

# Curriculum map for SCIENCE



Odd year

		Autumn 1 Fruitastic	Autumn 2 Super Heroes	Spring 1 Castles	Spring 2 All Creatures Great and Small	Summer 1 Once Upon a time	Summer 2 Summer
Topic focus (from long term overview)		Humans	Materials - properties	Materials - changing	Animals	Plants	Habitats
Y1	Knowledge development	<p>Can they draw &amp; label basic parts of the human body?</p> <p>Can they name some parts of the human body that cannot be seen?</p>	<p>Can they distinguish between an object and the material from which it is made?</p> <p>Can they describe materials using their senses?</p> <p>Can they name some different everyday materials? e.g. wood, plastic, metal, water and rock</p> <p>Can they explain why a material might be useful for a specific job?</p> <p>Can they sort materials into groups by given criterion?</p> <p>Can they describe things that are similar and different between materials?</p>	<p>Can they explore how the shapes of solid objects can be changed? (squashing, bending, twisting, stretching)</p>	<p>Can they identify and name a variety of common animals that are carnivores, herbivores and omnivores?</p> <p>Can they classify animals by what they eat? (carnivore, herbivore, omnivore)</p> <p>Can they sort photographs of living things and non-living things?</p> <p>Can they point out differences between living things and non-living things?</p> <p>Can they say why certain animals have certain characteristics?</p>	<p>Can they describe the parts of a plant (roots, stem, leaves, flowers)?</p> <p>Can they identify and name a range of common plants and trees?</p> <p>Can they recognise deciduous and evergreen trees?</p> <p>Can they name the trunk, branches and root of a tree?</p> <p>Can they observe changes across the four seasons?</p> <p>Can they name the four seasons in order?</p> <p>Can they observe and describe weather associated with the seasons?</p> <p>Can they observe and describe how day length varies?</p> <p>Can they observe features in the environment and explain that these are related to a specific season?</p> <p>Can they observe and talk about changes in the weather?</p> <p>Can they talk about weather variation in different parts of the world?</p>	
	Skills development	<p>Can they talk about what they see, touch, smell, hear or taste?</p>	<p>Can they identify and classify things they observe?</p> <p>Can they answer some scientific questions?</p>	<p>Can they perform a simple test?</p> <p>Can they tell other people about what they have done?</p>	<p>Can they show their work using pictures, labels and captions?</p> <p>Can they put some information in a chart or table?</p> <p>Can they think of some questions to ask?</p>	<p>Can they use simple equipment to help them make observations?</p> <p>Can they record their findings using standard units?</p>	<p>Can they give a simple reason for their answers?</p> <p>Can they explain what they have found out?</p>
Y2	Knowledge development	<p>Can they explain the basic needs of animals, including humans for survival? (water, food, air)</p> <p>Can they describe why exercise, balanced diet and hygiene are important for humans?</p>	<p>Can they describe the simple physical properties of a variety of everyday materials?</p> <p>Can they compare and group together a variety of materials based on their simple physical properties?</p>	<p>Can they identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, cardboard for particular uses?</p> <p>Can they find out about people who developed useful new materials? (John Dunlop, Charles Macintosh, John McAdam)</p> <p>Can they explain how materials are changed by bending, twisting and stretching?</p>	<p>Can they explain that animals grow and reproduce?</p> <p>Can they explain why animals have offspring which grow into adults?</p> <p>Can they explain the differences between living and non-living things?</p> <p>Can they decide whether something is living, dead or non-living?</p>		<p>Can they describe a range of different habitats?</p> <p>Can they match certain living things to the habitats they are found in?</p> <p>Can they name some characteristics of an animal that help it to live in a particular habitat?</p> <p>Can they describe what animals need to survive and link this to their habitats?</p>
	Skills development	<p>Can they use see, touch, smell, hear or taste to help them answer questions?</p>	<p>Can they organise things into groups?</p> <p>Can they find simple patterns (or associations)?</p>	<p>Can they carry out a simple fair test?</p> <p>Can they explain why it might not be fair to compare two things?</p>	<p>Can they identify animals and plants by a specific criteria, eg, lay eggs or not; have feathers or not?</p> <p>Can they use text, diagrams, pictures, charts, tables to record their observations?</p>	<p>Can they measure using simple equipment?</p> <p>Can they use some scientific words to describe what they have seen and measured?</p>	<p>Can they compare several things?</p> <p>Can they say whether things happened as they expected?</p>
KS1	Vocabulary	Human, baby, toddler, teenager, adult, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth, heart, lungs, intestines, stomach, brain, survival, water, food, air, exercise, hygiene, nutrition	Brick, rock, paper, cardboard, elastic, foil, shiny, dull, waterproof, absorbent, similar, different	Squashing, bending, twisting, stretching	Herbivore, carnivore, omnivore, living, dead, non-living, classify, characteristics, reproduce, offspring, plants, meat	Flower, leaf, root, stem, deciduous, evergreen, trunk, branch, root, seasons, Spring, Summer, Autumn, Summer, features, weather, speedwell, buttercup, tulip, sunflower, pansy, oak, horse chestnut, weeping willow, holly, sycamore	Habitat, environment, characteristics, survive, needs,
	Story book link	Oliver's Fruit Salad Eat your Peas	Traction Man by Mini Gray	The Bad Knight		The Rabbit Problem by Emily Gravett	Wild by Emily Hughes

Even year

		Autumn 1 Marvellous Me	Autumn 2 Celebrations	Spring 1 Perfect Pirates	Spring 2 Amazing Animals	Summer 1 Out of This World	Summer 2 Let's Go
Topic focus (from long term overview)		Humans	Materials - Properties	Materials - changes	Animals	Plants	Habitats
Y1	Knowledge development	Can they name the parts of the human body that they can see? Can they identify the main parts of the human body and link them to their senses?	Can they explain what material objects are made from? Can they describe materials using their senses, using specific scientific words?	Can they explain how solid shapes can be changed by squashing, bending, twisting and stretching? Can they explain what happens to certain materials when they are heated, eg. bread, ice, chocolate? Can they explain what happens to certain materials when they are cooled, eg. jelly, heated chocolate?	Can they name the parts of an animal's body? Can they compare the bodies of different animals? Can they point out some of the differences between different animals? Can they name a range of domestic animals? Can they identify and name a variety of common animals? (birds, fish, amphibians, reptiles, mammals, invertebrates) Can they begin to classify animals according to a number of given criteria? Can they name a range of wild animals?	Can they name the petals, stem, leaf, bulb, flower, seed, and root of a plant? Can they name the main parts of a flowering plant?	Can they describe how an animal is suited to its environment?
	Skills development	Can they talk about what they see, touch, smell, hear or taste?	Can they identify and classify things they observe? Can they answer some scientific questions?	Can they perform a simple test? Can they tell other people about what they have done?	Can they show their work using pictures, labels and captions? Can they put some information in a chart or table? Can they think of some questions to ask?	Can they use simple equipment to help them make observations? Can they record their findings using standard units?	Can they give a simple reason for their answers? Can they explain what they have found out?
Y2	Knowledge development	Can they describe some of the life processes common to plants and animals, including humans?	Can they describe the properties of different materials using words like, transparent or opaque, flexible, etc.? Can they sort materials into groups and say why they have sorted them in that way? Can they say which materials are natural and which are man made?	Can they explain how materials are changed by heating and cooling? Can they tell which materials cannot be changed back after being heated, cooled, bent, stretched or twisted? Can they explain how things move on different surfaces?	Can they describe what animals need to survive? Can they describe the life cycle of some living things? (e.g. egg, chick, chicken)	Can they describe what plants need to survive? Can they observe and describe how seeds and bulbs grow into mature plants? Can they find out & describe how plants need water, light and a suitable temperature to grow and stay healthy? Can they describe what plants need to survive and link it to where they are found? Can they explain that plants grow and reproduce in different ways?	Can they describe how a habitat provides for the basic needs of things living there? Can they describe a range of different habitats? Can they describe how plants and animals are suited to their habitat?
	Skills development	Can they use see, touch, smell, hear or taste to help them answer questions?	Can they organise things into groups? Can they find simple patterns (or associations)?	Can they carry out a simple fair test? Can they explain why it might not be fair to compare two things?	Can they identify animals and plants by a specific criteria, eg. lay eggs or not; have feathers or not? Can they use text, diagrams, pictures, charts, tables to record their observations?	Can they measure using simple equipment? Can they use some scientific words to describe what they have seen and measured?	Can they compare several things? Can they say whether things happened as they expected?
KS1	Vocabulary	Senses, sight, eyes, hearing, ears, touch, feel, skin, smell, nose, taste, tongue, human	Properties, transparent, opaque, flexible, natural, man made	Heated, cooled, bent, stretched, twisted, surfaces	Compare, birds, robin, owl, fish, tuna, trout, amphibians, frog, newt, reptiles, crocodile, snake, mammals, horses, zebras, invertebrates, snails, jelly fish, classify, differences, life cycle, survive	Petal, stem, leaf, roots, seeds, bulbs, stamen, pollen, pistil, sepal, water, light, temperature, survive, reproduce, mature, observe	Environment, suited, habitat, describe
	Story book link	Bog Baby				Jack and the Baked Bean Stalk	Little Evie in the Wild Wood by