## Advent 1 Science Year 6: Animals including Humans (Biology)

Scripture Link: 1 Corinthians 12

## **National Curriculum Objective**

## **Enquiry Question: How do things inside us work?**

	Lesson 1	Lesson 2	Lesson 3
Learning intention for each lesson	To find out about the human circulatory system.	To understand the structure of the heart and how it works	To investigate blood.
Recall and Retrieval	Know the main parts of the human body know the names and simple functions of the basic parts of the human digestive system	can name some of the factors that influence life expectancy: smoking, overeating, drug use, genetic conditions.	know the structure of the heart know what heart rate is. know how heart rate can be measured and affected. Can describe how humans can live a healthy life
Sequence of substantive knowledge throughout the lesson	I know the names of the key organs in the circulatory system and their function.	I know the structure of the heart  I know what heart rate is.  I know how heart rate can be measured and affected. (heart dissection lesson available if required)	I know about the structure of blood.  I understand the functions of the component parts of blood.
Key Skills/disciplinary knowledge	reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;	reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;	<ul> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> </ul>
Key Vocabulary	Heart, pulse, rate, pumps, blood, blood vessel, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle.	Heart, pulse, rate, pumps, blood, blood vessel, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle	Heart, pulse, rate, pumps, blood, blood vessel, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle
Main teaching activity			

If the school has another short term planning format, this does not need to be included.  Scaffolding	This can be done in groups, pairs or individually.	Children can talk to their partners to come up with the finish sentence.  Less able children may need support drawing their table or	Children can work individually, in pairs or in small groups.
Challenge	Challenge – children can add further parts to their diagrams STEM sentences available	give them template to support.  Challenge – can you represent the data as a graph?	
Diversity Links			
Catholic Social Teaching Principles British Values	Human Dignity – we are all made in the image and likeness of God.	Human Dignity – we are all made in the image and likeness of God.	Human Dignity – we are all made in the image and likeness of God.
Wider links			

## Advent 1 Science Year 6: Animals including Humans (Biology)

	Lesson 4	Lesson 5	Lesson 6
Learning intention for each lesson	To investigate how nutrients are transported.	To investigate the effects of different lifestyle choices on our bodies.	To investigate the effects of different lifestyle choices on our bodies.
Recall and Retrieval	know about the structure of blood. understand the functions of the component parts of blood. know the names of the key organs in the circulatory system and their function	know the ways in which nutrients and water are transported within animals and humans.  Can describe the main food groups and what is meant by a 'balanced diet'.	know the impact of diet, exercise, drugs and lifestyle on the way that our bodies function. know the structure of the heart
Sequence of substantive knowledge throughout the lesson	I know the ways in which nutrients and water are transported within animals and humans.	L5/6: I know the impact of diet, exercise, drugs and lifestyle on the way that our bodies function.	L5/6: I know the impact of diet, exercise, drugs and lifestyle on the way that our bodies function.
Key Skills/disciplinary knowledge	<ul> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<ul> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<ul> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>
Key Vocabulary	Heart, pulse, rate, pumps, blood, blood vessel, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle	Heart, pulse, rate, pumps, blood, blood vessel, lungs, oxygen, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle	Heart, pulse, rate, pumps, blood, blood vessel, lungs, oxygen, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle
Main teaching activity			

If the school has another short term planning format, this does not need to be			
included.			
Scaffolding	Children to complete their own they can have pictures to support if needed.	Teacher/TA to have a guided group and base it on any misconceptions or missed knowledge children may have.	Teacher/TA to have a guided group and base it on any misconceptions or missed knowledge children may have.
Challenge			
Diversity Links			
Catholic Social Teaching Principles		Option for the poor – identifying those most in need.	Option for the poor – identifying those most in need.
British Values			
Wider curriculum links			