

What I should already know:

- 1 The names and functions of the main body parts and internal organs (Year 3 and 4: skeletal, muscular and digestive system).
- 2 That animals, including humans, need the right types and amount of nutrition. (Year 3)
- 3 That animals, including humans, cannot make their own food: they get nutrition from what they eat. (Year 3)

What I will Learn:

- 1 The main parts of the human circulatory system, and the functions of the heart, blood vessels and blood.
- 2 The impact of diet, exercise, drugs and lifestyle on the way human bodies function.
- 3 The ways in which nutrients and water are transported within animals, including humans.

DIFFERENCE BETWEEN HEART RATE AND PULSE RATE



HEART RATE

HEART RATE IS THE SPEED OF THE HEARTBEAT MEASURED BY THE NUMBER OF CONTRACTIONS OF THE HEART PER MINUTE (BPM). THE HEART RATE CAN VARY ACCORDING TO THE BODY'S PHYSICAL NEEDS.



PULSE RATE

PULSE RATE IS THE NUMBER OF TIMES THE BLOOD FLOWS FROM THE CAPILLARIES THAT ARE CAUSED DUE TO THE CONTRACTIONS IN A MINUTE. A PULSE RATE CAN BE ACCURATELY MEASURED FROM THE EARLOBE.

Working scientifically skills:

- 1 **Plan** different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- 2 **Take measurements**, using a range of scientific equipment, with increasing accuracy and precision.
- 3 **Report** and **present** findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms.
- 4 **Gather** and **record data** to help in answering questions.

Scientists/Inventors:

William Harvey
(1578-1657)

He was the first known physician to describe completely, and in detail, the systemic circulation and properties of blood being pumped to the brain and the rest of the body by the heart.

Circulatory System for Kids



Key Vocabulary:

1	Aorta	a major artery carrying blood from the heart to the rest of the body
2	artery	a blood vessel carrying blood away from the heart
3	Atrium	chambers of the heart that receive blood from the veins
4	Addiction	an inability to stop using a substance or engaging in a behaviour even though it may cause psychological and/or physical harm.
5	Capillaries	tiny blood vessels between the end of the arteries and the start of the veins
6	Circulatory system	system of organs and tissues - including the heart, arteries
7	Nicotine	the addictive substance in cigarettes
8	Pulse	regular throbbing of the arteries, which can be felt at certain parts of the body such as the wrist