

# Biology

## Animals including humans



Function



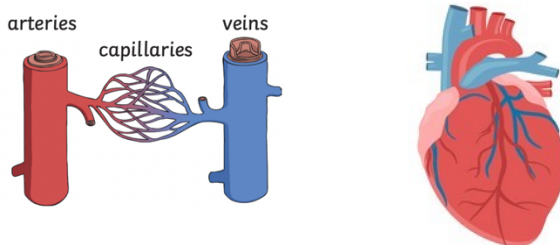
Year 6 - Autumn 1

### What should I already know?

- I know the need for a skeletal and muscular system (Year 3).
- I know the function of the digestive system (Year 4) and how our body gets nutrients from different types of food (Year 3).
- I know our bodies grow and change as we age (Year 5).

### What will I learn?

- I will learn that the circulatory system is a **body system** which **transports** things around the body.
- It has 3 main parts: the **heart**, **blood** and **blood vessels** and I will be able to describe the **functions** of these.
- I will recognise how diet, exercise, drugs and lifestyle choices can **impact** our body and circulatory system.
- I will learn how nutrients and water are **transported** in animals, including humans.



### What is our enquiry type?

Observing Changes Over Time	Pattern Seeking	Identifying, Grouping & Classifying	<b>Fair Testing</b>	Research
-----------------------------	-----------------	-------------------------------------	---------------------	----------

### Vocabulary

Function	Something's function is what job it does.
Circulatory system	A body system which transports things around the body.
Heart	An organ which constantly pumps blood around the circulatory system.
Blood vessels	Tube-like structures that carry blood through tissues and organs.
Blood	Blood travels in the blood vessels. It is a liquid that carries nutrients and water to the body.
Oxygenated blood	Blood with oxygen within it. It is pumped from the heart to the rest of the body.
Deoxygenated blood	Blood where the oxygen has already been transferred to the rest of the body.
Drug	A substance (including alcohol) containing chemicals that has an effect on your body.

Why does my heart beat?

### Working scientifically skills.

How will I be a scientist?

<b>Plan</b> 	I will plan an enquiry identifying a range of different <b>variables</b> whilst considering their impact and making a <b>prediction</b> based on scientific knowledge.	<b>Measure</b> 	I will <b>measure</b> heart rate using the <b>data loggers</b> . I will identify when to take additional readings and find averages.
<b>Interpret</b> 	I will draw findings from my enquiry and explain the <b>validity</b> of my results and suggest changes to increase the accuracy	<b>Report</b> 	I will use relevant scientific language to justify my findings, draw conclusions, and identify if I need further tests.

# Biology

## Living things and their habitats



Variation



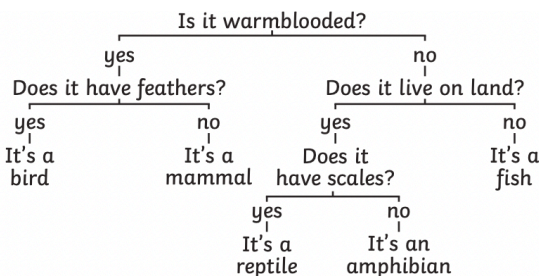
Year 6 - Autumn 2

### What should I already know?

- I recognise that living things can be grouped in a variety of different ways. (Year 1 & 4)
- I can use a classification key to help group, identify and name a variety of living things. (Year 4)

### What will I learn?

- I will be able to **classify** living things into broad groups according to their similarities and differences.
- I will be able to justify why I **classified** plants and animals based on their specific **characteristics**.
- I will know that broad **classification groups**, such as plants, animals and micro-organisms, can be subdivided.
- I will be able to explore a **classification key** in greater detail and generate my own.



### What is our enquiry type?

Observing Changes Over Time	Pattern Seeking	<b>Identifying, Grouping &amp; Classifying</b>	Fair Testing	Research
-----------------------------	-----------------	--	--------------	----------

### Vocabulary

Variation	A slightly different version of something. The same but different.
Characteristics	Special qualities or appearances that make something different to others.
Species	A group of living things that can reproduce.
Classify	To sort things into different groups
Classification key	A series of questions about the characteristics of living things. It is used to identify and group.
Micro-organism	An organism that can only be seen using a microscope. e.g. bacteria, mould and yeast.
Microscope	A piece of scientific equipment used to see very tiny (microscopic) things.
Taxonomist	A scientist who classifies different living things into categories.



Carl Linnaeus is known as the father of taxonomy. His classification system is the main system used to this day.

### Working scientifically skills.

How will I be a scientist?

	PLAN		DO		REVIEW
<b>Ask questions</b> 	I will ask questions about the strategies for <b>grouping</b> living things and consider when this would be useful. I will create my own key using questions to categories living things.	<b>Observe</b> 	I will <b>observe</b> animals and insects and consider what their key <b>characteristics</b> are and how this could help when grouping them.	<b>Evaluate</b> 	I will <b>evaluate</b> my classification keys and make changes to make them more useful and easier to read.