



Differentiation by input see the weekly planning and activities - ensure SEND pupils' targets are being used to support pupils in every lesson
 -Key vocab for each learning objective is in red font
 -Resources -see the weekly planning Ensure the resources extend the context they are learning through and supports their enjoyment of science.
 -Minimum Assessment for Learning strategies for all topics = Peer Talk; targeted questioning, attainment of transferable skills
 - Long term memory development strategies= Recapping previous learning at the start of each new topic / Long term memory strategy linked to the objectives on this sheet for each week
 -Scientific Cultural Capital = Understanding of order in teaching/learning of science in order to build on skills and knowledge

Sapphire Class - Year 1&2 Year A	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
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Ruby Class EYFS							
<ul style="list-style-type: none"> Communication and Language Personal, Social and Emotional Development Understanding the World 		Listening, Attention and Understanding Managing Self The Natural World	Make comments about what they have heard and ask questions to clarify their understanding Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. Explore the natural world around them, making observations and drawing pictures of animals and plants. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.				

Observe changes across the four seasons (Completed throughout the year)

Autumn 1 Animals including humans N.C. Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	N.C. Links: Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense Asking simple questions and recognising that they can be answered in different ways. USING OUR SENSES (Collins) Is everyone's body the same? L.O. To identify, name and compare parts of our bodies Key vocabulary: parts of the body (for example, head, neck, arms, elbows, hands, legs, knees, foot/feet, face, ears, eyes, nose, hair, mouth, teeth), comparative language (for example, tall, taller, short, shorter, big, bigger, small, smaller)	N.C. Links: Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense Identifying and classifying. USING OUR SENSES (Collins) What differences can our tongues taste? L.O. To describe, compare and group different edible materials by using the sense of taste Key vocabulary: taste, tongue, flavour, sweet, salty, sour, bitter, sharp, tingly, fizzy, milky	N.C. Links: Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense. Identifying and classifying USING OUR SENSES (Collins) What can we hear using our sense of hearing? L.O. To identify, compare and group the sounds collected during a sound walk Key vocabulary: names of sound sources (for example, buzzer, doorbell, radio, cooker timer, bird song, wind blowing, car horn, traffic noise), comparative language (for example, louder/ softer, loud, quiet, high, low), ear, hear, noisy, bang, crash, whistle, buzz, ring	N.C. Links: Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense Using observations and ideas to suggest answers to questions. USING OUR SENSES (Collins) How can we explore the world using our sense of touch? L.O. To describe how our sense of touch helps us to learn about the world around us. Key vocabulary: touch, feel, rub, pinch, prod, sensitive, sense, parts of the body that might be used to touch (for example, hands, fingers, feet, skin), words to describe textures (for example, rough, smooth, bumpy, wrinkled, grooved, shiny, smooth, soft, hard, crunchy, slippery, slimy)	N.C. Links: Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense. Gathering and recording data to help in answering questions. USING OUR SENSES (Collins) Which smells do we love and hate? L.O. To describe and compare a variety of different smells, identifying which are the most and least liked by the class Key vocabulary: smell, fragrance, scent, nose, nostrils, names of 'smell makers', adjectives to describe smells (for example, flowery, fruity, sour, bitter, sharp, strong, gentle, smelly, pong)	N.C. Links; Identify, name, draw and label basic parts of the human body and say which part of the body is associated with each sense Using observations and ideas to suggest answers to questions. USING OUR SENSES (Collins) How do we use our senses to find out about the world around us? L.O. To describe how our senses help us to find out about the world Key vocabulary: senses, taste, hear, hearing, smell, touch, touching, see, seeing, sight, tongue, mouth, ears, nose, body, hand, fingers, skin, eyes	Assessment and review
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Autumn 2 Animals, including humans N.C. 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	N.C. Links: Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identifying and classifying LOOKING AT ANIMALS (Collins). Who's who in the animal world? L.O. To identify and name a variety of common animals Key vocabulary: names of animals, common body parts and animal groups, including zebra, lion, lizard, snake, giraffe, elephant, deer, warthog, camel, brown bear, gorilla, goat, leopard, racoon, wildebeest, ostrich, chicken, salmon, toad, horse, tiger, parrot, angel fish, frog, rabbit, cow, crocodile, owl, clown fish, newt, fox, legs, wings, eyes, skin, fins, tail, fish, amphibians, reptiles, birds, mammals	N.C. Links: Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). Observing closely, using simple equipment. LOOKING AT ANIMALS (Collins). How are animals' bodies different? L.O. To describe and compare the body structures of different kinds of animals Key vocabulary: names and descriptions of amphibian and reptilian body parts, including webbed feet, legs, smooth skin, big eyes and mouth, nose, tail, scaly skin, legs, claws on feet, tail, long tongue, big eyes and mouth, big teeth	N.C. Links: Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Observing closely, using simple equipment. LOOKING AT ANIMALS (Collins). How do animals move? L.O. To describe and compare how different kinds of animals move Key vocabulary: jump, hop, leap, climb, clamber, swing, pad, pace, prowl, slither, canter, pounce, spring, flap, fly, flutter, flop, splash, splosh, dive, swim, slither, slide	N.C. Links: Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). Observing closely, performing simple tests and using observations to suggest answers to questions, gathering and recording data to help in answering questions. LOOKING AT ANIMALS (Collins). What's so special about birds? L.O. To observe the main features of birds, including feathers, and to compare these in different kinds of birds Key vocabulary: bird body parts, names of birds and descriptive vocabulary, including bill, beak, head eye, legs, claws, wings, tail, feather, down, quill, robin, blackbird, blue tit, hawk, peacock,	N.C. Links: Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). Identifying and classifying. LOOKING AT ANIMALS (Collins). What animals are busy at night? L.O. To describe how the lives of nocturnal animals differ from those of animals seen during the daytime Key vocabulary: night, nocturnal, senses, sight, smell, sonar, food, feeding, roost, sett, burrow, tunnel, nest, names of nocturnal animals, for example, hedgehog, fox, bat, badger	N.C. Links: Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Identifying and classifying. LOOKING AT ANIMALS (Collins). Whose food is this? L.O. To recognise that some animals mainly eat meat (carnivores), some only eat plant materials (herbivores) and some eat both (omnivores) Key vocabulary: food, eat, healthy, meat, insects, fish, vegetables, plants, trees, grass, seeds, nuts, carnivore, herbivore, omnivore, cow, horse, rabbit, mouse, squirrel, elephant, caterpillar, goat, sheep, fox, dragonfly, barn owl, otter, wolf, lion, tiger, bear, frog, chicken, badger, hedgehog, blackbird	Assessment and Review
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				seagull, magpie, eagle, long, thin, round, fat, big, small, bendy, soft, fluffy, firm			
<p>Spring 1 Plants</p> <p>N.C. Identify and describe the basic structure of a variety of common flowering plants including trees</p>	<p>N.C. Links: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Observing closely, using simple equipment.</p> <p>PLANT DETECTIVES (Collins)</p> <p>What garden plants can we find around our school? L.O. To identify, name, describe and compare some familiar garden plants in the local environment</p> <p>Key vocabulary: garden plant, names of garden plants, such as pansy, geranium, busy Lizzie, petunia, begonia, daisy, snapdragon, fuchsia, lily, daffodil, buddleia, lavender, cosmos; plant parts, such as leaf, stem, branch, flower, bud; similar, different, compare, group, identify</p>	<p>N.C. Links: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Observing closely, using simple equipment.</p> <p>PLANT DETECTIVES (Collins)</p> <p>What wild plants can we find around our school? L.O. To identify, name, describe and compare a variety of familiar wild plants in the local environment</p> <p>Key vocabulary: wild plant, weed, names of common wild plants such as buttercup, thistle, nettle, foxglove, poppy, dandelion, daisy, cornflower, periwinkle, bluebell; leaf, stem, bud, similar, different, compare, group</p>	<p>N.C. Links: Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Identifying and classifying.</p> <p>PLANT DETECTIVES (Collins)</p> <p>What is the same and different about the flowers around us? L.O. To compare a variety of familiar flowering plants and group them according to the similarities in their flowers</p> <p>Key vocabulary: flower, blossom, petals, stem, stalk, comparative language, such as small, little, big, large, single, lots: names of a variety of garden and wild plants found around school</p>	<p>N.C. Links: Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Using observations and ideas to suggest answers to questions.</p> <p>PLANT DETECTIVES (Collins)</p> <p>What is happening underground beneath our plants? L.O. To describe and compare the root systems of a variety of familiar plants</p> <p>Key vocabulary: plant, root, root system, tap root, fibrous roots</p>	<p>N.C. Links: Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Gathering and recording data to help in answering questions.</p> <p>PLANT DETECTIVES (Collins)</p> <p>What makes a tree a tree? L.O. To identify and name, describe and compare a variety of trees in the local environment</p> <p>Key vocabulary: plant, tree, trunk, branch, twig, bud, leaf, leaves, bark, wood; comparative language – tall, short, taller, shorter, tallest, shortest, compare, measure; descriptive language – surface, texture, rough, smooth, bumpy, cracks, flakes, wrinkled</p>	<p>N.C. Links: Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Observing closely, using simple equipment.</p> <p>PLANT DETECTIVES (Collins)</p> <p>What different types of plants, leaves and flowers can be found at a garden centre? L.O. To observe plants, leaves and flowers closely, draw or paint them, and combine them in a mural.</p> <p>Key vocabulary: names of common garden plants from Lesson 1, such as pansy, geranium, busy Lizzie, petunia, begonia, daisy, snapdragon, fuchsia, lily, daffodil, buddleia, lavender, cosmos; names of exotic tropical plants, such as leopard lily, prayer plant, yucca; plant parts such as leaf, stem, branch, flower.</p>	Assessment and Review
<p>Spring 2 Plants</p> <p>N.C. Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p>	<p>N.C. Links: Observe changes across the four seasons.</p> <p>Observing closely, using simple equipment.</p> <p>OUR CHANGING WORLD: PLANTS (Collins)</p> <p>How do leaves change across the year? L.O. To observe, compare and contrast leaves across</p> <p>Key vocabulary: leaf, leaves, bud, twig, branch, tree, plant, rough, smooth, shiny, glossy, wrinkled, crinkled, crunchy, crisp, soft, green, olive, brown, orange, red, yellow, rust, and other descriptive phrases and colour names the seasons, noticing any changes that may have occurred</p>	<p>N.C. Links: Observe changes across the four seasons.</p> <p>Observing closely, using simple equipment.</p> <p>OUR CHANGING WORLD: PLANTS (Collins)</p> <p>Do all trees lose their leaves in winter and grow new ones in the Spring? L.O. To observe, compare and contrast trees across the seasons, in particular what happens to the leaves and the changes in the twigs</p> <p>Key vocabulary: leaf, leaves, bud, twig, branch, tree, plant, deciduous, evergreen, colours of leaves, textures of leaves</p>	<p>N.C. Links: Observe changes across the four seasons.</p> <p>Observing closely, using simple equipment.</p> <p>OUR CHANGING WORLD: PLANTS (Collins)</p> <p>What flowers can we find in different seasons? L.O. To make observations of flowers, noticing the range of colours that exist.</p> <p>L.O. To identify and name some flowering plants and recognise that they produce flowers at different times of the year.</p> <p>Key vocabulary: flower, blossom, petals, stem, stalk, comparative language – small, little, big, large, single, lots, names of a variety of garden and wild plants found around school</p>	<p>N.C. Links: Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Observing closely, using simple equipment.</p> <p>OUR CHANGING WORLD: PLANTS (Collins)</p> <p>How do plants grow and change over time? L.O. To observe and describe changes to plants that take place over time</p> <p>Key vocabulary: plug plant, roots, stem, shoot/s, bud, flower, leaf, soil, compost, manure, dig, prepare, water, watering</p>	<p>N.C. Links: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Identifying and classifying.</p> <p>OUR CHANGING WORLD: PLANTS (Collins)</p> <p>What can we make with the food we have grown? L.O. To identify a variety of vegetable and fruit crops, and use them creatively to make salads</p> <p>Key vocabulary: vegetable, fruit, names of vegetables and fruits, salad, wash, clean, peel, cut, chop, grate, mix, sprinkle, combine</p>	<p>N.C. Links: Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Using observations and ideas to suggest answers to questions.</p> <p>OUR CHANGING WORLD: PLANTS (Collins)</p> <p>Independent research</p> <p>L.O. To use independent research to extend own knowledge</p> <p>Previous key vocabulary</p>	
Observe changes across the four seasons (Completed throughout the year)							
<p>Summer 1 Seasonal changes</p>	<p>N.C. Links: Observe changes across the four seasons</p>	<p>N.C. Links: Observe changes across the four seasons, and observe and</p>	<p>N.C. Links: Observe changes across the four seasons, and observe and</p>	<p>N.C. Links: Observe and describe weather associated with the seasons and how day length varies</p>	<p>N.C. Links: Observe and describe weather associated with the seasons and how day length varies</p>	<p>N.C. Links: Observe changes across the four seasons</p>	Assessment and Review

<p>N.C. Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies</p>	<p>Using observations and ideas to suggest answers to questions.</p> <p>OUR CHANGING WORLD: SENSING SEASONS (Collins)</p> <p>How do the changing seasons affect me? L.O. To identify how the seasons determine how 'our changing world' varies, and to describe the impact that seasonal change has on our lives</p> <p>Key vocabulary: season, autumn, winter, spring, summer, names of the months of the year, temperature, hot, warm, cold, cool, freezing, frosty, wet, dry, sunny, cloudy, showery, stormy, windy, breeze, gale, hat, gloves, mittens, scarf, muffler, ear muffs, boots, coat (and other items of clothing and names of fabrics that suit specific weather conditions), thick, thin, woolly, furry, warm, waterproof</p>	<p>describe weather associated with the seasons and how day length varies</p> <p>Gathering and recording data to help in answering questions.</p> <p>OUR CHANGING WORLD: SENSING SEASONS (Collins)</p> <p>What can we see and hear that shows us that the seasons are changing? Part 1 L.O. To observe, describe and compare the changing seasons of the year</p> <p>Key vocabulary: season and month names, season, change, names of plants, trees and animals that they have encountered during previous lessons.</p>	<p>describe weather associated with the seasons and how day length varies</p> <p>Using observations and ideas to suggest answers to questions.</p> <p>OUR CHANGING WORLD: SENSING SEASONS (Collins)</p> <p>What can we see and hear that shows us that the seasons are changing? Part 2 L.O. To identify how 'our changing world' varies depending on the season by examining the evidence collected, and to describe the impact that seasonal change has on animals</p> <p>Key vocabulary: season and month names, season, changes, evidence, similar, different, group, compare, names of plants, trees and animals that children have encountered in previous lessons; rain/ rainy, sun/sunny, wind/ windy, snow/snowy, shower, drizzle, puddle, breeze, gale, storm, thunder, lightning, sleet, frost, fog, mist, weather forecast</p>	<p>Gathering and recording data to help in answering questions.</p> <p>OUR CHANGING WORLD: SENSING SEASONS (Collins)</p> <p>How does the weather change across the seasons? L.O. To describe the weather and how it varies at different seasons of the year</p> <p>Key vocabulary: rain/rainy, sun/sunny, wind/windy, snow/snowy, shower, drizzle, puddle, breeze, gale, storm, thunder, lightning, sleet, frost, fog, mist, weather forecast</p>	<p>Using observations and ideas to suggest answers to questions</p> <p>OUR CHANGING WORLD: SENSING SEASONS (Collins)</p> <p>What do different kinds of weather look and feel like? L.O. To describe and compare weather associated with the seasons</p> <p>Key vocabulary: rain/rainy, sun/sunny, wind/windy, snow/ snowy, shower, drizzle, puddle, breeze, gale, storm, thunder, lightning, sleet, frost, fog, mist, umbrella, wellies, kite, windmill, sunglasses, mittens and ear muffs (and other weather-related vocabulary)</p>	<p>Observe and describe weather associated with the seasons and how day length varies</p> <p>Using observations and ideas to suggest answers to questions.</p> <p>Independent research</p> <p>L.O. To use independent research to extend our knowledge</p> <p>Previous key vocabulary</p>	
<p>Summer 2 Everyday materials</p> <p>N.C. 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, water and rock. Describe the 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.</p>	<p>N.C. Links: To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock. To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock</p> <p>Identifying and classifying. Observing closely, using simple equipment.</p> <p>EVERYDAY MATERIALS (Collins)</p> <p>What material is this? Part 1&2 L.O. To identify and name three /four everyday materials</p> <p>Key vocabulary: materials, wood, plastic, metal Key vocabulary: materials, water, rock, brick</p>	<p>N.C. Links: To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock</p> <p>Performing simple tests.</p> <p>EVERYDAY MATERIALS (Collins)</p> <p>Is all paper the same? L.O. To identify and name paper in a variety of forms</p> <p>Key vocabulary: materials, writing, wrapping, drawing, display, greaseproof, kitchen towel, handkerchief, wallpaper, sand paper, glossy paper</p>	<p>N.C. Links: To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock</p> <p>Using observations and ideas to suggest answers to questions.</p> <p>EVERYDAY MATERIALS (Collins)</p> <p>Is all fabric the same? L.O. To identify and name a variety of fabrics</p> <p>Key vocabulary: materials fabrics, wool, nylon, silk, fleece, fibre.</p>	<p>N.C. Links: To distinguish between an object and the material from which it is made</p> <p>Identifying and classifying. Gathering and recording data to help in answering questions.</p> <p>EVERYDAY MATERIALS (Collins)</p> <p>What's it made of? Can the same object be made from different materials? L.O. To recognise that most objects are made from more than one material L.O. To describe how the same type of object can be made using different materials</p> <p>Key vocabulary: wood, wooden, metal, plastic, rock, brick, glass, fabric, water</p>	<p>N.C. Links: Compare and group together a variety of everyday materials on the basis of their simple physical properties. To describe the simple physical properties of a variety of everyday materials</p> <p>Observing closely, using simple equipment. Gathering and recording data to help in answering questions.</p> <p>EVERYDAY MATERIALS (Collins)</p> <p>What's it like? Does it bend or stretch? L.O. To identify and describe the physical properties of a selection of materials L.O. To investigate the stretchiness and flexibility of selected materials</p> <p>Key vocabulary: hard, soft, rough, smooth, shiny, dull, light, heavy, transparent, opaque, properties, harder, lighter, rougher Key vocabulary: stretch, stretchy, stiff, bend, bendy, not bendy, press, squash, twist, shape, hard, soft, flexible, rigid</p>	<p>N.C. Links: To describe the simple physical properties of a variety of everyday materials</p> <p>Performing simple tests.</p> <p>EVERYDAY MATERIALS (Collins)</p> <p>What properties do ice and water have? L.O. To describe the properties of ice</p> <p>Key vocabulary: hard, smooth, cold, wet, dull, shiny, frozen, freeze, melt, water, ice, salt</p>	<p>Assessment and Review</p>

During years 1 and 2 pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking simple questions and recognising they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions

Collins is the scheme of work followed but other resources can be used to supplement and complement the planning process and learning objectives

- Science Enrichment Activities - Science Club (Year 2), Science Week, Outdoor Learning

Differentiation by input see the weekly planning and activities - ensure SEND pupils' targets are being used to support pupils in every lesson -Key vocab for each learning objective is in red font -Resources -see the weekly planning Ensure the resources extend the context they are learning through and supports their enjoyment of science. -Minimum Assessment for Learning strategies for all topics = Peer Talk; targeted questioning, attainment of transferable skills - Long term memory development strategies= Recapping previous learning at the start of each new topic / Long term memory strategy linked to the objectives on this sheet for each week -Scientific Cultural Capital = Understanding of order in teaching/learning of science in order to build on skills and knowledge							
Sapphire Year 1 & 2 Year B	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Ruby Class EYFS <ul style="list-style-type: none"> Communication and Language Personal, Social and Emotional Development Understanding the World <p>Listening, Attention and Understanding Managing Self The Natural World</p> <p>Make comments about what they have heard and ask questions to clarify their understanding Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. Explore the natural world around them, making observations and drawing pictures of animals and plants. Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>							
Autumn 1 Animals, including humans N.C. 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)	N.C. Links: Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Identifying and classifying. GROWING UP (Collins) What do babies need? L.O. To recognise the needs of an animal for survival Key vocabulary: baby, doll, need, want, living, alive, essential, food, milk, water, drink, eat, air, breathe, shelter, warmth, survival, depend	N.C. Links: Notice that animals, including humans, have offspring that grow into adults Gathering and recording data to help in answering questions. GROWING UP (Collins) How have we changed? L.O. To compare features of a baby and a child Key vocabulary: baby, child, toddler, compare, change, differences, dependent, independent, move, feed, eat, care, learn, appearance, annotate	N.C. Links: Notice that animals, including humans, have offspring that grow into adults Observing changes over time GROWING UP (Collins) How do we change throughout our lives? L.O. To classify and describe changes that happen as people grow older Key vocabulary: life cycle, life story, stages, order, compare, differences, changes, pregnancy, birth, baby, toddler, child, teenager, adult, parent, elderly person, independent, grow	N.C. Links: Notice that animals, including humans, have offspring that grow into adults Observing changes over time Noticing patterns GROWING UP (Collins) Do all our body parts grow as we get older? L.O. To find evidence about how we grow as we get older Key vocabulary: grow, measure, compare, table, scatter graph, plot, pattern, evidence	N.C. Links: To notice that animals, including humans, have offspring which grow into adults Using observations and ideas to suggest answers to questions OUR CHANGING WORLD (Collins) How do animals change? L.O. To observe how animals change over time Key vocabulary: egg, offspring, baby, adult, grow, change	N.C. Links: To notice that animals, including humans, have offspring which grow into adults Observing changes over time. Using observations and ideas to suggest answers to questions OUR CHANGING WORLD (Collins) Are all offspring the same as their parents? L.O. To observe similarities and differences between babies and their parent's Key vocabulary: offspring, baby, adult, grow, change, chick, calf, cub, kid and other baby animal terms	Review and Assessment
Autumn 2 Animals, including humans N.C. Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene	N.C. Links: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Using observations and ideas to suggest answers to questions TAKE CARE (Collins) How can we stay fit? L.O. To observe the effects of exercise and plan for regular exercise Key vocabulary: exercise, physical activity, hot, sweaty, heart beating, tired, aching, muscles	N.C. Links: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Finding things out using secondary sources of information Using observations and ideas to suggest answers to questions TAKE CARE (Collins) How can we stay clean? L.O. To describe different ways to stay hygienic Key vocabulary: clean, hygiene, hygienic, wash, bath, shower, brush, comb, toothbrush, toothpaste, soap, water, shampoo	N.C. Links: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Using observations and ideas to suggest answers to questions. TAKE CARE (Collins) How can we stay healthy? L.O. To present information about staying healthy in a book for younger children Key vocabulary: food, healthy diet, dairy, fruits, vegetables, meat, fish, beans, fat, sugar, bread, potatoes, cereals, exercise, physical activity, hot, sweaty, heart beating, pulse, tired, aching, muscles, clean, hygiene, hygienic, wash, bath, shower, brush, comb, toothbrush, toothpaste, soap, water, shampoo	N.C. Links: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Identifying and classifying. TAKE CARE (Collins) How can we sort this food? L.O. To understand how animals depend on each other for food Key vocabulary: food, sort, classify, Venn diagram, Carroll diagram	N.C. Links: Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Grouping and classifying. Using observations and ideas to suggest answers to questions TAKE CARE (Collins) What food should we eat? L.O. To sort foods according to their food types Key vocabulary: food, healthy diet, dairy, fruits, vegetables, meat, fish, beans, fat, sugar, bread, potatoes, cereals	Review and Assessment	Review and Assessment
Spring 1 Plants N.C. Observe and describe how seeds and bulbs grow into mature plants Find out and describe how plants need water, light	N.C. Links: Observe and describe how seeds and bulbs grow into mature plants Observing closely, using simple equipment. Grouping and classifying	N.C. Links: Observe and describe how seeds and bulbs grow into mature plants, and find out and describe how plants need water, light and a suitable temperature to grow and to stay healthy Observing changes over time Asking simple questions and recognising that	N.C. Links: Observe and describe how seeds and bulbs grow into mature plants Performing simple tests and recording data. Carrying out simple comparative and fair tests	N.C. Links: Observe and describe how seeds and bulbs grow into mature plants, and find out and describe how plants need water, light and a suitable temperature to grow and to stay healthy Gathering and recording data to help in answering questions	N.C. Links: To observe and describe how seeds and bulbs grow into mature plants Observing closely, using simple equipment. OUR CHANGING WORLD (Collins)	N.C. Links: To find out and describe how plants need water, light and a suitable temperature to grow and stay healthy Asking simple questions and recognising that they can be answered in different ways.	Review and Assessment

<p>and a suitable temperature to grow and stay healthy</p>	<p>THE APPRENTICE GARDENER (Collins)</p> <p>What will the seeds grow into? L.O. To identify which seeds will grow into which types of plants</p> <p>Key vocabulary: seeds, plants, apprentice, gardener, grow, observations, describe, identify, expert</p>	<p>they can be answered in different ways.</p> <p>THE APPRENTICE GARDENER (Collins)</p> <p>What do gardeners need to know? L.O. To ask questions that will help us to find out about growing plants from seeds</p> <p>Key vocabulary: seed, plant (verb and noun), bulb, grow, question, observe, predict, water, compare, answer, investigate</p>	<p>THE APPRENTICE GARDENER (Collins)</p> <p>How should we plant the seeds? L.O. To plan and set up an investigation into how seeds should be planted</p> <p>Key vocabulary: seed, bean, soil, surface, plant, compare, test, bury, light, dark, water, prediction</p>	<p>Observing changes over time; carrying out simple comparative and fair tests</p> <p>THE APPRENTICE GARDENER (Collins)</p> <p>What is happening to our seeds? L.O. To make an accurate record of the changes that happen to our seeds</p> <p>Key vocabulary: seed, plant, germinate, grow, radicle, root, shoot, leaves, change</p>	<p>How do plants grow and change over time? L.O. To observe, describe and measure changes in plants which take place over time</p> <p>Key vocabulary: seed, bulb, plant, stem, shoot(s), bud, flower, leaf, soil, compost, manure, dig, prepare, water, watering</p> <p>This lesson to be repeated throughout the year to check on the growing process of these vegetables</p>	<p>OUR CHANGING WORLD (Collins)</p> <p>What shall we plant for our soup? L.O. To find out when and how to plant bulbs and seeds to grow ingredients for soup</p> <p>Key vocabulary: seeds, bulbs, plant, root, stem, leaf, fruit</p> <p>Linked to lesson Summer 1 lesson 7</p>	
<p>Spring 2 Plants N. C. 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</p>	<p>N. C. Links: Observe and describe how seeds and bulbs grow into mature plants</p> <p>Gathering and recording data to help in answering questions. Noticing patterns</p> <p>THE APPRENTICE GARDNER (Collins)</p> <p>How tall will they grow? L.O. To present data on a bar chart and use it to answer a question</p> <p>Key vocabulary: evidence, height, tallest, shortest, seed, plant, grow, bar chart, scale, pattern, question, connection, measure, compare</p>	<p>N. C. Links: Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p> <p>Using observations and ideas to suggest answers to questions.</p> <p>THE APPRENTICE GARDNER (Collins)</p> <p>How can we care for our plants? L.O. To decide how to improve the condition of an unhealthy plant</p> <p>Key vocabulary: seedling, mature plant, wilting, healthy, unhealthy, water, light, warmth, plan, change, care, predict</p>	<p>N. C. Links: Observe and describe how seeds and bulbs grow into mature plants Observing closely changes over time, using simple equipment</p> <p>THE APPRENTICE GARDNER (Collins)</p> <p>What happens when a seed germinates? L.O. To describe the different stages of germination</p> <p>Key vocabulary: germination, grow, seed, seedling, mature plant, food store, radicle, root, shoot, leaves, first, next, later, observation, order</p>	<p>N. C. Links: Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p> <p>Gathering and recording data to help in answering questions.</p> <p>THE APPRENTICE GARDNER (Collins)</p> <p>What do plants need to grow and be healthy? L.O. To identify what plants need for healthy growth</p> <p>Key vocabulary: plant, wilting, healthy, unhealthy, water, light, warmth, plan, change, care, predict, observations, because</p>	<p>N. C. Links: Observe and describe how seeds and bulbs grow into mature plants</p> <p>Carrying out simple comparative and fair tests</p> <p>THE APPRENTICE GARDNER (Collins)</p> <p>What can we plant our seeds in? L.O. To plan a test to compare how seeds germinate and grow on different materials.</p> <p>Key vocabulary: seed, grow, germinate, fair, compare, same, plan, suitable, soil (and names of other materials used), water</p>	<p>N. C. Links: Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</p> <p>Performing simple tests and recording data.</p> <p>THE APPRENTICE GARDNER (Collins)</p> <p>Do plants need light, water, soil? L.O. To describe how to investigate whether plants need light, liquid, soil plants</p> <p>Key vocabulary: grow, die, healthy, test, light, block, investigate, compare, same, plan, agree, disagree, water, wilt, die, alive, healthy, observation,</p>	<p>Review and Assessment</p>
<p>Summer 1 Living things and their habitats 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</p>	<p>N.C. Links: To identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>Observing closely, performing simple tests and using observations to suggest answers to questions, gathering and recording data to help in answering questions.</p> <p>OUR CHANGING WORLD (Collins)</p> <p>What lives in a habitat? L.O. To observe and identify what plants and animals live in different habitats</p> <p>Key vocabulary: habitat</p>	<p>N.C. Links: 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</p> <p>Gathering and recording data to help in answering questions.</p> <p>OUR CHANGING WORLD (Collins)</p> <p>How does a habitat change through the year? (Outdoor learning) Repeat this lesson 3 times throughout the year</p> <p>L.O. To record changes in the number and types of animals found in a habitat during the year</p> <p>Key vocabulary: habitat, tally chart, pattern</p>	<p>N.C. Links: To 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</p> <p>Using observations and ideas to suggest answers to questions.</p> <p>OUR CHANGING WORLD (Collins)</p> <p>How do the animals in a habitat depend on each other? L.O. To understand how animals depend on each other for food</p> <p>Key vocabulary: food chain</p>	<p>N.C. Links: 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 explore and compare the differences between things that are living, things that are dead and things that have never been alive</p> <p>Using observations and ideas to suggest answers to questions.</p> <p>WHAT IS IN YOUR HABITAT? (Collins)</p> <p>What is in your habitat? L.O. To recognise and compare the main components of some different habitats</p> <p>Key vocabulary: habitat, alive, living, once-lived, dead, never lived, plants, animals, decay, rocks, soil, air, water</p>	<p>N.C. Links: To 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</p> <p>Gathering and recording data to help in answering questions. Using secondary sources of information</p> <p>WHAT IS IN YOUR HABITAT? (Collins)</p> <p>What do different animals eat in their habitats? L.O. To construct examples of food chains for a selection of habitats</p> <p>Key vocabulary: food chain, plants, animals, herbivores (eat plants and parts of plants), carnivores (eat other animals), omnivores (eat plants/ parts of plants and other animals), direction, source of food</p>	<p>N.C. Links: 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</p> <p>Using observations and ideas to suggest answers to questions. Grouping and classifying</p> <p>WHAT IS IN YOUR HABITAT? (Collins)</p> <p>Where can I live? L.O. To identify ways in which living things are suited to their habitat</p> <p>Key vocabulary: suited, habitat, features, names of habitats, living things, animal body parts</p>	<p>N.C. Links: To observe and describe how seeds and bulbs grow into mature plants Observing changes over time. Observing closely, using simple equipment</p> <p>How will we make our soup? (Collins)</p> <p>L.O. To identify when crops are ready to harvest and to use these to make soup</p> <p>Key vocabulary: plant, vegetable, herbs, names of vegetables and herbs, wash, clean, peel, cut, chop, blend, smooth, puree, heat, boil, simmer, fry</p> <p>Linked to lesson Spring 1 lesson 6</p>

<p>Summer 2 Uses of everyday materials Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>	<p>N.C. Links: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular use</p> <p>Identifying, grouping and classifying</p> <p>MATERIALS - GOOD CHOICES (Collins)</p> <p>Can you describe the object? L.O. To describe objects, including naming the material from which they are made</p> <p>Key vocabulary: words that describe how something feels (for example, smooth, rough, soft, squashy, hard, bendy, stiff, warm, cold) and how it looks (shiny, dull, thin, flat, bumpy, thick, pointed), wood, metal, plastic, glass, rock, brick, paper</p>	<p>N.C. Links: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses</p> <p>Identifying and classifying. Using observations and ideas to suggest answers to questions.</p> <p>MATERIALS - GOOD CHOICES (Collins)</p> <p>What material is it made of? L.O. To identify objects made of particular materials</p> <p>Is that a good choice of material? L.O. Grouping and classifying to explain if a material is a good choice for an object</p> <p>Key vocabulary: wood, metal, plastic, glass, rock, paper</p>	<p>N.C. Links: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses</p> <p>Gathering and recording data to help in answering questions. Carrying out simple comparative and fair test.</p> <p>MATERIALS - GOOD CHOICES (Collins)</p> <p>What fabric will make a bedroom dark? L.O. To test different fabrics to find out how much light passes through Scientific enquiry type:</p> <p>Key vocabulary: bright, fabric, light, see through, opaque, transparent, material</p>	<p>N.C. Links: Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard, for particular uses</p> <p>Using observations and ideas to suggest answers to questions. Carrying out simple comparative and fair tests</p> <p>MATERIALS - GOOD CHOICES (Collins)</p> <p>What shall we use to make a teabag? L.O. To test different materials to find out which is suitable for a teabag</p> <p>Key vocabulary: teabag, tea leaves, material, waterproof, bendy, absorbent, property, tear</p>	<p>N.C. Links: Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p> <p>Using observations and ideas to suggest answers to questions. Grouping and classifying</p> <p>MATERIALS-SHAPING UP (Collins)</p> <p>How can I make different shapes? L.O. To use, correctly, scientific words related to changing shape</p> <p>Key vocabulary: squash, bend, twist, stretch, pull, push, calligram</p>	<p>N.C. Links: Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p> <p>Gathering and recording data to help in answering questions. Grouping and classifying</p> <p>MATERIALS-SHAPING UP (Collins)</p> <p>How can I change the shape of an object? L.O. To recognise that different objects made from the same material can have different properties, and to sort objects according to how their shapes can be changed</p> <p>Key vocabulary: squashing, bending, twisting, stretching, names of objects and the materials that they are made from, table, column, Venn diagram, set, sort</p>	<p>Review and Assessment</p>
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During years 1 and 2 pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

- Asking simple questions and recognising they can be answered in different ways
- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions

Collins is the scheme of work followed but other resources can be used to supplement and complement the planning process and learning objectives

Science Enrichment activities

- Science Week
- Science Club (year 2)
- Outdoor Learning