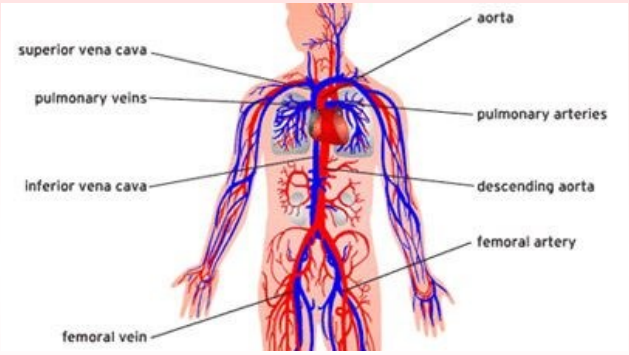
BLOOD HEART

Topic

In this topic, the children will:

- Research about the ABO blood group system and its founder Karl Lindsteiner.
- Research the first human heart transplant, when it took place and who carried it out.
- Research and collate data on the countries which have the highest and lowest death rates relating to heart disease.
- Using the programme Scratch, create their own short animation with a message about healthy eating.



PSHE/RSE

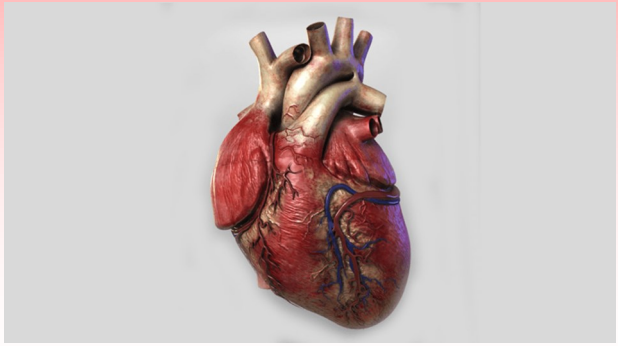
This half-term, children will be focussing on: images in the media and reality; how this can affect how people feel; risks and effects of drugs; recognising what they are good at; setting goals; aspirations; roles and responsibilities of parents; who is responsible for their health and safety; and where to get help and advice.

PE

Children will be developing their skills in football. These include dribbling, defending, passing and receiving the ball. They will also be focussing on building their fitness skills through a variety of activities.

Memorable experience

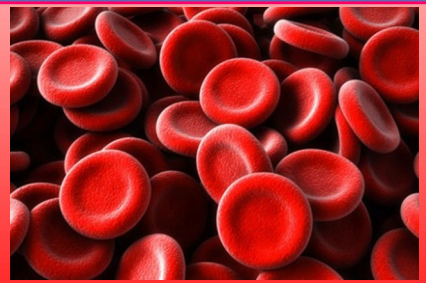
Our young surgeons will dissect an animal heart and examine the arteries, veins and chambers up close!



Art/DT

In this topic, the children will:

- Make their own sketches of the human heart using different grade sketching pencils.
- Draw their own coloured versions of red blood cells, paying particular attention to the unique structure of them and capturing this in their work.
- Analyse food labels from a variety of foods and create bar charts using Microsoft Excel.
- Will use the different food groups facts to create their own table of facts using Microsoft Office.
- Design and make their own healthy sandwich, using a variety of fillings and sauces!



Science

Children will learn Children will learn about circulatory system. What is the role of the heart in the circulatory system? How the heart pumps blood around the body? They will examine the chambers of the heart, understand the difference between arteries, veins and capillaries. What role do the lungs play in the circulatory system. How do the lungs work? Children will learn about trachea, bronchiole, alveoli. How we can keep our lungs healthy. Children will investigate the impact of exercise on the heart rate.

Research about diet and the impact of diet on the heart. Children will understand the major food groups the function od each food group in a balanced healthy diet.

Children will learn about blood, what is blood? How does blood help to protect me?

Maths

Number and Place Value: numbers up to 10,000,000 Addition and Subtractions: formal written methods (involving decimals, money & negative numbers), mental calculations. Multiplication and Division: formal written methods (involving decimals & money), calculation problems (1 & 2 step) Fractions: adding subtracting mixed number fractions, FDP equivalences. Algebra: use simple formulae, solve equations, and express missing numbers algebraically Measurement: conversion between Kg -grams, Centimeters to Milimeters.

Literacy

Children will study the book "Pig Heart Boy". Writing letters, a biased argument for or against using animals for scientific research. Diary entry as a heart surgeon. Children will also write diary entries as Cameron, the transplant recipient.

HOME LEARNING

Create an exercise plan for maintaining a healthy heart.

Find out about the different pulse points on the human body, including the side of the neck (carotid), wrist (radial), top of the thigh (femoral) and elbow crease (brachial). Test the different pulse points – which one has the strongest pulse?

Design and make decorative heart-shaped tokens to give to someone close to your heart.

Look out for heart shapes around you – in decorative ironwork, embellishments in clothing and jewellery, and even in nature itself. Photograph

Be kind to your heart! Research information and plan ideas for a weekly menu of food that your heart would love. Spinach, porridge, blueberries, salmon and soy protein are all heart-healthy.

What does the phrase 'blood is thicker than water' mean? Write a short story using this as a title.

Collect red colour charts from a DIY store and compare the shades and names. Mix paint to create a favourite shade of red.

Find out about some famous heart surgeons. What do you need to study to become a heart surgeon? How long would it take if you started right now? What skills and personality would make you successful in this role?

Find examples of proverbs or idioms relating to the heart, such as 'wear your heart on your sleeve' or 'eat your heart out'.

Think about what is meant by 'heart-stopping'. Write about a 'heart-stopping' moment in your life. Describe to another person the bodily sensations experienced, and then capture the moment in words as accurately as you can.

Find out about the size and structure of a human heart and compare it to the size, structure and number of hearts in other animals – worms have five!