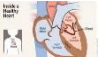
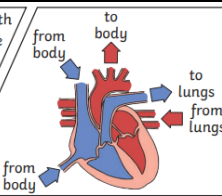

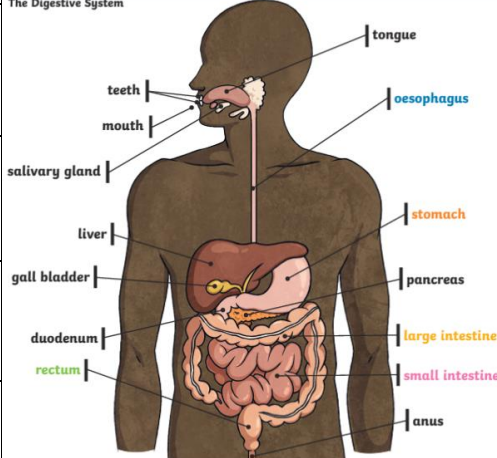


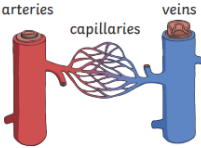


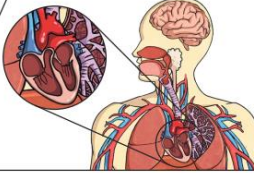



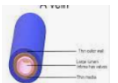




Year 6 Spring 1- Our bodies- How does the heart circulate blood around the body?

Key Vocabulary		Prior knowledge	Sticky Knowledge	
Circulatory system 	<p>A system which includes the heart, veins, arteries and blood transporting substances around your body.</p>	<p>In Year 4, during the topic ' Human and Nutrition' we:</p> <ul style="list-style-type: none"> - Described the simple functions of the basic parts of the digestive system in humans 	<p>Mammals have hearts with four chambers. Notice how the blood that has come from the body is deoxygenated, and the blood that has come from the lungs is oxygenated again. The blood isn't actually red and blue: we just show it like that on a diagram.</p>  <p>Plasma is liquid. The other parts of your blood are solid.</p> <p>Red blood cells carry oxygen through your body.</p> <p>Platelets help you stop bleeding when you get hurt.</p> <p>White blood cells fight infection when you're sick.</p>	
Heart 	<p>An organ which constantly pumps blood around your circulatory system.</p>	<p>The Digestive System</p> 	<p>Drugs, alcohol and smoking have negative effects on the body.</p> <p>A healthy diet involves eating the right types of nutrients in the right amounts.</p> 	
Blood vessels 	<p>The tube-like structures that carry blood through the tissues and organs. Veins, capillaries and arteries have three types of blood vessels.</p>		<p>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.</p>	<p>Arteries carry oxygenated blood away from the heart.</p>  <p>Veins carry deoxygenated blood toward the heart.</p>
Oxygenated blood 	<p>Oxygenated blood has more oxygen. It is pumped from the heart to the rest of the body.</p>		<p>If you linked up all of the body's blood vessels, including arteries, capillaries, and veins, they would measure over 60,000 miles.</p>	<p>Blood transports:</p> <ul style="list-style-type: none"> • gases (mostly oxygen and carbon dioxide); • nutrients (including water); • waste products.
Deoxygenated blood 	<p>This is blood where most of the oxygen has already been transferred to the rest of the body.</p>		<p>The heart pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.</p> 	<p>The liquid part of blood contains water and protein. This is called plasma.</p>
Drugs 	<p>A substance containing natural or manmade chemicals that have an effect on your body when it enters your system.</p>		<p>Knowledge and Assessment</p> <ul style="list-style-type: none"> - Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and - blood - Describe the ways in which nutrients and water are transported within animals, including humans. - Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function 	<p>Regular exercise:</p> <ul style="list-style-type: none"> • strengthens muscles including the heart muscle; • improves circulation; • increases the amount of oxygen around the body; • releases brain chemicals which help you feel calm and relaxed; • helps you sleep more easily; • strengthens bones. <p>It can even help to stop us from getting ill.</p> 
Nutrients 	<p>Substances that animals need to stay healthy and alive.</p>			
Vein 	<p>A vein is one type of blood vessel that has the job of carrying deoxygenated blood away from the body's tissues and back to the heart</p>			
Artery 	<p>It is a type of blood vessel which has the job of taking the blood full of oxygen away from the heart and towards the body's tissues</p>			
Capillary 	<p>It is a minute thin-walled vessel of the body</p>			