

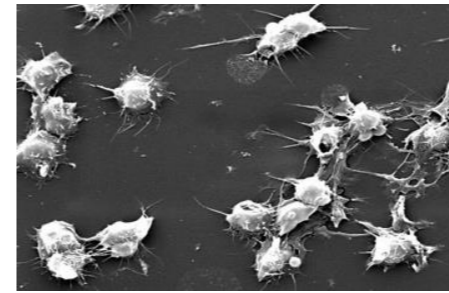
Year 6 – Autumn 1 – ‘Humans and the Circulatory System’

I can plan, carry out and evaluate an investigation

NC Science – ‘Animals including humans’

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.



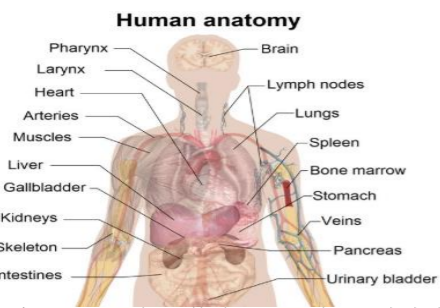
I can explain the function of the human circulatory system

Show BBC Bitesize video that explains the circulatory system and its function/other organs involved etc. How can we represent this in a diagram?

Show children various representations of circulatory system and allow them to choose their own method of presenting it in their books. Label.

Follow up with a flowchart/diagram demonstrating the journey that blood takes through the body and a short explanation to support this.

Introduce the ‘P’s’ and what we will be investigating. Pose the question: ‘How is our heart rate is affected by exercise?’. Explore the different ways that this can be explored e.g. change over time/comparison of people, time taken to get back to resting, different exercises etc. Plan investigation including variables/predictions/method/equipment etc. Carry out investigation fairly. Record and present results in a table followed by a line graph. Provide a conclusion and suggest ways that the experiment could be adapted in future by evaluating the process.



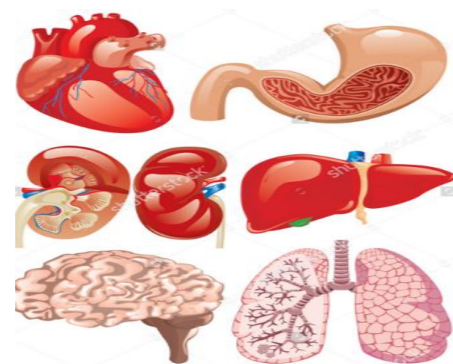
I can work collaboratively to label the human bodies organs

I can explain the function of the organs inside my body

Assess what chn already know about the function of each of our organs.

Why are they important? Which ones can we live without? What is their job?

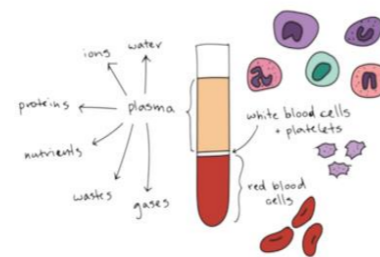
Go through power point that explains each function. Stick pictures in books alongside an explanation of the function of each body part.



I can present and conclude findings about blood

What is blood? Why is it important? Show BBC Bitesize clip (demonstrates the job of blood and its various components).

Discuss the components of blood (plasma, white/red blood cells and platelets). Imitate this using marshmallows (white blood cells), water (plasma), sprinkles (platelets) and raspberries (red blood cells). Use percentages to ensure equal representation. Draw diagram of test tube containing blood-including percentages of each component. Create watercolour painting of blood under a microscope and pair with an explanation of blood composition and function.

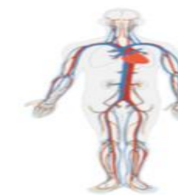
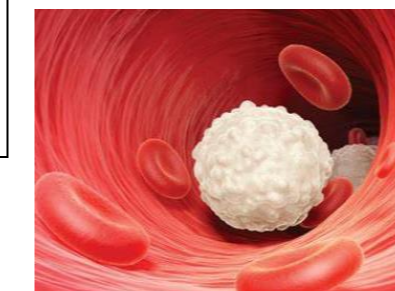


I can present and conclude my findings

Give children microscope-enhanced pictures of platelets, plasma, white blood cells and red blood cells.

Play game of who am I? Give clues to children. Using the clues, work out which component of blood it is describing.

Name the component, stick in visual representation and describe the function. Present in a table.



NC Working Scientifically (UKS2)

During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments



Week 1

Stunning start

Identify where main organs are in a human body – group work life-size model

Human organs

Work collaboratively to draw around the outline of a person (on large backing paper). Use felts to identify as many organs inside the body as they can. Once complete, compare with others, can you add any more to yours? Use iPads to research 5 more organs/bones/body parts that you did not know before and add to the diagram.