



Science Progression Map (showing disciplinary knowledge)

	Autumn term	Spring term	Summer term
EYFS	<ul style="list-style-type: none"> •Explore the natural world around them •Make observations about the world around them •Make observations about plants and animals •Create drawings of plants and animals •Identify some similarities and differences between the natural world around them and contrasting environments •Know the four seasons •Describe characteristics of the four seasons •Identify changing states of matter 		
Year 1	<p style="text-align: center;">Humans</p> <ul style="list-style-type: none"> •Identify, name, draw and label the following parts of the human body: head, hair arms, legs, shoulders, knees, feet, fingers, toes, eyes, ears, nose, mouth, teeth, stomach, back, neck •Know which part of the body is associated with each sense: ears-hear, eyes-see, nose smell, hands-touch, tongue-taste. <p style="text-align: center;">Materials</p> <ul style="list-style-type: none"> •Identify and name the following everyday materials: wood, plastic, glass, metal, water and rock. •Distinguish between an object and the material from which it is made •Describe the simple physical properties (hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy/not bendy, waterproof/ not waterproof, absorbent/ not absorbent, opaque/ transparent) of the above everyday materials. •Compare everyday materials based on physical properties and justify these groupings. 	<p style="text-align: center;">Plants</p> <ul style="list-style-type: none"> •Identify and name a variety of deciduous and evergreen trees. •Identify and label the following common plants: daisy, rose, poppy, dandelion, buttercup, conifer, grass, hedges •Label the following parts of a deciduous and evergreen tree: roots, trunk, branches, leaves. •Identify and describe the following parts of plants using real life parts: leaves, flowers (blossom), petals, fruit, roots, bulb, seed, stem. •Draw and label a diagram of a chosen plant from a real-life example. 	<p style="text-align: center;">Seasons</p> <ul style="list-style-type: none"> •Observe and identify changes across the 4 seasons •Observe and describe weather associated with the seasons •Observe how day length varies •Know how to complete a given table to record the daily weather during periods of different seasons. <p style="text-align: center;">Animals</p> <ul style="list-style-type: none"> •Identify and label a variety of common animals including fish: stingray, goldfish; Amphibians: frogs, snakes, lizards, crocodiles; Birds: chicken, eagle, robin, duck; and Mammals: cow, pig, sheep, horse, goat, tiger, dog. •Identify and name the following animals into carnivores, herbivores and omnivores. Carnivores: crocodile, snake, lion, penguin. Herbivores – cow, sheep, horse, rabbit. Omnivores – human, pig, bear, birds. •Describe and compare the structure of a variety of common animals: specific fish, amphibians, reptiles, birds, and mammals including pets.



Year 2	<p style="text-align: center;">Living things and their habitats</p> <ul style="list-style-type: none"> •Classify (sort) things that are living, dead or have never lived. •Compare and explore differences between things that are living, dead or have never lived. <p>Identify the habitat of the following living things and explain how they are suited to their habitat and depend on each other: fish – water, polar bears – arctic, camels – desert, birds– trees.</p> <ul style="list-style-type: none"> •Describe how different habitats provide for the basic needs of plants and animals •Identify and name a variety of plants and animals in their habitats, including microhabitats. •Construct, label and explain a simple food chain, identifying the producer, prey, predator, consumer. •Explain that animals including humans grow throughout their lives and life cycles. •Label a given diagram to show the following stages in the life cycles of animals; FROG: frogspawn, tadpole, froglet, frog; BUTTERFLY: egg, caterpillar, chrysalis, butterfly; CHICKEN: egg, chick, chicken. 	<p style="text-align: center;">Animals Including Humans</p> <ul style="list-style-type: none"> •Use secondary sources to explain how to keep my body healthy, including the importance of exercise, eating the right amounts of different food types and hygiene. •Explain the following needs of animals, including humans, basic needs for survival for survival: oxygen, food, water. •Identify by matching animals, including humans have offspring which grow into adults: lamb – sheep; calf – cow; chick – chicken; cub – lion; puppy – dog; kitten – cat; piglet – pig; tadpole – frog. <p style="text-align: center;">Plants</p> <ul style="list-style-type: none"> •Grow a flowering plant. •Know the conditions for growing a plant. •Make regular observations, take regular measurements, and record these in a given table. •Describe in writing how a seed or bulb grows into a plant. •Know that plants need water, light and a suitable temperature for germination •Set up a comparative test to demonstrate how changes in light, water and temperature effect the growth of plants. •Write conclusions of how changes in light, water and temperature effect the growth of plants. 	<p style="text-align: center;">Materials</p> <ul style="list-style-type: none"> •Identify and compare the use of a variety of everyday materials including wood, metal, plastic, glass, brick, rock, paper and cardboard •Investigate how the shape of some materials can be changed: twisting, bending, stretching, squashing •Identify that when changing the shape of an object some will return to its original shape whilst others will remain changed. •Conduct a comparative test to compare the suitability of everyday materials and identify particular uses. •Conduct an investigation to identify and test which materials float and which sink.
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Lower Key	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2



Y3

Rocks	Animals including humans	Light	Plants	Plants	Forces and magnets
<ul style="list-style-type: none">•Identify, name and label different types of rocks and their properties.•Classify different types of rocks using my own criteria (appearance and physical properties).•Explain in writing the difference between sedimentary, metamorphic and igneous rock.•Explain using an annotated diagram how fossils are formed.•Describe in writing how soil is formed.	<ul style="list-style-type: none">•Complete a table frame to classify animals with and without skeletons (invertebrates: spider, snail, worms, crabs, starfish, scorpion, insects. Vertebrates: mammals, reptiles, fish, birds, and observe and compare their movements).•Explain how the skeletal and muscular system of a human provides support, protection and movement.•Recognise that animals, including humans cannot make their own food.•Explain the importance of a nutritious, balanced diet.•Use secondary sources to explain the following food groups (fats, fibre, carbohydrates, protein, water, vitamins and minerals, fruit and vegetables).•Design a meal based on knowledge of (fats, fibre, carbohydrates, protein, water, vitamins and minerals, fruit and vegetables).	<ul style="list-style-type: none">•Define and demonstrate that dark is the absence of light.•Explain that light is needed in order to see and is reflected from a surface.•Identify natural and artificial sources of light.•Explain and demonstrate how a shadow is formed including the need for an opaque object.•Conduct an investigation to explain how a shadow changes size.•Conduct an investigation to observe what time of day a shadow is likely to be at its longest and shortest.•Use secondary sources to understand the dangers of direct sunlight.•Use secondary sources to identify ways to protect the eyes.	<p style="text-align: center;">Plants</p> <ul style="list-style-type: none">•Identify by labelling and explain in writing the function of the following parts of flowering plants: roots, stem/trunk, leaves, flowers.•Observe how water is absorbed and transported in plants (cut, white carnations).•Draw, label and explain by annotating a diagram to show how water is absorbed and transported in plants (cut, white carnations).•Set up a comparative test to demonstrate how changes in air, light, water, nutrients from soil, and room to grow effect the growth of plants.•Make regular observations, take regular measurements, and draw a table to record these measurements.•Write conclusions of how changes in air, light, water, nutrients from soil, and room to grow effect the growth of plants.•Draw, label and explain by annotating the life cycle of a flowering plant, including an explanation of the following processes: pollination, seed formation and seed dispersal.	<ul style="list-style-type: none">•Identify by labelling and explain in writing the function of the following parts of flowering plants: roots, stem/trunk, leaves, flowers.•Observe how water is absorbed and transported in plants (cut, white carnations).•Draw, label and explain by annotating a diagram to show how water is absorbed and transported in plants (cut, white carnations).•Set up a comparative test to demonstrate how changes in air, light, water, nutrients from soil, and room to grow effect the growth of plants.•Make regular observations, take regular measurements, and draw a table to record these measurements.•Write conclusions of how changes in air, light, water, nutrients from soil, and room to grow effect the growth of plants.•Draw, label and explain by annotating the life cycle of a flowering plant, including an explanation of the following processes: pollination, seed formation and seed dispersal.	<ul style="list-style-type: none">•Through investigation, compare and describe how objects move on different surfaces: concrete, carpet, wood, cardboard, plastic, metal.•Construct a simple table to identify and classify materials as either magnetic and nonmagnetic.•Explain and demonstrate using examples that some forces require contact and some can act at a distance, giving examples.•Draw and label a diagram to show that magnets have two poles.•Annotate diagrams of magnets to predict whether the magnets will attract or repel and give reasons.•Explain using writing and diagrams how magnets attract and repel.



Y4	Living things and their habitats	States of matter	States of matter	Animals including humans	Sound	Electricity
	<ul style="list-style-type: none"> •Classify living things into multiple self-created and justified groups. •Recognise that living things can be groups in a variety of ways and classify them into given groups. •Construct and explain a simple classification key. •Using secondary sources, explain how environment can change: natural reserves, garden ponds, ecologically planned parks, ice caps melting, deforestation, drought, urbanisation, pollution. •Identify and explain how environmental changes may pose dangers to living things. •Explore microhabitats in the local environment and use or create classification keys to identify, name and group a variety of living things. 	<ul style="list-style-type: none"> •Define, describe and list examples of solids, liquids, gases. •Classify examples of solids, liquids and gases using my own criteria. •Draw, label and annotate a diagram of the water cycle to identify the part played by evaporation and condensation. •Observe and explain in writing how some materials (water, chocolate, butter) change state when they are heated or cooled. •Draw, label and annotate a diagram to show water as a solid, liquid and gas. •Use secondary sources to research the temperature at which materials change states. •Investigate and conduct a fair test to explore how temperature is linked to evaporation. 	<ul style="list-style-type: none"> •Define, describe and list examples of solids, liquids, gases. •Classify examples of solids, liquids and gases using my own criteria. <p>Draw, label and annotate a diagram of the water cycle to identify the part played by evaporation and condensation.</p> <ul style="list-style-type: none"> •Observe and explain in writing how some materials (water, chocolate, butter) change state when they are heated or cooled. •Draw, label and annotate a diagram to show water as a solid, liquid and gas. •Use secondary sources to research the temperature at which materials change states. •Investigate and conduct a fair test to explore how temperature is linked to evaporation. 	<ul style="list-style-type: none"> •Draw, label and annotate a diagram to explain the function of the following parts of the digestive system: Mouth, tongue, teeth, oesophagus, stomach, small and large intestine. •Label and annotate a diagram to identify types of human teeth (incisors, canines, premolars, molars) and to explain their simple functions. •Compare differences in the teeth of carnivores and herbivores. •Explain how the teeth of carnivores and herbivores are suited to their purpose. •Use secondary sources to explain how to keep teeth healthy and explain possible damages to teeth. •Construct, label and explain a simple food chain, identifying the producers, preys, predators, consumers. 	<ul style="list-style-type: none"> •Draw, label and annotate a diagram to identify that sound is made by something vibrating (musical instruments) and that sound travels from a source through a medium to our ear. •Investigate and describe what happens to a sound as it travels away from its source. •Conduct a fair test to investigate the relationship between the size of an object and the pitch of the sound produced. •Conduct a fair test to investigate the relationship between the strength of the vibrations and the volume it produces. •Create a musical instrument and explain how its features effect the volume and pitch of the sound. 	<ul style="list-style-type: none"> •Classify appliances into groups depending on whether or not they require electricity to function. •Construct a series circuit. Draw and label a complete series circuit (picture representation) including cells, wires, bulbs, switches and buzzers. •Predict and test whether a lamp will light within a circuit and explain the outcome in writing. •Explain the function of a switch and draw and label diagrams to identify how the position of the switch effects the circuit. •Construct a table to identify examples of conductors and insulators, identifying metals as good conductors.
Y5	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2



Properties and changes in materials	Forces	Earth and Space	Earth and Space	Living things and their habitats	Animals including humans
<ul style="list-style-type: none">•Compare and classify everyday materials based on their properties: hardness, solubility, transparency, conductivity (electrical and thermal).•Compare and classify everyday materials based on their response to magnets.•Investigate and conduct comparative fair test to test which materials conduct electricity.•Investigate and conduct comparative fair test to test which materials make the best insulators.•Investigate and conduct comparative fair test to test the best temperature for dissolving sugar and explain how this forms a solution.•Observe and describe how to recover a substance from a solution.•Demonstrate and explain how some materials can be separated through filtering, sieving and evaporating.•Demonstrate and explain how water can change state into a liquid, gas or solid.	<ul style="list-style-type: none">•Draw, label and annotate a diagram to explain what gravity is and that unsupported objects fall towards the Earth because of gravity.•Conduct a fair test to demonstrate the effects of air resistance.•Conduct a fair test to demonstrate the effects of water resistance.•Conduct a fair test to demonstrate the effects of friction.•Explain in writing how levers, pulleys and gears allow a smaller force to have a greater effect.	<ul style="list-style-type: none">•Create a labelled and annotated heliocentric diagram of the solar system.• Explain in writing the movement of the Earth and other planets relative to the sun.•Explain in writing the movement of the Moon relative to the Earth.•Describe the Sun, Earth and Moon (using the term spherical).•Draw, label and annotate a diagram to explain how day and night are created.•Explain using diagrams and writing how the geocentric model gave way to the heliocentric model.	<ul style="list-style-type: none">•Create a labelled and annotated heliocentric diagram of the solar system.• Explain in writing the movement of the Earth and other planets relative to the sun.•Explain in writing the movement of the Moon relative to the Earth.•Describe the Sun, Earth and Moon (using the term spherical).•Draw, label and annotate a diagram to explain how day and night are created.•Explain using diagrams and writing how the geocentric model gave way to the heliocentric model.	<ul style="list-style-type: none">•Explain how living things are classified into groups based on observable characteristics and similarities and differences.•Classify a range of animals using broad groups (vertebrates / nonvertebrates / micro-organisms) and further subgroups (insects, spiders, snails, worms, fish, amphibians, reptiles, birds, mammals, fungi, moulds, bacteria, and Protista).•Construct a classification key to classify a range of animals using broad groups (vertebrates / nonvertebrates / microorganisms) and further sub-groups (insects, spiders, snails, worms, fish, amphibians, reptiles, birds, mammals, fungi, moulds, bacteria, and Protista).•Classify a range of flowering and nonflowering plants.•Construct a classification key to classify flowering and non-flowering plants.	<ul style="list-style-type: none">•Construct, label and annotate a timeline to indicate the stages of growth and development in humans: foetus, baby, toddler, child, adolescent, adult, elderly.•Construct a table to detail the average height of humans at different stages of lives.•Construct a line graph to detail the average height of humans at different stages of their lives.•Define puberty and explain the importance of puberty.•Describe and explain changes their males and females experience during puberty.



Y6	Animals including humans <ul style="list-style-type: none"> •Draw, label and annotate a diagram to identify the main parts of the human circulatory system: heart, lung, blood vessels, arteries, veins, capillaries, left atrium, right atrium, right ventricle, left ventricle, blood. •Explain the functions of the main parts of the circulatory system: 	Living things and their habitats <ul style="list-style-type: none"> •Explain how living things are classified into groups based on observable characteristics and similarities and differences. •Classify a range of animals using broad groups (vertebrates / non-vertebrates / micro-organisms) and further sub-groups (insects, spiders, snails, worms, fish, amphibians, reptiles, birds, mammals, fungi, 	Evolution and inheritance <ul style="list-style-type: none"> •Annotate a picture of an animal and a plant to explain how adaptations make it suited to its environment. •Use secondary sources to explain how fossils are explored to provide information about living things. •Identify ways that living things have changed over time. •Identify that living things produce 	Evolution and inheritance <ul style="list-style-type: none"> •Annotate a picture of an animal and a plant to explain how adaptations make it suited to its environment. •Use secondary sources to explain how fossils are explored to provide information about living things. •Identify ways that living things have changed over time. •Identify that living things produce 	Electricity <ul style="list-style-type: none"> •Identify to correct symbols for a circuit diagram. •Draw and label a circuit diagram using correct symbols. •Identify and explain dangers and precautions for working safely with electricity. •Conduct a fair test to demonstrate how the voltage of cells effects the 	Light <ul style="list-style-type: none"> •Identify that light appears to travel in straight lines. •Draw, label and annotate a diagram to explain how we see objects. •Create a periscope and explain how it is used to see objects using the idea that light travels in straight lines. •Identify that shadows have the same shape as the object that casts them.
	heart, lung, blood vessels, arteries, veins, capillaries, left atrium, right atrium, right ventricle, left ventricle, blood. <ul style="list-style-type: none"> •Use secondary sources to explain the positive and negative impact of diet, exercise, drugs, and lifestyle on the way the human body functions. •Explain in writing how to lead a healthy lifestyle. •Draw, label and annotate a diagram to describe how nutrients and water are transported in animals and humans. 	moulds, bacteria, and Protista). <ul style="list-style-type: none"> •Construct a classification key to classify a range of animals using broad groups (vertebrates / non-vertebrates / micro-organisms) and further sub-groups (insects, spiders, snails, worms, fish, amphibians, reptiles, birds, mammals, fungi, moulds, bacteria, and Protista). •Classify a range of flowering and nonflowering plants. •Construct a classification key to classify flowering and non-flowering plants. 	offspring of the same kind, but normally not identical. <ul style="list-style-type: none"> •Annotate a picture to explain the evolution of humans over time. 	offspring of the same kind, but normally not identical. <ul style="list-style-type: none"> •Annotate a picture to explain the evolution of humans over time. 	brightness of a lamp or volume of a buzzer. <ul style="list-style-type: none"> •Investigate and explain how changing the components in a circuit can affect the brightness of bulbs, loudness of buzzers and the impact of on/off position of switches. 	<ul style="list-style-type: none"> •Investigate how the size of shadows can be altered. •Explore and describe different phenomena associated with light (eg: rainbows, colours on soap bubbles, objects looking bent in water, and coloured filters).

Working scientifically

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
	Questioning	Explore 'what if' questions through play.	Ask 'why' questions.	Ask 'why' and 'what if' questions.	Use knowledge and understanding to ask 'why' and 'what if' questions.	Use knowledge and understanding to ask questions.	Use knowledge and understanding to ask questions about my observations.	Use knowledge and understanding to challenge scientific ideas and concepts.
	Explaining	With support, recall simple scientific facts.	Recall some simple scientific facts.	Recall relevant scientific facts with some confidence.	Use science ideas and facts to describe and explain.	Show developing knowledge and understanding of scientific ideas and concepts.	Show clear knowledge and understanding of scientific ideas and concepts.	Show secure knowledge and understanding of scientific ideas and concepts.
		With support, pronounce simple scientific words to help with an activity.	Remember and use relevant scientific words during an activity.	Construct an oral sentence using scientific words.	Use simple scientific words in a written sentence.	Use scientific words during oral and written explanations.	Accurately use a range of scientific words during oral and written explanations.	Use a range of complex scientific words in a written report.
		With support, describe what is happening using words or actions.	Describe what is happening using words	Describe and recall what I have observed.	Describe simple scientific models / diagrams.	Describe and explain scientific models / diagrams.	Use knowledge and understanding to describe and explain scientific models / diagrams.	Begin to use scientific models / diagrams to explain new events (linking prior knowledge).
	Diagrams	Match a picture to the correct label.	Use a word bank to match a label to the correct part of an image	Label a simple diagram using scientific words.	Label and annotate a diagram with scientific information.	Draw, label and annotate my own diagram with given scientific information.	Draw, label and annotate my own diagram with selected scientific information.	Draw, label, annotate and explain my own diagrams using scientific information.
	Secondary sources	Recall some simple scientific facts.	Begin to select some facts to use in an answer.	Select relevant scientific facts to use in an answer.	Link relevant scientific facts together in an answer.	Use scientific facts to create an argument.	Select and prioritise scientific facts to create an argument.	Present a clear and logical argument using scientific facts.
Identifying	With support, name things related to science.	Accurately name a range of things related to science.	Identify and name simple scientific things, ideas and processes.	Identify and name a range of scientific things, ideas and processes.	Identify and describe changes in scientific processes.	Use knowledge and understanding to help identify unknown scientific things, ideas and processes.	Use knowledge, understanding and secondary resources to identify unknown scientific things, ideas and processes.	
	Classifying	Group by familiar features e.g. <i>Shape, size, colour</i>	Group by similarity or difference.	Use multiple groups when sorting.	Create my own criteria for sorting.	Create and explain my own criteria for sorting.	Create my own criteria for sorting, which includes a subgroups.	Create my own criteria for sorting, which includes multiply sub-groups.
		Use given instructions to sort.	Sort using simple yes/no statements.	Follow and complete simple classification keys with obvious differences.	Construct a simple classification key using given information.	Construct a simple classification key.	Construct a complex classification key.	Construct and explain a complex classification key.
	Comparing	Describe given things	Identify obvious differences.	Identify similarities and differences.	Link properties to purpose and suitability.	Identify when properties change.	Describe how properties change.	Explain how and why properties change.
Experi	Predicting	Suggest what might be 'best' or 'worst'	Suggest what might happen.	Use own knowledge to suggest what might happen in an investigation.	Predict cause and effect (casual prediction).	Predict a trend (relationship prediction).	Use knowledge and understanding to justify my prediction.	Use knowledge and understanding to generate a testable hypothesis.
	Observing	Comment on what I see.	Comment on what I see during an investigation.	Identify changes during an investigation.	Explain changes during an investigation.	Use knowledge and understanding to explain changes during an investigation.	Use knowledge and understanding to identify trends during an investigation.	Identify trends during an investigation and make justified predictions for the rest of an investigation.
	Equipment	Use a range of everyday items to investigate.	Use some scientific equipment.	Use a range of scientific equipment.	Select suitable equipment for a given task.	Select and independently use a range of scientific equipment for a given task.	Select the most appropriate equipment for an independently designed task.	Justify reasons for selecting specific equipment and identify possible alternatives.
		Work safely when given instructions.	Notice risk and identify some common dangers.	Identify and begin to explain common dangers.	Predict obvious risk and act on safety suggestions.	Plan to minimize risk and work safely.	Plan to minimize risk and describe safe use of equipment.	Predict risks and explain how I can plan and control risks.
	Designing	With support, suggest ideas to investigate.	I can suggest an idea to investigate and ask questions.	Demonstrate how why might investigate something.	Demonstrate and explain how why might investigate something.	Plan a fair test by selecting variables to change and measure.	Plan a fair test and ensure controlled variables are kept the same.	Plan a reliable and fair test.
		With support, say how we might investigate.	Begin to identify variables in an investigation.	Identify which variable we are testing.	Identify a range of variables which could be tested.	Identify a range of variables which could be tested and explain appropriate tests.	Identify a range of variables which could be tested and devise appropriate tests.	Explain which variables will be kept the same and devise tests which ensure these variables are controlled.
Follow a short demo and spoken instructions.		Follow a short demo, spoken and picture instructions.	Follow short spoken and written instructions in order.	Follow instructions and write a simple method.	Design and write a simple ordered method.	Design and write a reliable ordered method.	Design and write a reliable and precise method.	



	Collecting	Use non-standard units of measure and compare 2 things <i>e.g.: heavier / lighter.</i>	Use non-standard units of measure and compare multiply things <i>e.g.: lightest, light, heavier, heaviest.</i>	Measure using standard units: Length: cm / m Mass: g / kg Capacity: ml / l	Measure and compare using standard units: Length: mm / cm / m Mass: g / kg Capacity: ml / l	Measure and compare using standard units: Length: mm / cm / m Mass: g / kg Capacity: ml / l Time: seconds / minutes	Measure, convert and compare using standard units: Length: mm / cm / m Mass: g / kg Capacity: ml / l Time: seconds / minutes	Calculate an average from repeated measurements.
	Tables	Use a simple table to record pictures and words.	Use a simple, given table to record	Use a simple, given table to tally and record totals.	Use a frame to record a table of results.	Construct a simple table to compare cause and effect.	Use a frame to construct a complex table of results to show repeated data.	Construct a complex table of results to show repeated data.
	Graphs	Use prepared pictograms to record my observations.	Use a frame to add pictograms and block charts	Construct simple pictograms and block charts.	With support, use axes to construct a bar chart.	Accurately and independently construct a bar chart.	With support, use a frame to construct a graph and scale one axis.	Accurately construct and scale a graph.
		Add pictures to a given pictogram.	Add blocks to a given chart.	Use a scale on a block chart to add the correct blocks.	Draw bars on a given bar chart.	Plot coordinates in the first quadrant.	Join plotted coordinates with straight lines.	Plot mean values and draw a trend line for linear data.
	Patterns and relationships	Recognise, create and simple patterns <i>e.g.: size.</i>	Recognise, create and describe simple patterns.	Describe simple patterns in data and charts.	Describe simple patterns in data, charts, and graphs.	Describe patterns, trends and relationships in data, charts and graphs.	Describe and compare patterns, trends and relationships in data, charts and graphs.	Describe and compare changing patterns, trends and relationships in data, charts and graphs.
		Use 'more' or 'less' to compare observations.	Use 'more' or 'less' to compare observations and numbers.	Identify differences in sets of data.	Identify and explain differences in sets of data.	Identify and explain differences in sets of repeated data.	Identify and explain differences in sets of repeated data and identify anomalies.	Identify and explain, using margin of error, differences in sets of repeated data and identify anomalies.
	Concluding	Comment on changes that I observe during an activity.	Describe the changes that are happening.	After an activity, recall and describe the changes that have happened.	Describe my results linking cause and effect.	Describe trends and begin to use scientific observations to explain.	Use data in my conclusions and use science to explain.	Use primary and secondary data and ideas when concluding.
		Begin to talk about what we did.	Explain what we did.	Explore different ways to do things.	Identify weaknesses in my methods.	Identify weaknesses in my methods and suggest improvements.	Identify how limitations in my methods might affect my results and suggest improvements.	Identify limitations in my methods and use my results data to justify improvements.