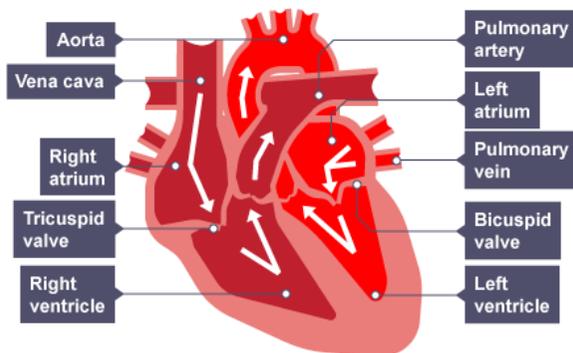


**What should I already know/be able to do?**

- Describe the changes as humans develop to old age.
- Describe the simple functions of the basic parts of the digestive system in humans.
- Identify the different types of teeth in humans and their simple functions.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.
- Describe how teeth and gums have to be cared for in order to keep them

**Skills**

- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function (in the long term and short term).
- Describe the ways in which nutrients and water are transported within animals, including humans.



**Year 6– Spring Term – Animals, including humans (Science)**

**Intention: In Science I will be...**

**Knowledge**

- The heart pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.
- Mammals have hearts with four chambers. The blood that has come from the body is deoxygenated and the blood that has come from the lungs is oxygenated again.
- Capillaries are the smallest blood vessels in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.
- Arteries carry oxygenated blood away from the heart.
- Veins carry deoxygenated blood towards the heart.
- If you linked up all of the body's blood vessels, including arteries, capillaries and veins, they would measure over 60,000 miles.
- Plasma is a liquid. The other parts of your blood are solids.
- Red blood cells carry oxygen through your body.
- Platelets help you stop bleeding when you get hurt.
- White blood cells fight infection when you're sick.
- Drugs, alcohol and smoking have negative effects on the body.
- A healthy diet involves eating the right types of nutrients in the right amounts.
- The liquid part of the blood contains water and protein. This is called plasma.
- Blood transports: gases, nutrients and waste products.
- Regular exercise strengthens muscles, improves circulation, increased the amount of oxygen in the body, releases brain chemicals, helps you sleep easier and strengthens bones.

**Vocabulary**

Circulatory system	A system that includes the heart, veins, arteries and blood transporting substances around the body.
heart	An organ which constantly pumps blood around the circulatory system
Blood vessels	The tube-like structures that carry blood through the tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
Oxygenated Blood	Oxygenated blood has more oxygen. It is pumped from the heart to the rest of the body.
Deoxygenated Blood	Deoxygenated blood is blood where most of the oxygen has already been transferred to the rest of the body.
drug	A substance containing natural or man-made chemicals that has an effect on your body when it enters your system.
alcohol	A drug produced from grains, fruits or vegetables when they are put through a process called fermentation.
nutrients	Substances that animals need to stay alive and healthy.

