"It is the glory of God to conceal things, but the glory of kings is to search things out." Proverbs 25:2

Animals Including Humans (Year 1 Content)

Autumn Term KS1	Key Knowledge - Encompassed within knowledge mat	Key Vocabulary
NC Objectives To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. To identify and name a variety of common animals that are carnivores, herbivores and omnivores. To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) To 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 understand how to take care of animals in their habitat. Pupils will become familiar with the common names of some fish, amphibians, reptiles, birds and mammals, including those that are kept as pets. Pupils will have opportunities to learn the names of the main body parts (including head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth) through games, actions, songs and rhymes. Pupils will work scientifically by: using their observations to compare and contrast animals at first hand or through videos or photographs, describing how they identify and group them; grouping animals according to what they eat; and using their senses to compare different textures, sounds and smells.	• 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 113km 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 hints, catches and eats other animals.	fish amphibians reptiles birds mammals carnivore herbivore omnivore tame wild nocturnal

Animals Including Humans (Year 2 Content)

Autumn Term KS1	Key Knowledge - Encompassed within knowledge mat	Key Vocabulary
NC Objectives To notice that animals, including humans, have offspring which grow into adults. To find out about and describe the basic needs of animals, including humans, for survival (water, food and air). To 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. Pupils will be introduced to the processes of reproduction and growth in animals. Pupils will look at examples such as: spawn, tadpole, froglet, frog; lamb, sheep. Growing into adults will include reference to baby, toddler, child, teenager, adult. Pupils will work scientifically by: observing, through video or first-hand observations and measurement, how different animals, including humans, frown; 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.	• 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 includer 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.	healthy diet offspring exercise proteins carbohydrates fats nutrition survival hygiene

Everyday Materials (Year 1 Content)

Spring Term KS1	Key Knowledge - Encompassed within knowledge mat	Key Vocabulary
NC Objectives To distinguish between an object and the material from which it is made. To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. To describe the simple physical properties of a variety of everyday materials. To compare and group together a variety of everyday materials on the basis of their simple physical properties. Pupils will explore, name, discuss and raise and answer questions about everyday materials so that they become familiar with the names of materials and properties, such as: hard/soft, stretchy/stiff, shiny/dull, rough/smooth; bendy/not bendy, waterproof/not waterproof, absorbent/not absorbent, opaque/transparent. Pupils will explore and experiment with a wide variety of materials, including: brick, paper, fabrics, elastic and foil. Pupils will work scientifically by: performing simple tests to explore questions.	• Glass is used for windows in houses and cars to see through. • Mirrors are used to see yourself – for reflection. • Metal is used for strength in construction of plants, cars, trains and especially tall buildings. • Plastic is molded or shaped to form any shape. • A material is what something is made from. • Materials can be natural or man-made. • Glass is made from very fine sand. It is heated until it melts. • Plastics are a man-made material, mostly made from oil. • A glass bottle could take 1 million years to decompose (break down). • A plastic bottle will take 450 years to decompose (break down). • Natural rubber is made from a runny, milky liquid called latex, which comes from some plants. Most of the world's natural rubber comes from the rubber tree. • Some solids can be hammered or squashed into many different shapes without breaking. They are known as malleable materials. • Other solids, such as biscuits or glass, will not bend when hammered or squashed, but will break and split. These materials are brittle. • Wood, paper and cardboard are all made from trees. • Leather comes from cow skin. • Wool comes from sheep. • Cotton comes from plants. • Durable means long lasting. • All materials have physical properties. A physical property is one that a person can measure without changing the material. Colour, amount, hardness and temperature are examples of physical properties.	materials wood plastic metal liquid gas stretch stiff bend waterproof shiny

Living Things and their Habitats

Summer Term KS1	Key Knowledge - Encompassed within knowledge mat	Key Vocabulary
NC Objectives Explore and compare the differences between things that are living, dead, and things that have never been alive. 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. Identify and name a variety of plants and animals in their habitats, including. Micro-habitats. Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different food sources. Pupils will be introduced to the idea that all living things have certain characteristics that are essential for keeping them alive and healthy. Pupils should raise and answer questions that help them to become familiar with the life processes that are common to all living things. Pupils will compare animals in familiar habitats with animals found in less familiar habitats. For example, in woodland, in the ocean, in the rainforest. Pupils will work scientifically by: sorting and classifying things according to whether they are living, dead or were never alive, and recording their findings using charts. Pupils will describe how they decided where to place things, exploring questions and talk about ways of answering their questions. Pupils will construct a simple food chain that includes humans. Pupils will describe the conditions in different habitats and micro-habitats and find out how the conditions affect the number and type(s) or plants and animals that live there.	• A habitat is a place than 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 ting 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. • All animals get food by eating other living things. Herbivores eat plants, whilst carnivores eat other animals. • Decomposers, such as fungi and earthworms, feed on rotting plants and animals.	dinosaur indigenous rivers woodland ponds sea rainforest desert species microhabitats