EDEN Academy Trust
Working together to make a difference

Science Curriculum – Cycle B
Upper Key Stage 2 – Autumn 1

Theme - Animals including Humans (Biology)

Enquiry Question - Why do I have a pulse?

National Curriculum Coverage

Pupils should be taught to:
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.

Key Scientist: William Harvey	**Comparative Test** Which exercise has the greatest effect on our heart rate? **Fair Test** Does the length of time we exercise for affect our heart rate?	**Observation over time** How much exercise do I do in a week?	**Pattern Seeking** Is there a pattern between what we eat for breakfast and how fast we can run?	**Research** What are the main parts of the circulatory system?

Objective	Challenge	Working Scientifically	Vocabulary
• To know and name the main parts of the human circulatory system. - heart, blood and blood vessels • To know and describe the functions of the blood, blood vessels, and heart - To know the components of the blood - To know the difference between veins, arteries and capillaries - To know the function of the heart • To know the ways in which nutrients and water are transported within animals, including humans - To know that the blood is responsible for transporting	• To explore the works of medical pioneers such as William Harvey and Galen and recognise how much we have learnt about how bodies • To compare the organ systems of humans to other animals • To make a diagram of the human body and explain how different parts work and depend on each other • To name and locate the major organs in the human body	See separate objectives sheets.	Internal organs, heart, lungs, liver, kidney, brain, muscle, muscular, digest, digestion, digestive, circulatory systems, heart, blood vessels, capillaries, blood, impact, diet, exercise, drugs, lifestyle, nutrients, water, damage, drugs, alcohol, substances

the nutrients, water and oxygen to parts of the body. - To know that they are absorbed in the stomach, small/large intestines - To know that they enter the blood stream via the capillaries and passed through to the arteries • To recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies functions	• To make a diagram that outlines the main parts of a body • **or own challenges*		

Prior to Teaching (Entry Point) What knowledge do we expect children to have remembered which we are going to build on in this unit?	**Assessment Exit Point** By the end of the unit, what knowledge must children know/remember to be ready for the next unit?
1. What parts make up the digestive system? 2. Where do animals get their nutrients from? 3. What does the heart do? Pumps blood around the body. 4. What is the purpose of our teeth? To break down food into smaller parts. 5. What gas do we breathe in? Oxygen Vocabulary: digestive, nutrients, teeth, intestines, stomach, heart	1. Can you name a part of the circulatory system? 2. What purpose does blood have in our bodies? 3. How are veins different to arteries? 4. How do nutrients enter the blood stream? 5. How can your lifestyle impact how your body functions? Vocabulary: artery, vein, circulatory, blood, impact