Staniland Academy Science Overview

	Autumn	Spring	Summer
EYFS	Autumn 1— Us, our bodies and senses Autumn 2 — Light and Materials Cooking and Baking	Spring 1— Pets and other animals (habitats) Spring 2— How do people use Science to help us?	Summer 1 - Planting and growing (farming) Summer 2 - Transport, movement and forces
Year 1	Autumn 1— Light (Physics) Autumn 2— Seasonal change (observing and recording through-out the year) (Physics)	Spring 1—Animals including humans (Biology) Spring 2 —Materials (Chemistry)	Summer 1 —Forces (Physics) Summer 2 —Plants (Biology)
Seasonal and weather charting through out the year EYFS and Yr 1			
Year 2	Autumn 1— Living things and their habitats (Biology) Autumn 2— Electricity (Physics)	Spring 1—Materials (Chemistry) Spring 2—Forces (Physics)	Summer 1—Animals including humans (Biology) Summer 2— Plants (Biology)
Year 3	Autumn 1— Materials (Chemistry) Autumn 2— Animals including humans (Biology)	Spring 1—Rocks and soils (Chemistry) Spring 2—Magnets (Physics)	Summer 1—Plants (Biology) Summer 2— Light (Physics)
Year 4	Autumn 1— Forces (Physics) Autumn 2— Electricity (Physics)	Spring —States of Matter (Chemistry)	Summer 1—Living things and their habitats (Biology) Summer 2—Animals including humans (Biology)
Year 5	Autumn — Materials (Chemistry)	Spring 1—Earth and Space (Physics) Spring 2—Sound (Physics)	Summer 1—Living things and their habitats (Biology) Summer 2— Animals including humans (Biology)
Year 6	Autumn 1—Evolution and Inheritance (Biology) Autumn 2—Living things and their habitats (Biology)	Spring 1—Forces (Physics) Spring 2 —Animals including humans (Biology)	Summer 1—Animals including humans (Biology) Summer 2—Light (Physics)

Staniland Academy Science Overview

EYFS Term	Autumn	Spring	Summer
Theme N.C PoS	Autumn 1— Us, our bodies and senses Autumn 2 — Light and Materials Cooking and Baking	Spring 1— Pets and other animals (habitats) Spring 2— How do people use Science to help us?	Summer 1 - Planting and growing and farming Summer 2 - Transport, movement and forces.
Skills to be covered	Us, our bodies and senses— • Make simple observations about parts of the body 3 to 4 years • Talk about what they see using a wide vocabulary • Understand the key features of the life cycle of a plant and an animal • Begin to understand the need to respect and care for the natural environment and all living things. • Begin to make sense of their own life-story and family's history • Continue developing positive attitudes about the differences between people. Reception • Talk about members of their immediate family and community • Name and describe people that are familiar to them • Describe what they see hear and feel while outside Light and Materials- • Be able to ask and answer questions (with support) in familiar contexts, e.g. What happens at night? What can we see when it's dark? 3 to 4 years • Explore collections of materials with similar and/or different properties • Use all their senses in hands-on exploration of natural materials. • Talk about what they see using a wide vocabulary • Explore how things work • Talk about the differences between materials and changes they notice. Reception • Explore the natural world around them • Describe what they see hear and feel while outside Cooking & Baking: • Make observations, comment on how things change, e.g. before and after, chopping, cooking, baking 3 to 4 years • Talk about what they see using a wide vocabulary • Explore how things work • Talk about the differences between materials and changes they notice.	Pets & Other Animals- • To observe closely and present results • Can comment on how two, e.g. animals, are similar or different from each other; notice and describe how they change as they grow • Sort e.g. living things, into two simple groups, using given criteria Communicate what they have learned through drawing 3 to 4 years • Talk about what they see using a wide vocabulary • Understand the key features of the life cycle of a plant and an animal • Begin to understand the need to respect and care for the natural environment and all living things. Reception • Explore the natural world around them • Describe what they see hear and feel while outside • Understand the effect of changing seasons on the natural world around them Habitats around us – who lives here? • To ask and answer science questions • Ask and answer questions about what they have observed, e.g. Who lives where? Why do some animals live in dark places and some do not? • Select equipment and materials to use to create e.g. a nest, or animal habitat (bug hotel, hedgehog home) 3 to 4 years • Talk about what they see using a wide vocabulary • Understand the key features of the life cycle of a plant and an animal • Begin to understand the need to respect and care for the natural environment and all living things. • Know there are different countries in the world and talk about the differences they have experienced or seen in photos. • Using their senses in hands on exploration of natural materials. Reception • Explore the natural world around them • Describe what they see hear and feel while outside • Recognise some environments that are different to the one in which they live • Understand the effect of changing seasons on the natural world around them People that help us 3 to 4 years • Talk about what they see using a wide vocabulary • Show interest in different occupations • Explore how things work Reception • Recognise some similarities and differences between life in this country and life in other countries. • Talk about members of their immediate family and community	Planting & Growing- • To observe closely and record results • Make simple observations of e.g. size, shape, • Comment on what they see as they investigate and on how things change over time • Participate in class data collection. • Farming • To interpret results Communicate orally, in simple descriptions and explanations, e.g. talk about a farm, which animals 3 to 4 years • Talk about what they see using a wide vocabulary • Explore how things work • Plant seeds and care for growing plants • Understand the key features of the life cycle of a plant and an animal • Begin to understand the need to respect and care for the natural environment and all living things. • Use all their senses in hands-on exploration of natural materials. Reception • Explore the natural world around them • Know there are different countries in the world and talk about the differences they have experienced or seen in photos. • Describe what they see hear and feel while outside • Understand the effect of changing seasons on the natural world around them Transport 3 to 4 years • Talk about what they see using a wide vocabulary • Explore how things work • Explore and talk about different forces they can feel • Know there are different countries in the world and talk about the differences they have experienced or seen in photos. Reception • Comment on images from familiar situations in the past. • Explore the natural world around them
Resources (Texts/ Visual Resources)	Body model—see Science cupboard Dark Den—Cupboard	Use plastic animals to create results—server room Bug hotel—nature area Bug exploration—Science cupboard Hungry Caterpillar/ Bear Hunt/ Dear Zoo	What the Ladybug Heard Emma Jane Lost and Found

Staniland Academy Science Overview

Year 1 Term	Autumn	Spring	Summer
Theme N.C PoS	Autumn 1— Light (Physics) Autumn 2— Seasonal change (observing and recording throughout the year) (Physics)	Spring 1—Animals including humans (Biology) Spring 2 —Materials (Chemistry)	Summer 1 —Forces (Physics) Summer 2 —Plants (Biology)
Progression Statement	Light: • Light is needed in order to see things and darkness is the absence of light • Find patterns in the way that the size of a shadow changes • Shiny objects need a light source to "shine" and they are not sources of light Seasonal Change: • Observe changes across the four seasons • Observe and describe weather associated with the seasons and how day length varies	Animals including humans: • Identify and name a variety of common animals that are carnivores, herbivores & omnivores • Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense • Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Materials: • Distinguish between an object and the material from which it is made • Identify and name a variety of materials, including wood, plastic, glass, metal, water and rock • Describe the simple properties of a variety of everyday materials • Compare and group together a variety of everyday materials on the basis of their simple physical properties	Forces: • That pushing or pulling things can make objects start or stop moving • To observe and describe different ways of moving • To know that things can be made to move by other means than ourselves (e.g. wind/water etc) Plants: • Identify and describe the basic structure of a variety of flowering plants, including trees, roots, leaves, flowers, stem). • Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees ***(NEW 2025-26 No investigation needed where plants are grown in different conditions this is done in Year 2)*** Westgate Woods trip planned in
Working Scientifically Enquiry Type	Light: • Pattern seeking/Noticing patterns • Grouping & Classifying Seasonal Changes: • Observing changes over time • Pattern Seeking/Noticing patterns	Animals inc. Humans: • Research from Secondary Sources • Comparative Testing • Grouping & Classifying Materials: • Comparative Testing • Grouping & Classifying	Forces: • Comparative Testing • Grouping & Classifying Plants: • Grouping & Classifying • Research from Secondary Sources • Pattern Seeking
Working Scientifically Skills	Light: • Observing closely • Identifying & Classifying • Communicate outcomes in different ways • Gathering & recording data to help in answering questions Seasonal Changes: • Gathering & interpreting data • Making careful observations • Communicate outcomes in different ways • Asking & answering questions	Animals inc. Humans: • Observing closely using simple equipment • Asking simple questions and recognising that they can be answered in different ways • Identifying & Classifying • Communicate outcomes in different ways Materials: • Observing closely • Identifying & Classifying • Communicate outcomes in different ways • Gathering & recording data to help in answering questions	Forces: • Using simple equipment • Identifying & classifying • Gathering & recording data to help in answering questions Plants: • Comparing & contrasting • Identifying & classifying • Observing closely
Resources (Texts/Visual Resources)	Dark den Seasonal change posters—Nature Area	Materials boxes Human body model	Forces boxes Order seeds and soil

Blue = KPI. Red = National Curriculum. Green = Staniland enriched curriculum.

Staniland Academy Science Overview

Year 2 Term	Autumn	Spring	Summer
Theme	Autumn 1— Things and their habitats (Biology) Autumn 1— Electricity (Physics)	Spring 1—Materials (Chemistry) Spring 2—Forces (Physics)	Summer 1—Animals including humans (Biology) Summer 2— Plants (Biology)
Progression Statement TO KNOW	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 describes how they are suited to that habitat • Identify and name a variety of plants and animals in their habitats, including microhabitats • Identify animals from a range of animal groups and describes their observable features • Describe how animals obtain their food from plants and other animals, using the idea of simple food chains and identify and name different sources of food Electricity : • Identify common appliances that use electricity • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers • Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery • Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit	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. Forces: • That pushes and pulls are an example of a force • That pushes and pulls can make things speed up, slow down, change direction or change shape	Animals including humans: • All animals (inc. humans) grow and change as they become older • Find out about and describe the basic needs of animals, including humans, for survival (water, food, air) • Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene Plants: • 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 *(New 2025-26 look after plants as they grow—weeding, thinning, watering etc. make close observations and measurements of their plant/s growing from seed or bulbs. Plant two different types of plants one from a seed the other from a bulb and observe the differences in hydroponic labs.)*
Working Scientifically Enquiry Type TO BE ABLE TO	Living Things & Their Habitats: • Observing changes over time • Grouping & Classifying • Research from Secondary Sources Electricity: • Grouping & Classifying	Materials: • Grouping & Classifying • Comparative Testing & Simple Fair Tests Forces: • Grouping & Classifying • Comparative Testing & Simple Fait Tests • Research from Secondary Sources	Animals inc. Humans: • Research from Secondary Sources • Observing changes over time • Pattern Seeking/Noticing patterns • Grouping & Classifying Plants: • Grouping & Classifying • Observing changes over time • Comparative Testing & simple Fair Tests • Noticing Patterns/Pattern Seeking
Working Scientifically Skills TO BE ABLE TO	Living Things & Their Habitats: • Using simple equipment • Recording observations in a range of ways • Use data to suggest answers to question Electricity: • Identifying differences, similarities or changes related to simple scientific ideas and processes • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Materials: • Using observations and ideas to suggest answers to questions • Gathering and recording data to help in answering questions • Using simple equipment • Identifying & Classifying • Making careful observations Forces: • Using simple equipment to measure & observe things • Using observations & ideas to suggest answers to questions • Gathering and recording data to help in answering questions • Identifying differences, similarities or changes related to simple scientific ideas and processes	Animals inc. Humans: • Gathering & recording data to help in answering questions • Using observations and ideas to help answer questions • Identifying & Classifying Plants: • Observing closely, using simple equipment • Asking simple questions & recognising they can be answered in different ways • Gathering and recording data to help in answering questions • Using observations & ideas to suggest answers to questions
Resources (Texts/Visual Resources)	Circuits Animal photos Animals—server room	Forces boxes Materials boxes	Plants—ordered before

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Staniland Academy Science Overview

Year 3 Term	Autumn	Spring	Summer
Theme	Autumn 1— Animals including humans (Biology) Autumn 2— Materials (Chemistry)	Spring 1—Rocks and soils (Chemistry) Spring 2—Magnets (Physics)	Summer 1—Plants (Biology) Summer 2— Light (Physics)
Progression Statement TO KNOW	Materials: • That materials often change when they are heated and cooled • The same material can be used to make different objects • Know that some materials are electrical and thermal insulators • Know that some materials are electrical and thermal conductors Animals including Humans: • Identify teeth and their functions • Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat	Rock and Soils: • Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties • Describe in simple terms how fossils are formed when things that have lived are trapped within rock • Recognise that soils are made from rocks and organic matter. Magnets: • Observe how magnets attract or repel each other • Predict whether two magnets will attract or repel each other, depending on which poles are facing • Describe magnets as having two poles • Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials • Notice that some forces need contact between two objects, but magnetic forces can act at a distance	Plants: • Explore the requirements of plants for life and growth (air, light, water, nutrients from the soil, room to grow) and how they vary from plant to plant • Investigate the way water is transported within plants • Explore the part that flowers play in the lifecycle of flowering plants, including pollination, seed formation and seed dispersal • Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers ***(NEW 2025-26 observe what happens to plants over time when the leaves or roots are removed. Investigate what happens to plants when they are put in different condition e.g. darkness, in cold deprived of air, different types of soil, different fertilisers, varying amount of space using hydroponic labs)*** Lights: • Recognise that shadows are formed when the light from a light source is blocked by an opaque object • Recognise that light from the sun can be dangerous and that there are ways to protect their eyes • Notice that light is reflected from surfaces
Working Scientifically Enquiry Type TO BE ABLE TO	Materials: • Grouping & Classifying • Comparative & Fair Testing Animals inc. Humans: • Grouping & Classifying • Research from Secondary Sources	Rocks & Soils: • Grouping & Classifying • Comparative & Fair Testing • Observing Changes Over Time • Research from Secondary Sources Magnets: • Grouping & Classifying • Comparative & Fair Testing	Plants: • Grouping & Classifying • Comparative & Fair Testing • Observing Changes Over Time • Research from Secondary Sources Light: • Grouping & Classifying • Pattern Seeking/Noticing patterns • Comparative & Fair Testing
Working Scientifically Skills TO BE ABLE TO	Materials: • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables • Asking relevant questions & recognising they can be answered in different ways • Gathering, recording, classifying and presenting data in a variety of ways to help answer questions • Using straightforward scientific evidence to answer questions or to support their findings Animals inc. Humans: • Asking relevant questions • Identifying differences, similarities or changes related to simple scientific ideas and processes • Gathering, recording, classifying and presenting data in a variety of ways to help answer questions • Making systematic & careful observations • Using straightforward scientific evidence to answer questions or to support their findings	Rocks & Soils: • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables • Asking relevant questions & recognising they can be answered in different ways • Gathering, recording, classifying and presenting data in a variety of ways to help answer questions • Using straightforward scientific evidence to answer questions or to support their findings • Identifying differences, similarities or changes related to simple scientific ideas and processes Magnets: • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Gathering, recording, classifying and presenting data in a variety of ways to help answer questions • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables • Making systematic & careful observations	Plants: • Asking relevant questions & recognising they can be answered in different ways • Identifying differences, similarities or changes related to simple scientific ideas and processes • Setting up & using equipment • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables • Using results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Light: • Gathering, recording, classifying and presenting data in a variety of ways to help answer questions • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Using results to draw simple conclusions, make predictions for new values • Using straightforward scientific evidence to answer questions or to support their findings • Identifying differences, similarities or changes related to simple scientific ideas and processes • Setting up & Making accurate measurements using standard units, using a range of equipment, for example thermometers and dataloggers
Resources (Texts/Visual Resources)	Materials boxes Human body—Science cupboard	Rocks and soils in cupboard Magnets	Materials Plants — email Mrs Charlesworth

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Staniland Academy Science Overview

Year 4 Term	Autumn	Spring	Summer
Theme	Autumn 1— Forces (Physics) Autumn 1— Electricity (Physics)	Spring—States of Matter (Chemistry)	Summer 1—Living things and their habitats (Biology) Summer 2—Animals including humans (Biology)
Progression Statement TO KNOW	Forces: • Compare how different things move on different surfaces • Know that friction is a force that slow moving objects and may prevent objects from starting to move • Know when objects are pushed or pulled, an opposing pull or push can be felt • Know how to measure forces and identify the direction in which they act Electricity: • Recognise some common conductors and insulators, and associate metals with being good conductors • Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches • Use recognised symbols when representing a simple circuit in a diagram	States of Matter: • Compare and group materials together, according to whether they are solids, liquids or gases • Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) • Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature	Living things and their habitats: • Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment • Recognise that environments can change and that this can sometimes pose dangers to living things • Recognise that living things can be grouped in a variety of ways; Identify and name a variety of common animals including fish, amphibians, reptiles, birds, invertebrates, carnivores, omnivores, herbivores and mammals Animals including humans: • Describe the basic parts of the digestive system in humans • Construct and interpret a variety of food chains, identifying producers, predators and prey • Identify that humans and some animals have skeletons and muscles for support, protection and movement
Working Scientifically Enquiry Type TO BE ABLE TO	Electricity: • Carrying out comparative & fair testing • Research from secondary source Forces: • Pattern seeking/Noticing patterns • Comparative & Fair Testing	States of Matter: • Grouping & Classifying • Observing Changes Over Time • Carrying out comparative & fair testing • Research from secondary sources	Living Things & Their Habitats: • Grouping & Classifying • Pattern Seeking/Noticing patterns • Research from secondary sources Animals inc. Humans: • Grouping & Classifying • Research from secondary sources
Working Scientifically Skills TO BE ABLE TO	Electricity: • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Identifying scientific evidence that has been used to support or refute ideas or arguments Forces: • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, including taking repeat readings when appropriate • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further question	States of Matter: • Identifying differences, similarities or changes related to simple scientific ideas and processes • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables • Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Using straightforward scientific evidence to answer questions or to support their findings	Living Things & Their Habitats: • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions • Making systematic & careful observations • Making systematic and careful observations and recording findings using diagrams or keys • Identifying differences, similarities or changes related to simple scientific ideas and processes • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Using straightforward scientific evidence to answer questions to support findings Animals inc. Humans: • Using straightforward scientific evidence to answer questions, or to support their findings • Gathering, recording, classifying and presenting data in a variety of ways to help answer questions • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
Resources (Texts/Visual Resources)	Forces boxes—Phizzy forces Circuit boxes	Meet a farmer—online	Human body—science cupboard

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Staniland Academy Science Overview

Year 5 Term	Autumn	Spring	Summer
Theme	Autumn — Materials (Chemistry)	Spring 1—Earth and Space (Physics) Spring 2—Sound (Physics)	Summer 1—Living things and their habitats (Biology) Summer 2— Animals including humans (Biology)
Progression Statement TO KNOW	Materials • Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets • Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution • Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic • Demonstrate that dissolving, mixing and changes of state are reversible changes • Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.	Earth and Space • Describe the movement of the Earth, and other planets, relative to the Sun in the solar system • Describe the movement of the Moon relative to the Earth • Describe the Sun, Earth and Moon as approximately spherical bodies • Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky. Sound • Identify how sounds are made, associating some of them with something vibrating • Find patterns between the pitch of a sound and features of the object that produced it • Find patterns between the volume of a sound and the vibrations that produced it • Recognise that sounds get fainter as the distance from the sound source increases • Recognise that vibrations from sounds travel through a medium to the ear	Living things and their habitats: • Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird • Describe the life process of reproduction in some plants and animals Animals including humans: • Describe the changes as humans develop to old age • Compare reproduction in plants with reproduction in animals
Working Scientifically Enquiry Type TO BE ABLE TO	Properties of Materials: • Grouping & Classifying • Carrying out Comparative & Fair Testing • Observing Changes Over Tim	Earth & Space: • Research from Secondary Sources • Pattern Seeking/Noticing patterns • Observing Changes Over Time Sound: • Carrying out comparative & fair testing • Pattern Seeking/Noticing patterns	Living Things & Their Habitats: • Research from Secondary Sources • Grouping & Classifying Animals inc. Humans: • Grouping & Classifying • Research from Secondary Sources • Pattern Seeking/Noticing Patterns
Working Scientifically Skills TO BE ABLE TO	Properties of Materials: • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate • Identifying scientific evidence that has been used to support or refute ideas or argument • Using test results to make predictions to set up further comparative and fair tests • Planning different types of science enquiries to answer questions, including recognising and controlling variables where necessary • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs • Using test results to make predictions to set up further comparative and fair test	Earth & Space: • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate • Identifying scientific evidence that has been used to support or refute ideas or argument • Using test results to make predictions to set up further comparative and fair tests Sound: • Identifying differences, similarities or changes related to simple scientific ideas and processes • Recording findings using drawings and labelled diagrams • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including data loggers	Living Things & Their Habitats: • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Identifying scientific evidence that has been used to support or refute ideas or arguments Animals inc. Humans • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Identifying scientific evidence that has been used to support or refute ideas or argument • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs
Resources (Texts/Visual Resources)	Materials Email—Mrs Charlesworth before needing any resources	Space box Sound box	Order soil and plants

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Staniland Academy Science Overview

Year 6 Term	Autumn	Spring	Summer
Theme	Spring 1—Evolution and Inheritance (Biology) Spring 2—Living things and their habitats (Biology)	Spring 1—Forces (Physics) Spring 2 —Animals including humans (Biology)	Summer 1 —Animals including humans (Biology) Summer 2—light (Physics)
Progression Statement TO KNOW	Evolution and Inheritance: • Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago • Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Living things and their habitats: • Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals • Give reasons for classifying plants and animals based on specific characteristics.	Forces: • Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the earth and falling object • Identify the effects of air resistance, water resistance and friction, that act between moving surfaces • Recognise that some mechanisms, including levers, pulleys, gears allow a smaller force to have a greater effect Animals including humans: • Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood • Describe the ways in which nutrients and water are transported within animals, including humans.	Animals including humans: • Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function • Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood • Describe the ways in which nutrients and water are transported within animals, including humans. Light: • Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes • Recognise that light appears to travel in straight lines • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them • Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
Working Scientifically Enquiry Type TO BE ABLE TO	Evolution & Inheritance: • Grouping & Classifying • Research From Secondary Sources • Carrying out Comparative & Fair Tests Living Things & Their Habitats: • Grouping & Classifying • Observing changes over time • Research from Secondary Sources	Forces: • Carrying out Comparative & Fair Testing • Noticing Patterns/Pattern Seeking Animals inc. Humans: • Research from Secondary Sources • Grouping & Classifying • Carrying out comparative & fair testing	Animals inc. Humans: • Research from Secondary Sources • Grouping & Classifying • Carrying out comparative & fair testing Light: • Noticing Patterns/Pattern Seeking • Carrying out comparative & Fair Tests
Working Scientifically Skills TO BE ABLE TO	Evolution & Inheritance: • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs • Identifying scientific evidence that has been used to support or refute ideas • Planning different types of enquiries to answer questions including recognising and controlling variables where necessary • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Living Things & Their Habitats: • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Identifying scientific evidence that has been used to support or refute ideas • Planning different types of enquiries to answer questions including recognising and controlling variables where necessary	Forces: • Identifying scientific evidence that has been used to support or refute ideas or argument • Planning different types of science enquiries to answer questions, including recognising and controlling variables where necessary • Using test results to make predictions to set up further comparative and fair tests • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate Animals inc. Humans: • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Identifying scientific evidence that has been used to support or refute ideas or arguments • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate	Animals inc. Humans: • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • Identifying scientific evidence that has been used to support or refute ideas or arguments • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate Light: • Identifying scientific evidence that has been used to support or refute ideas • Using test results to make predictions to set up further comparative and fair tests • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs and bar and line graphs • Planning different types of enquiries to answer questions including recognising and controlling variables where necessary • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
Resources (Texts/Visual Resources)		Forces box Light box	Human body resources