

Subject: Science  
 Year group: 6  
 Term: Spring  
 Unit name: Animals including humans  
 Strand: Biology

**Prior Knowledge** - Which things are living and which are not. Classification of animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates) Animals that are carnivores, herbivores and omnivores. Animals have offspring which grow into adults. The basic needs of animals for survival (water, food, air). The importance of exercise, hygiene and a balanced diet. Animals get nutrition from what they eat. Some animals have skeletons for support, protection and movement. The basic parts of the digestive system. The different types of teeth in humans. Respiration is one of the seven life processes. The life cycle of a human and how we change as we grow.

**Key Vocabulary:** Heart, pulse, rate, pumps, blood, blood vessel, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle.

**Key Scientists:**

Santorio Santorio  
 Rosalind Franklin (DNA)  
 Doctors  
 Nurses

**Suggested books:**



**National curriculum:**





















- I can identify the main parts of the human circulatory system and describe the function of the heart, blood vessels and blood.
- I can describe the ways in which nutrients and water are transported within animals including humans.
- I can recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.

**Working Scientifically:**

- Evaluate different aspects of their enquiries such as equipment and accuracy of measurements.
- Make predictions about which materials are soluble or insoluble.
- Use scientific language and illustrations to discuss, communicate and justify scientific ideas.
- Make careful observations when heating solutions.
- Plan own investigation to test how materials react with each other.
- Record my results in a table.

Respect

Integrity

Key learning objectives- <b>Highlighted boxes = Learning Objective for that lesson.</b> The other two are your Success Criteria.		
Knowledge	Working Scientifically	Scientific Enquiry
To identify the main parts of the human circulatory system and describe the function of the heart, blood vessels and blood.	To use scientific diagrams, models and labels to explain processes 	To identify and classify parts of the body and the heart. 
To identify and classify parts of the body and the heart.	To take accurate measurements and record in a table. 	To use research by Santorio Santorio to support my investigation.  
To identify the main parts of the human circulatory system and describe the function of the heart, blood vessels and blood.	To use labelled diagrams to support my explanation about the structure of blood. 	To identify parts of blood and create a model to explain my thoughts. 
To describe the ways in which nutrients and water are transported within animals including humans.	To focus on scientific reasons for why things happen and use models to explain my thinking. 	To use research and scientific vocabulary to support my explanations. 
To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.	To plan my investigations and record my results.  	To plan a comparative test. 
To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.	To observe what happens when you smoke using a model. 	To use research to support the presentation of my ideas. 
<b>Scientific Enquiry</b>	<b>Comparative / fair testing</b> Changing one variable to see its effect on another, whilst keeping all others the same. 	<b>Pattern-seeking</b> Identifying patterns and looking for relationships in enquiries where variables are difficult to control. 
	<b>Research</b> Using secondary sources of information to answer scientific questions. 	<b>Identifying, grouping and classifying</b> Making observations to name, sort and organise items. 
	<b>Observation over time</b> Observing changes that occur over a period of time ranging from minutes to months. 	<b>Problem-solving</b> Applying prior scientific knowledge to find answers to problems. 
<b>Assessment- Key indicators:</b> Can draw a diagram of the circulatory system, label the parts and annotate it to show what the parts do. Can explain the positive and negative effects on diet, exercise, drugs and lifestyle on the body.		