



Statutory Requirements:

- Identify and name the main parts of the human circulatory system, and explain 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

Working Scientifically:

- 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 degree of trust in results, in oral and written forms such as displays and other presentations.

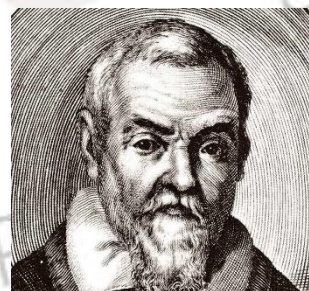
Key Knowledge:

- The main parts of the circulatory system are the heart, blood vessels (veins, arteries, capillaries) and blood.
- The circulatory system transports useful materials like oxygen, water and nutrients and removes waste products like carbon dioxide.
- The circulatory system flows through major organs such as the liver, lungs, brain, intestines and kidneys.
- Regular exercise and good diet are good for the circulatory system. Lifestyle choices, such as smoking and drug use, can damage the circulatory system.
- Blood pressure and heart rate can be used to measure and detect health problems.

Key Vocabulary:

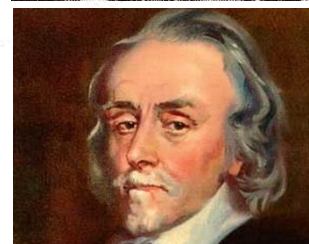
- Circulatory System
- Heart
- Blood
- Blood Vessel
- Veins
- Capillaries
- Arteries
- Pulse
- Heart rate
- Blood Pressure
- Balanced Diet
- Drugs
- Lifestyle
- Exercise
- Aerobic
- Oxygen
- Carbon Dioxide
- Organs

Key Scientists:



Classic
Santorio Santorio
(1561 – 1636)

First used pendulums to measure pulse rates.



Classic
William Harvey
(1578 – 1657)

Discovered the circulatory system.



Contemporary
Katharine Dibb
(???? –)

Studying heart rhythms and heart health.