






<p>Programme of Study Statements</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. Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. Describe the ways in which nutrients and water are transported within animals, including humans. 					<p>Key Vocabulary</p> <p>Heart, pulse, rate, pumps, blood, blood vessels, transported, lungs, oxygen, carbon dioxide, nutrients, water, muscles, cycle, circulatory system, diet, exercise, drugs, lifestyle</p>
<p>Investigations and Skills for thinking like a Scientist</p> <div style="display: flex; justify-content: space-around; align-items: center;">      </div>					<p>Sticky Knowledge:</p> <p>The heart pumps blood around the body.</p> <ul style="list-style-type: none"> Oxygen is breathed into the lungs where it is absorbed by the Muscles need oxygen to release energy from food to do work (Oxygen is taken into the blood in the lungs; the heart pumps the blood through blood vessels to the muscles; the muscles take oxygen and nutrients from the blood.)
<p><u>Comparative Tests</u></p> <p>How does the length of time we exercise for affect our heart rate?</p> <p>Can exercising regularly affect your lung capacity?</p> <p>Which type of exercise has the greatest effect on our heart rate?</p>	<p><u>Identify & Classify</u></p> <p>Which organs of the body make up the circulation system, and where are they found?</p>	<p><u>Observation over time</u></p> <p>How does my heart rate change over the day? How much exercise do I do in a week?</p>	<p><u>Pattern seeking</u></p> <p>Is there a pattern between what we eat for breakfast and how fast we can run?</p>	<p><u>Research</u></p> <p>How have our ideas about disease and medicine changed over time?</p>	<p>Prior Knowledge:</p> <ul style="list-style-type: none"> Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. (Y3 - Animals, including humans) Describe the simple functions of the basic parts of the digestive system in humans. (Y4 - Animals, including humans) Identify the different types of teeth in humans and their simple functions. (Y4 - Animals, including humans)
<ul style="list-style-type: none"> Potential Evidence to support our Scientists (I can.): Use the role play model to explain the main parts of the circulatory system and their role Can use subject knowledge about the heart whilst writing conclusions for investigations Can explain both the positive and negative effects of diet, exercise, drugs and lifestyle on the body Present information e.g. in a health leaflet describing impact of drugs and lifestyle on the body <p>Big Question: How do our choices affect how our bodies work? Why does my heart beat?</p>					<p>Future Knowledge:</p> <ul style="list-style-type: none"> The consequences of imbalances in the diet, including obesity, starvation and deficiency diseases. (KS3) The effects of recreational drugs (including substance misuse) on behaviour, health and life processes. (KS3) The structure and functions of the gas exchange system in humans, including adaptations to function. (KS3) The mechanism of breathing to move air in and out of the lungs. (KS3) The impact of exercise, asthma and smoking on the human gas exchange system. (KS3)

Cultural Capital		
Visits and visitors Life Bus visit Life Skills Centre trip We the Curious (Bristol)	Experiences and events British Heart Foundation activities Life Bus experience	Key texts <i>Pig-Heart Boy</i> (Malorie Blackman) <i>Skellig</i> (David Almond) <i>A Heart Pumping Adventure</i> (Heather Manley)
Community events and links Wickwar Youth Club Raise money for a local Heart Foundation charity	Global issues Impact of poverty across the globe on how the body functions.	Famous people/ Key Scientists Justus von Liebig (Theories of Nutrition and Metabolism) Sir Richard Doll (Linking Smoking and Health Problems) Leonardo Da Vinci (Anatomy)
Life Skills Curiosity Team Work Resilience Making Links	Key places	