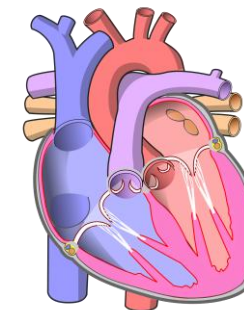
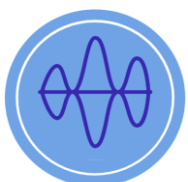


YEAR 6 – BLOOD HEART – SPRING 2



QUESTION: HOW CAN WE KEEP OUR HEART HEALTHY?

KEY SCIENTIST: WILLIAM HARVEY



MAKING PREDICTIONS



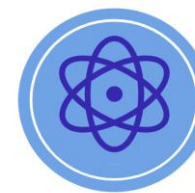
SETTING UP TESTS



OBSERVING AND MEASURING



ANALYSING AND RECORDING
DATA



INTERPRETING AND COMMUNICATING
RESULTS



EVALUATING

WEEKS OF TEACHING	LINE OF ENQUIRY	THRESHOLD CONCEPT	SUBSTANTIVE KNOWLEDGE	DISCIPLINARY KNOWLEDGE	CURRICULUM ENDPOINT
1	WHAT IS THE CIRCULATORY SYSTEM?	- Understand animals and humans - This concept involves becoming familiar with different types of animals, humans and the life processes they share.	The circulatory system is made up of the heart, blood, and blood vessels The heart is a pump – It contracts to push blood through blood vessels to all parts of the body. There are three types of blood vessels - Arteries carry blood away from the heart, - Veins carry blood back to the heart, - Capillaries are tiny vessels where substances move in and out of the blood. Blood carries important substances – It transports oxygen and nutrients to cells and removes waste products like carbon dioxide. The circulatory system is vital for survival – It keeps cells supplied with what they need to produce energy and stay alive.	Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.	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

2	HOW DOES OUR HEART WORK?	• Understand animals and humans • This concept involves becoming familiar with different types of animals, humans and the life processes they share.	• The heart is a muscular pump • The heart has four chambers • Blood travels in two circuits in a figure of eight • The heart has valves - These ensure blood flows in the right direction and prevent it from flowing backward. • William Harvey discovered the circulation of blood	• Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.	within animals, including humans.
3	WHAT DOES BLOOD TRANSPORT AROUND THE BODY?	• Understand animals and humans • This concept involves becoming familiar with different types of animals, humans and the life processes they share.	• Oxygen is carried from the lungs to the body's cells • Red blood cells pick up oxygen and deliver it where it's needed for energy. • Carbon dioxide is carried from the body's cells to the lungs • Nutrients from food are transported to cells • Waste products are transported to excretory organs • Hormones are carried to target organs	• 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.	
4	HOW DOES EXERCISE AFFECT HEART RATE?	• Understand animals and humans • This concept involves becoming familiar with different types of animals, humans and the life processes they share.	• Exercise makes the heart beat faster- Muscles need more oxygen and nutrients during activity, so the heart pumps more blood. • Heart rate increases to supply more oxygen to the body • Blood flow to muscles increases during exercise • Heart rate gradually returns to normal after exercise • Regular exercise strengthens the heart	• Recognise the importance of diet, exercise, drugs and lifestyle on the way the human body functions.	

5	HOW CAN I LIVE A HEALTHY LIFESTYLE?	• Understand animals and humans • This concept involves becoming familiar with different types of animals, humans and the life processes they share.	• Eating a balanced diet is important • Regular exercise keeps the heart and muscles strong • Getting enough sleep is vital • Avoiding harmful substances protects your body • Mental and social health matter too	• Recognise the importance of diet, exercise, drugs and lifestyle on the way the human body functions.	
6	WHAT CAN DAMAGE OUR HEALTH?		• Unhealthy diet can harm the body – Eating too much sugar, salt, or processed food can lead to obesity, heart problems, or diabetes. • Lack of exercise weakens the heart and muscles • Smoking, alcohol, and drugs are harmful • Poor sleep affects health • Stress and poor mental health impact the body	• Recognise the importance of diet, exercise, drugs and lifestyle on the way the human body functions.	

ASSESSMENT OPPORTUNITY: A NON-CHRONOLOGICAL REPORT ON KEEPING A HEALTHY HEART