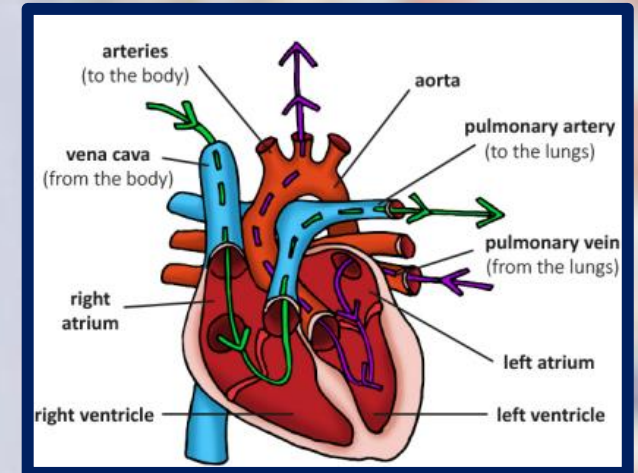




Crimson, scarlet, burgundy, cherry. Blood flows through our bodies in all its vibrant shades of red. Let's explore our circulation system. Now, surgeons, don't be squeamish as we dissect an animal heart and examine the veins, arteries and chambers up close. They all work hard to move blood around our bodies. William Harvey was fascinated with anatomy and made groundbreaking discoveries about valves. I wonder what we might uncover? Why do people give blood? Find out how to keep your heart happy with cardiovascular exercise and healthy food. Kickstart a campaign to spread the word about the damage caused to the lungs and heart by smoking.



Help your child prepare for their topic!

Your heart will be with you forever, so it's important to look after it. Why not research heart-healthy foods together and try out delicious, nutritious recipes that will make your heart happy? You could also set up an obstacle course in the garden and take each other's pulse before and after exercise to see how it changes. Alternatively, you could investigate advice for keeping your heart healthy and make an informative poster.

Healthy heart

The heart is a hardworking organ and it is important to keep it healthy. A balanced diet and regular exercise are vital for a healthy heart. A balanced diet should include plenty of fruits and vegetables, whole grains, low-fat dairy products, lean meat and fish, nuts and pulses and good fats. Eating foods that are high in salt, sugar and fat can be bad for the heart and lead to blockages in the arteries.

The heart

The heart is a muscle that is found in the chest cavity between the lungs. It is responsible for pumping blood around the body, through the circulatory system. The heart is made up of four chambers known as the left and right atriums, and the left and right ventricles.

Did you know!

Some capillaries are so thin that red blood cells have to squeeze through one at a time!

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| Science | The circulatory system includes the heart, blood vessels and blood. The heart pumps blood through the blood vessels and around the body. There are three types of blood vessel: arteries, veins and capillaries. They each have a different-sized hole (lumen) and walls. The blood carries gases (oxygen and carbon dioxide), water and nutrients to where they are needed. The red blood cells carry oxygen and carbon dioxide around the body. The blood also contains white blood cells, which protect the body from infection. |
| | Specialised equipment is used to take accurate measurements in standard units. Examples include data loggers plus sensors, such as light (lux), sound (dB) and temperature (°C); timers (seconds, minutes and hours); thermometers (°C) and measuring tapes (millimetres, centimetres, metres). |
| | The role of the circulatory system is to transport oxygen, water and nutrients around the body. They are transported in blood and delivered to where they are needed. |
| | Questions can help us find out about the world and can be answered using a range of scientific enquiries, including fair tests, research and observation. |
| | Lifestyle choices can have a positive (exercise and eating healthily) or negative (drugs, smoking and alcohol) impact on the body. |
| | A method is a set of clear instructions for how to carry out a scientific investigation, including what equipment to use and observations to make. A variable is something that can be changed during a fair test. A prediction is a statement about what might happen in an investigation based on some prior knowledge or understanding. |
| | The role of the circulatory system is to transport oxygen, water and nutrients around the body. They are transported in blood and delivered to where they are needed. |
| Art | Relief sculpture projects from a flat surface, such as stone. High relief sculpture clearly projects out of the surface and can resemble a freestanding sculpture. Low relief, or bas-relief sculptures do not project far out of the surface and are visibly attached to the background. |
| | A 3-D form is a sculpture made by carving, modelling, casting or constructing. |
| DT | In conceptual art, the idea or concept behind a piece of art is more important than the look of the final piece. |
| | Design criteria should cover the intended use of the product, age range targeted and final appearance. Ideas can be communicated in a range of ways, including through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. |
| DT | Ingredients can usually be bought at supermarkets, but specialist shops may stock different items. Greengrocers sell fruit and vegetables, butchers sell meat, fishmongers sell fresh fish and delicatessens usually sell some unusual prepared foods, as well as cold meats and cheeses. |
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| MFL | French vocabulary extension |
| PSHE | Relationships: Friends and Families |
| IT | Digital Animator: Photography |
| PE | Gymnastic sequences |