

Animals Including Humans

Construction



Prior Knowledge

Year 5: Describe the changes as humans develop to old age.

Year 4: Describe the simple functions of the basic parts of the digestive system in humans.

Identify the different types of teeth in humans and their simple functions.

Construct and interpret a variety of food chains, identifying producers, predators and prey.

Year 3: Identify that animals, including humans, need the right types and amount of nutrition and that they cannot make their own food but they do get nutrition from what they eat.

Identify that humans and some other animals have skeletons and muscles for support, protection and movement.

Year 2: Notice that animals, including humans, have offspring which grow into adults.

Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).

Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.

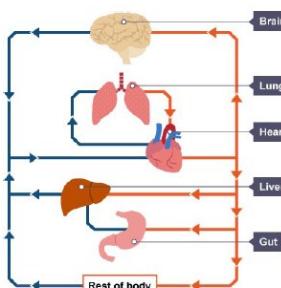
Year 1: Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores.

Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).

Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Future knowledge

KS3: Gas exchange systems. The structure and functions of the gas exchange system in humans, including adaptations to function. The mechanism of breathing to move. The impact of exercise, asthma and smoking on the human gas exchange system. The structure and functions of the human skeleton, to include support, protection, movement and making blood cells.



My Component Knowledge:

Lesson 1: I can describe the function of the circulatory system.

Lesson 2: I can describe the role of blood.

Lesson 3: I can describe the role of the heart.

Lesson 4: I can describe the journey of blood through the heart.

Lesson 5: I can explain the difference between veins and arteries.

Lesson 6: I understand the impact of diet on the human body.

Lesson 7: I can explain the effects of drugs on the human body.

Lesson 8: I can explain the impact of smoking on the human body.

Lesson 9: I can explain the impact of exercise on the human body.

Lesson 10: I can experiment with the impact of exercise on the body.

Lesson 11: I can analyse results.

My Composite Knowledge:

I can recognise the function of the heart, blood and the circulatory system and why it is so essential for our bodies.

My Powerful Knowledge:

To recognise that living things have changed over time and that fossils provide information about living things that inhabited the earth millions of years ago.



Which organs remove waste from the blood?

What enters the blood from the lungs?

Why is blood red?

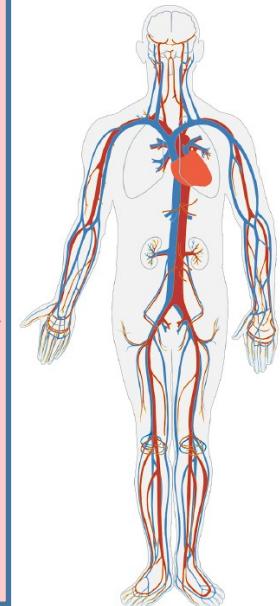
What is another name for the circulatory system?

Key Vocabulary

Tier 1: heart, body, organs

Tier 2: circulatory system, (de-) oxygenated blood, artery, vein, atrium, nutrients

Tier 3: oxygen exchange, carbon dioxide, diffusion



Working scientifically:

Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate.

Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.