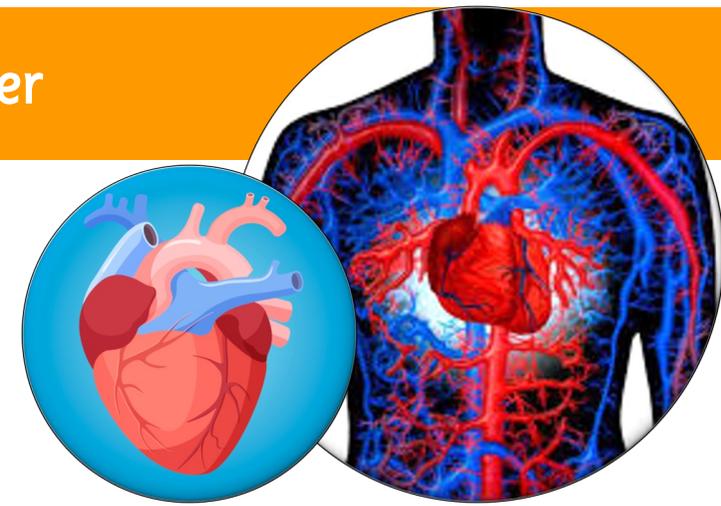


- That veins, arteries, the heart, lungs, trachea, alveoli, capillaries, red blood cells and the diaphragm are all part of the circulatory system
- That the heart is a muscle that pumps blood around the body.
- That lungs provide the blood with oxygen.
- That blood is a liquid that carries oxygen, water and nutrients around the body.
- That veins carry deoxygenated blood towards the heart.
- That arteries carry oxygenated blood away from the heart.
- That capillaries are the smallest blood vessels in the body.
- That red blood cells carry oxygen through your body.
- That exercise strengthens muscles including the heart muscle and improves circulation.
- That drugs, alcohol and smoking have negative effects on the body.



Key Vocabulary

circulatory system	A system which moves blood around the body.
blood	A body fluid that carries oxygen and other substances around the body.
blood vessels	Tubes that carry blood through the body.
oxygen	Used to make energy and is absorbed into the body through the lungs.
Carbon dioxide	A waste product made when the body makes energy. It leaves the body through the lungs.
lungs	Organs in the body used to breathe air in and out.
oxygenated blood	Oxygenated blood contains more oxygen. It is pumped from the heart to the rest of the body.
deoxygenated blood	Deoxygenated blood is where most of the oxygen has already been transferred to the rest of the body.
nutrients	Substances that animals, including humans, need to stay alive and be healthy.
veins	Veins carry deoxygenated blood towards the heart.
arteries	Arteries carry oxygenated blood away from the heart.
capillaries	Capillaries are tiny blood vessels that connect arteries and veins.



Making a difference at The Merton

As the children begin to prepare for their transition into secondary school, children will focus on how their bodies work and some of the changes that they will encounter along this journey. During their science learning, the children will explore how their bodies work, as well as the physical and mental benefits of exercise and how they can make a difference to their own wellbeing. Focusing on the circulatory system, the children will explore how blood transports both oxygen, carbon dioxide and nutrients around their bodies. The children will also explore both the positives and negative effects of alcohol, drugs and smoking.

Making a difference at home

Can you conduct your own fitness routine to see how exercise has an impact on your health and well-being? Record how you feel both physically and mentally before and after your exercise and consider the benefits of exercise over time. How does exercise make a difference to you?