

Sholing Infant School — Science Curriculum Coverage



Year 1						
Concepts	Animals including Humans	Everyday Materials Seasonal Changes	Animals including Humans	Everyday Materials Seasonal Changes	Animals including Humans	Plants Seasonal Changes
Curriculum objectives	Identify, name, draw and label basic parts of the human body	 Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood, plastic, glass, metal and rock. Observe changes across the 4 seasons. Observe and describe weather associated with the seasons and how day length varies. 	 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). 	 Describe the simple physical properties of a variety of everyday materials. Compare and group together a variety of everyday materials on the basis of their simple physical properties. Observe changes across the 4 seasons. Observe and describe weather associated with the seasons and how day length varies. 	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.	 Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. Observe changes across the 4 seasons Observe and describe weather associated with the seasons and how day length varies.
Sticky knowledge	❖ I know the name and location of basic external body parts e.g. arm, head, leg, nose, ear, mouth, foot, elbow, knee, wrist, shoulder, neck	 I know the names of at least 3 materials (e.g. wood, plastic, glass, metal, rock, paper) when they are shown them. I know that an object is made from a material and be able to give at least 3 examples e.g. the chair is made from wood. I know that there are four seasons in the UK: Autumn, Spring, Summer and Winter. I know that weather changes with the seasons and know how day-length changes throughout the year. 	I know the name of an animal from each main group. I know how to describe one feature of an animal from each main group. I know an example of one animal that is a herbivore, carnivore and omnivore.	 I know the simple properties of different materials e.g. hard, soft, flexible, squishy, strong, see-through I know how to group materials that have the same property. I know how to compare materials that have different properties. I know that there are four seasons in the UK: Autumn, Spring, Summer and Winter. I know that weather changes with the seasons and know how day-length changes throughout the year. 	When provided with the five senses, I know which body part is used for each sense.	I know the main parts of a plant (roots, stem, leaves and flowers) and know what each part does. I know the difference between a deciduous and evergreen tree. I know the names of some wild and garden plants. I know that there are four seasons in the UK: Autumn, Spring, Summer and Winter. I know that weather changes with the seasons and know how day-length changes throughout the year
Vocabulary	body, arm, elbow, wrist, hand, fingers, leg, hip, knee, ankle, foot, shoulder, head, face, hair, eyes, ears, mouth, nose, chest, thigh, external, internal, brain, heart, lungs, stomach, skeleton	object, material, wood, plastic, glass, metal, rock, rubber, fabric seasons (Autumn, Winter, Spring, Summer), change, year, months, weather, temperature	Animal, amphibians, reptiles, birds, mammals, fish, pets, describe, compare, carnivores, herbivores, omnivores, eggs, live young, warmblooded, cold-blooded, land, water, beak, snout, tail, skeleton, vertebrae, feathers, scales, wings, gills, fur	properties (hard, soft, bendy, squishy, flexible, dull, bright, seethrough, smooth, strong, tough, bumpy), compare, group, natural, man-made seasons (Autumn, Winter, Spring, Summer), change, year, months, weather, temperature	Senses, touch, skin, pain, hot, cold, sight, eyes, brain, hearing, ears, quieter, louder, smell, nose, nostrils, taste, mouth, tongue, taste buds, bitter, sour, sweet, salty	observation, plants, flowers (rose dandelion nettle poppy bluebell), trees (oak, lime, horse chestnut, cedar holly) deciduous tree, evergreen tree, structure
Working Scientifically	 Observing closely Taking measurements 	 Observing closely Identifying and classifying Gathering and recording data Present data 	 Asking and answering questions Identifying and classifying 	 Identifying and classifying Observing closely Gathering and recording data Present data 	 Asking and answering questions Gathering and recording data Performing simple tests 	 Observing closely Taking measurements Gathering and recording data Present data
Topic	❖ Autumn 1 - Marvellous Me	❖ Autumn 2 - Pirates	Spring 1 – Hot or Not	❖ Spring 2 - Toys	Summer 1 — The Great Fire of London	Summer 2 - Forests



Sholing Infant School – Science Curriculum Coverage



Year 2						
Concepts	Animals including Humans	Everyday Materials	Living Things and Habitats	Everyday Materials	Animals including Humans	Plants
Curriculum objectives	Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	 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 microhabitats. Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food. 	 ❖ Identify and compare the suitability of a variety of everyday materials for particular uses. ❖ (non-statutory) Pupils might find out about people who have developed useful new materials e.g. John Dunlop (air filled tyres)/ Charles Macintosh (waterproof material)/ John McAdam (tarmac). 	 Notice that animals, including humans, have offspring which grow into adults. Find out and describe the basic needs of animals, including humans, for survival (water, food, air). 	 Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.
Sticky knowledge	 I know at least three examples of exercise and know some reasons why it is important for humans. I know at least three ways that we can have good hygiene and explain simply what would happen if we had poor hygiene. I know that we need to eat different foods to have a balanced diet and know that we need to eat more of certain food groups than others. 	 I know that you can change the shape of some objects and when given a verbal instruction will be able to change the shape of objects by squashing, stretching, bending and twisting. I know at least one material that can be changed easily and one material that cannot. 	 I know that all animals and plants do not live in the same place and know at least 3 examples of habitats. I know that things can either be living, dead or never living and give at least one example of each I know that animals get their food from different places and give at least one example of a simple food chain 	 I know at least three examples of why a material has been selected to create an object, using key vocabulary such as: hard, soft, smooth, rough, transparent, opaque and waterproof. I know what invention Charles Macintosh created. 	 I know the three main things that animals including humans need to survive (air, food, water). I know an example of a life cycle and explain it in simple terms. I know the main changes that happen in a caterpillar's life cycle. 	 I know that plants need water, light and a suitable temperature to grow and stay healthy. I know and describe in simple terms how seeds/bulbs grow into mature plants using key vocabulary.
Vocabulary	exercise (muscles, exercise, fat, healthy, heart rate, breathing, sweat, active, strength, energy, obese) balanced diet (healthy, food, water, carbohydrates, protein, fruit, vegetables, fats, dairy, energy, vitamins, calcium, bones, food groups) hygiene (germs, bacteria, illness, sick, healthy, clean, dirty, spread, wash)	object, materials, shape, change, squashing, bending, twisting, stretching, reversible, irreversible	living (move, grow, reproduce, get rid of waste, react to surroundings), dead, never alive habitats (ocean, pond, rainforest, desert, forest), suited, adapted, microhabitats, food chain, prey, predators, energy, transfer	identify, compare, suitable, not suitable, use, properties (waterproof, transparent, opaque, rough, smooth, absorbent, flexible)	offspring, life cycle, baby, toddler child, teenager adult, elderly, birth, death basic needs, survival, water, food, air, oxygen, sleep, shelter, essential, non-essential	Bulb (hyacinth), temperature, growth, healthy, measure, height, pollen, germination, shoot, nutrition, grow, sunlight, water
Working Scientifically	 Gathering and recording data Taking measurements 	 Identifying and classifying Gathering and recording data 	 Identifying and classifying Observing closely Asking and answering questions 	 Asking and answering questions Perform simple tests Gathering and recording data Presenting data 	 Observing closely Taking measurements Presenting data 	 Observing closely Perform simple tests Gathering and recording data, including taking measurements Presenting data
Topic	Autumn 1 - Victorians	Autumn 2 - Flight	Spring 1 — Wonderful World	Spring 2 - Titanic	Summer 1 — Survival SOS	Summer 2 - Survival SOS