# Curriculum map for SCIENCE

Odd year

| | | Autumn 1<br>Fruitastic | Autumn 2<br>Super Heroes | Spring 1<br>Castles | Spring 2<br>All Creatures Great and Small | Summer 1<br>Once Upon a time | Summer 2<br>Summer |
|---|---|---|---|---|---|---|---|
| Topic focus (from long term overview) | | Humans | Materials - properties | Materials - changing | Animals | Plants | Habitats |
| Reception | Knowledge and skills development | Can they describe what they see?<br>Can they ask questions about things to find out more information?<br>Do they notice changes, similarities and differences? | Can they explore a wide range of materials?<br>Can they observe range of natural objects?<br>Can they say how materials are the same and different?<br>Can they use scientific vocabulary to name and describe a range of materials? | Do they notice changes, similarities and differences?<br>Can they use scientific vocabulary to name and describe changes of materials? | Can they say how animals are the same and different?<br>Can they use pictures and words to talk about living things?<br>Can they use scientific vocabulary to name and describe a range of animals? | Can they say how plants are the same and different?<br>Can they use pictures and words to talk about living things?<br>Can they use scientific vocabulary to name and describe a range of plants? | Can they say how places have the same and different features?<br>Do they notice changes, similarities and differences?<br>Are the beginning to use words and pictures to talk about places including where they live? |
| | Vocabulary | See, hear, feel, smell, taste, human, similar different living, change, group | Wood, plastic, metal, fabric, glass, soft, hard, rough, smooth, see through. | Melt, freeze, sink, float | Tail, claw, pet, farm, zoo, fur, feathers, scales. Wings, beak, pouch, baby animal names, | Flower, stem, root, leaf,<br>Daisy, rose, dandelion | Garden, pond, sea, desert, ice cap, forest |
| | Story book link | Handa's Surprise<br>Avocado Baby | Three little Pigs | | Dear Zoo<br>Farmer Duck | Jack and Beanstalk<br>The Enormous Turnip | Rainbow Fish<br>Gruffalo |
| Y1 | Knowledge development | Can they draw & label basic parts of the human body?<br>Can they name some parts of the human body that cannot be seen? | Can they distinguish between an object and the material from which it is made?<br>Can they describe materials using their senses?<br>Can they name some different everyday materials? e.g. wood,<br>plastic, metal, water and rock<br>Can they explain why a material might be useful for a specific job?<br>Can they sort materials into groups by given criterion?<br>Can they describe things that are similar and different between materials? | Can they explore how the shapes of solid objects can be changed? (squashing, bending, twisting, stretching) | Can they identify and name a variety of common animals that are carnivores, herbivores and omnivores?<br>Can they classify animals by what they eat? (carnivore, herbivore, omnivore)<br>Can they sort photographs of living things and non-living things?<br>Can they point out differences between living things and non-living things?<br>Can they say why certain animals have certain characteristics? | Can they describe the parts of a plant (roots, stem, leaves, flowers)?<br>Can they identify and name a range of common plants and trees?<br>Can they recognise deciduous and evergreen trees?<br>Can they name the trunk, branches and root of a tree?<br>Can they observe changes across the four seasons?<br>Can they name the four seasons in order?<br>Can they observe and describe weather associated with the seasons?<br>Can they observe and describe how day length varies?<br>Can they observe features in the environment and explain that these are related to a specific season?<br>Can they observe and talk about changes in the weather?<br>Can they talk about weather variation in different parts of the world? | |
| | Skills development | Can they talk about what they see, touch, smell, hear or taste? | Can they identify and classify things they observe?<br>Can they answer some scientific questions? | Can they perform a simple test?<br>Can they tell other people about what they have done? | Can they show their work using pictures, labels and captions?<br>Can they put some information in a chart or table?<br>Can they think of some questions to ask? | Can they use simple equipment to help them make observations?<br>Can they record their findings using standard units? | Can they give a simple reason for their answers?<br>Can they explain what they have found out? |
| Y2 | Knowledge development | Can they explain the basic needs of animals, including humans for survival? (water, food, air)<br>Can they describe why exercise, balanced diet and hygiene are important for humans? | Can they describe the simple physical properties of a variety of everyday materials?<br>Can they compare and group together a variety of materials based on their simple physical properties? | 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?<br>Can they find out about people who developed useful new materials? (John Dunlop, Charles Macintosh, John McAdam)<br>Can they explain how materials are changed by bending, twisting and stretching? | Can they explain that animals grow and reproduce?<br>Can they explain why animals have offspring which grow into adults?<br>Can they explain the differences between living and non-living things?<br>Can they decide whether something is living, dead or non-living? | | Can they describe a range of different habitats?<br>Can they match certain living things to the habitats they are found in?<br>Can they name some characteristics of an animal that help it to live in a particular habitat?<br>Can they describe what animals need to survive and link this to their habitats? |
| | Skills development | Can they use see, touch, smell, hear or taste to help them answer questions? | Can they organise things into groups?<br>Can they find simple patterns (or associations)? | Can they carry out a simple fair test?<br>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?<br>Can they use text, diagrams, pictures, charts, tables> to record their observations? | Can they measure using simple equipment?<br>Can they use some scientific words to describe what they have seen and measured? | Can they compare several things?<br>Can they say whether things happened as they expected? |
| KS1 | Enquiry focus | | | | | | |
| | 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<br>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<br>Marvellous Me | Autumn 2<br>Celebrations | Spring 1<br>Perfect Pirates | Spring 2<br>Amazing Animals | Summer 1<br>Out of This World | Summer 2<br>Let's Go |
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| Topic focus (fromlong term overview) | | Humans | Materials - Properties | Materials - changes | Animals | Plants | Habitats |
| Reception | Knowledge and skills development | Can they describe what they see?<br>Can they ask questions about things to find out more information?<br>Do they notice changes, similarities and differences? | Can they explore a wide range of materials?<br>Can they observe range of natural objects?<br>Can they say how materials are the same and different?<br>Can they use scientific vocabulary to name and describe a range of materials? | Do they notice changes, similarities and differences?<br>Can they use scientific vocabulary to name and describe changes of materials? | Can they say how animals are the same and different?<br>Can they use pictures and words to talk about living things?<br>Can they use scientific vocabulary to name and describe a range of animals? | Can they say how plants are the same and different?<br>Can they use pictures and words to talk about living things?<br>Can they use scientific vocabulary to name and describe a range of plants? | Can they say how places have the same and different features?<br>Do they notice changes, similarities and differences?<br>Are the beginning to use words and pictures to talk about places including where they live? |
| | Vocabulary | See, hear, feel, smell, taste, human, similar different living, change, group | Wood, plastic, metal, fabric, glass, soft, hard, rough, smooth, see through. | Melt, freeze, sink, float | Tail, claw, pet, farm, zoo, fur, feathers, scales, wings, beak, pouch, baby animal names, | Flower, stem, root, leaf,<br>Daisy, rose, dandelion | Garden, pond, sea, desert, ice cap, forest |
| | Story book link | | | | | | |
| Y1 | Knowledge development | Can they name the parts of the human body that they can see?<br>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?<br>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?<br>Can they explain what happens to certain materials when they are heated,eg. bread, ice, chocolate?<br>Can they explain what happens to certain materials when they are cooled,eg. jelly, heated chocolate?<br>, | Can they name the parts of an animal's body?<br>Can they compare the bodies of different animals?<br>Can they point out some of the differences between different animals?<br>Can they name a range of domestic animals?<br>Can they identify and name a variety of common animals? (birds, fish, amphibians, reptiles, mammals, invertebrates)<br>Can they begin to classify animals according to a number of given criteria?<br>Can they name a range of wild animals? | Can they name the petals, stem, leaf, bulb, flower, seed, and root of a plant?<br>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?<br>Can they answer some scientific questions? | Can they perform a simple test?<br>Can they tell other people about what they have done? | Can they show their work using pictures, labels and captions?<br>Can they put some information in a chart or table?<br>Can they think of some questions to ask? | Can they use simple equipment to help them make observations?<br>Can they record their findings using standard units? | Can they give a simple reason for their answers?<br>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.?<br>Can they sort materials into groups and say why they have sorted them in that way?<br>Can they say which materials are natural and which are man made? | Can they explain how materials are changed by heating and cooling?<br>Can they tell which materials cannot be changed back after being heated, cooled, bent, stretched or twisted?<br>Can they explain how things move on different surfaces? | Can they describe what animals need to survive?<br>Can they describe the life cycle of some living things? (e.g. egg, chick, chicken) | Can they describe what plants need to survive?<br>Can they observe and describe how seeds and bulbs grow into mature plants?<br>Can they find out & describe how plants need water, light and a suitable temperature to grow and stay healthy?<br>Can they describe what plants need to survive and link it to where they are found?<br>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?<br>Can they describe a range of different habitats?<br>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?<br>Can they find simple patterns (or associations)? | Can they carry out a simple fair test?<br>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?<br>Can they use text, diagrams, pictures, charts, tables> to record their observations? | Can they measure using simple equipment?<br>Can they use some scientific words to describe what they have seen and measured? | Can they compare several things?<br>Can they say whether things happened as they expected? |
| KS1 | Enquiry focus | | | | | | |
| | 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 |