

National Curriculum: Science

Key Learning

Vocabulary

Animals, including humans:

Pupils should be taught to:

- 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.
- 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.

Working Scientifically:



Animal categories, human features and senses



Exercise, healthy eating and survival



Amphibians - live in the water as babies and on land as they grow older. They have smooth, slimy skin.

Birds - All birds have a beak, two legs, feathers and wings.

Fish - live and breathe under water. They have scaly skin, fins to help them swim and they breathe through gills.

Mammals - Mammals are animals that breathe air, grow hair or fur and feed on their mother's milk as a baby.

Reptiles - All reptiles breathe air. They have scales on their skin.

Carnivore - Animals that mostly eat other animals (meat) are carnivores.

Herbivore - Animals that only eat plants are herbivores.

Omnivore - Animals that eat both plants and other animals are omnivores.

Sight - Your eyes let you see all the things around you.

Hearing - Your ears let you listen to all the things around you. Your brain is able to tell what different sounds are.

Touch - Your skin gives you the sense of touch. You can tell if something is warm, cold, smooth or rough without even looking at it!

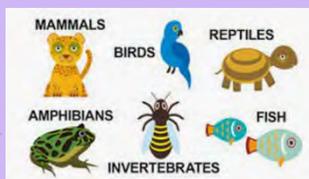
Taste - Your sense of taste comes from your tongue. You can tell if something tastes bitter or sweet. You might have some tastes you like and some you don't.

During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- asking simple questions and recognising that they can be answered in different ways
- observing closely, using simple equipment
- performing simple tests
- identifying and classifying
- using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions.

Key Questions

What are animals and are there different types of animals?



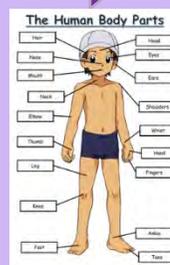
How can different animals be sorted?

What do different animals eat?



What makes us human?

What are senses and how do we use them?

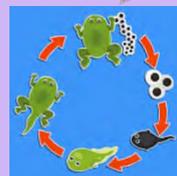
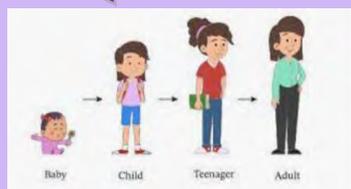


Do all offspring look like their parents?



How do frogs change as they grow into adults?

Do humans have lifecycles?



What do animals need to survive?

How can we live a healthy lifestyle?



Smell - You smell using your nose. Your nose can tell if things smell nice or not nice.

Adult - A fully grown animal or plant.

Develop - To grow bigger and become stronger.

Life cycle - The changes living things go through to become an adult.

Offspring - The child of an animal.

Young - Offspring that has not reached adulthood.

Live young - Offspring that has not hatched from an egg.

Diet - The food and water that an animal needs.

Exercise - A physical activity to keep your body fit.

Germs - Tiny living things that can cause disease.

Hygiene - How we keep ourselves and the world around us clean so we can stay healthy and stop germs spreading.

Nutrition - Food needed to live.

Key Learning:

1	What are animals and are there different types of animals? Animals are living things that eat, breathe and move. Animals can be classified as either mammals, birds, fish, reptiles, amphibians depending on their specific features. Learning: To identify and name some common animals through video observations. To describe and compare the structure of a variety of common animals using charts to discuss differences.
2	What do different animals eat? Animal diets can be classified in 3 different ways: carnivore, herbivore and omnivore. Carnivores eat a diet of meat. Omnivores are defined as any organism that regularly consumes a variety of food including plants, animals, fungi and algae. For example, humans can eat meat, fruit, vegetables, as well as fungi such as mushrooms. Herbivores are any organism that feeds on plants. Learning: To identify, name and sort animals that are herbivores, carnivores and omnivores using a Venn diagram in groups.
3	What makes us human? Our body is made up of lots of different parts. We have many different features, including a head, hair, ears, eyes, teeth, nose, neck, mouth, shoulders, arms, legs, feet and hands. Each part of your body has its own special job to do. Learning: To name and label the parts of the human body and discuss how we differ to fish (using a real-life fish).
4	What are senses and how do we use them? There are 5 basic human senses: sight, hearing, touch, taste and smell. The parts of the body that deal with the senses: the eyes, ears, nose tongue and skin are called the sensory organs. Much of this information comes through the sensory organs. Learning: To name the five senses and to perform simple tests, using all the senses, to find out more about them.
5	How can different animals be sorted? All living things are classified by scientists according to their characteristics or structures. To sort the animals, you will need to talk and to think about: which animal group they belong to, what they eat and things that are the same or different. Learning: To sort animals according to a criteria through quizzing and group work.
6	Do all offspring look like their parents? Offspring are baby animals. Some offspring do look like their adult when they are born and some do not. Some animals, such as most amphibians, look completely different to their adult when they are born and go through a big change to become an adult, called metamorphosis. Learning: To match, sort and group young animals and their adults in groups.
7	How do frogs change as they grow into adults? All young animals change as they go through the different stages of their life cycle and grow into adults. Frogs begin their lives as frogspawn. They then undergo metamorphosis where they change from a tadpole to a froglet, and then finally an adult frog. This process is called the frogs life cycle. Learning: To find out about the lifecycle of a frog using videos and diagrams.
8	Do humans have lifecycles? Like frogs, humans also have a life cycle. We start off life as a baby and need a lot of care. We then grow to become a toddler and are slightly more independent. We then grow to become a teenager before becoming an adult. Learning: To compare the stages of the human life cycle using real photographs of parents.
9	What do animals need to survive? To stay alive, all animals have three basic needs for survival: air, water and food. Learning: To research (in groups) and describe what animals, including humans, need to survive.
10	How can we live a healthy lifestyle? To grow into a healthy adult, we must eat the right types of food in the right amount and exercise. Being active and exercising keeps our bodies and minds healthy. To stop germs from spreading, it is important to be hygienic. Learning: To test the effects of exercise on the human body and investigate the importance of healthy eating and hygiene.