



Year A

SCIENCE KS1



"It is the glory of God to conceal things, but the glory of kings is to search things out."

Proverbs 25:2



**Class 2 – Animals, Including Humans
Year 1 Content**

Pupils will 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.

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

Pupils will also become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets.

Pupils will learn the names of the main parts of the body.

Pupils will group animals according to what they eat; using their senses to compare different textures, sounds and smells.

By the end of the topic pupils will know:

The blue whale can produce the loudest sound of any animal.

Camels can survive up to six months without food or water due to the fatty tissues stored in their humps.

The cheetah is the fastest animal to roam the earth with top speeds of 113 km per hour.

Mammals are warm blooded animals. They breathe air, have a backbone and give birth to live babies.

Birds have feathers and wings. They lay eggs and are warm-blooded.

**A fish is a scaly skinned creature with a spine that swims in water and breathes using gills.
A fish lays eggs and is cold-blooded.**

Reptiles are cold-blooded. Most lay eggs and their skin is covered with hard, dry scales.

Amphibians begin their life in water with gills and tails. Examples are frogs and newts.

Herbivores eat plants.

Omnivores eat plants and meat.

Carnivores are meat-eating animals that get their food from killing other animals.

Prey is an animal that is hunted by another for food. Prey are hunted by predators.

A predator is an animal that hunts, catches and eats other animals.

Animals, Including Humans – Class 2

Year 2 Content

Pupils will be taught to:

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.

Pupils will also be introduced to the basic needs of animals for survival, as well as the importance of exercise and nutrition for humans.

They will be introduced to the processes of reproduction and growth in animals.

They will look at examples such as: egg, chick, chicken; egg, caterpillar, pupa, butterfly; spawn, tadpole, froglet, frog; lamb, sheep. Growing into adults will include reference to baby, toddler, child, teenager, adult.

Pupils will work scientifically by; observing how different animals, including humans, grow, asking questions about what things animals need for survival and what humans need to stay healthy; and suggesting ways to find answers to their questions.

By the end of the topic children will know:

All foods contain nutrients which your body needs to stay active throughout the day.

Everyone should have 5 portions of fruits and vegetables a day to get the right amount of nutrients.

Sugary foods are bad for your teeth and can be fattening, and salty foods can lead to heart disease.

Keep your mouth happy by brushing your teeth twice a day.

To keep healthy, have 30-60 minutes of exercise every day. This can include running around and playing games with friends.

Carbohydrates are sugars (such as fructose, glucose and lactose) and starches, which are found in foods such as starchy vegetables, grains, rice, breads and cereals.

Fats are found in meat and other animal products such as butter and cheese.

Protein is a food group which includes meat, eggs, fish, dairy products, nuts and seeds.

Good hygiene habits include washing hands, covering your mouth when you cough, having regular baths or showers and brushing teeth.

The five food groups are Fruit and Vegetables, Carbohydrates, Protein, Dairy and Oils and spreads.

Fruit and Vegetables should make up over a third of the food we eat in a day.

A person's children or an animal's young are known as their offspring.

Baby Rabbits are also called kittens.

Male seahorses give birth.

Newly born giraffes are six feet tall and weigh 150 pounds.

Orangutan mothers only give birth every 8 years or so.

Baby Cheetahs are born blind, but by the time they grow up they can see up to 3 miles away.

A baby horse is called a foal. They can start walking within a couple of hours of being born.

A baby sea otter is covered with fluff so it can't drown, They float like little furry beach balls.

Living things and their habitats – Class 2

Pupils will be taught;

To explore and compare the differences between things that are living, dead and things that have never been alive.

To identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.

To identify and name a variety of plants and animals in their habitats, including microhabitats.

To describe how an animal obtains their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

By the end of Living Things and their habitats topic the children will know:

A habitat is a place that an animal or plant lives. It provides the animal or plant with food, water and shelter.

A microhabitat is a very small, specific habitat for animals and plants.

An environment is the area in which something exists or lives.

An inhabitant is a person or animal that lives in a place.

A consumer eats producers or other consumers in a food chain.

A producer is an organism that makes its own food, such as a plant.

An organism is a living thing.

A living thing is alive. It is called an organism.

A dead thing has once been alive.

A non-living thing has never been alive.

A food chain is a diagram that shows us how animals are linked by what they eat.

There are many different habitats around the world from forests to grasslands and from mountain slopes to deserts.

Animals and plants often compete with each other for food and water when resources like food and water are limited.

All animals get food by eating other living things. Herbivores eat plants, while carnivores eat other animals.

Decomposers, such as fungi and earthworms, feed on rotting plants and animals.

All living things have certain characteristics that are essential for keeping them alive and healthy.

That a habitat is a natural environment or home of a variety of plants and animals and a microhabitat is a very small habitat, for example for woodlice under stones, logs or leaf litter.

Describe the conditions in different habitats and find out how the conditions affect the number and type(s) of plants and animals that live there.