	1			1		
Year 1	Autumn 1 - Ourselves	Autumn 2 - Toys	Spring 1 – People Who Help Us	Spring 2 - Where We Live	Summer 1 - Animals	Summer 2 - Opposites
Statutory requirements These MUST be covered.	Animals, including Humans: -identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each senseobserve changes across the four seasons	Everyday materials: -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 simple 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.	Seasons: -observe changes across the four seasons -observe and describe weather associated with the seasons and how day length varies.	Plants: -identify and name a variety of common wild and garden plants, including deciduous and evergreen trees -identify and describe the basic structure of a variety of common flowering plants, including trees.	Animals, including Humans: -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 -describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).	Seasons: -observe changes across the four seasons -observe and describe weather associated with the seasons and how day length varies.
Working Scientifically Focus	-identifying and classifying Context: Identifying body partsgathering and recording data to help in answering questions Context: Creating eye/hair colour pictograms.	-observing closely, using simple equipment Context: Using magnifying glass to examine materialsperforming simple tests Context: Testing materials for simple properties, e.g. waterproofidentifying and classifying: Classifying materialsusing their observations and ideas to suggest answers to questions: Context: Answering a question, e.g. Which material would make the best umbrella?	-asking simple questions and recognising that they can be answered in different ways -observing closely, using simple equipment -gathering and recording data to help in answering questions Context: Looking closely at the weather for a week. Collecting and interpretting data, e.g. rainfall/temperature.	-identifying and classifying -using their observations and ideas to suggest answers to questions Context: Naming and classifying plants and trees and parts of these.	-observing closely, using simple equipment -identifying and classifying -using their observations and ideas to suggest answers to questions Context: Naming and classifying animals.	-asking simple questions and recognising that they can be answered in different ways -observing closely, using simple equipment -gathering and recording data to help in answering questions Context: Identifying weather patterns and changes throughout the year. Collecting and interpretting data, e.g. amount of light – dataloggers.
Notes			Outdoor learning. Look at doctors/dentists as scientists.	Outdoor learning. Growing herbs/salad.	Visit Whipsnade Zoo.	Outdoor learning. Properties: shiny/dull light/heavy rough/smooth wet/dry light/dark floating/sinking seasons
Writing Outcomes	Skill: labelling and captions Context: body parts and senses	Skill: using adjectives to describe Context: writing a toy catalogue with descriptions using adjectives related to materials	Skill: labelling and captions Context: how humans grow into adults	Skill: labelling and captions Context: photos of plants	Skill: descriptive sentences and questions Context: writing riddles about animals using characteristics – what am I?	Skill descriptive/comparative sentences Context: writing about weather- In summer, In winter, EXT: conjunctions: and/but

Year 2	Autumn 1 – Pirates	Autumn 2 – Fire Fire!	Spring 1 – Island Adventures	Spring 2 - Everything's Changing	Summer 1 - Superheroes	Summer 2 – Passport to the World
Statutory requirements These MUST be covered.	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.	Uses of everyday materials: -find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Animals, including humans: -notice that animals, including humans, have offspring which grow into adultsfind out about and describe the basic needs of animals, including humans, for survival (water, food and 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.	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	Living things and their habitats: -identify and name a variety of plants and animals in their habitats, including micro-habitats -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.
Working Scientifically Focus	-asking simple questions and recognising that they can be answered in different ways -observing closely, using simple equipment -performing simple tests -identifying and classifying Context: Investigating the properties of materials, e.g. buoyancy. Look at inventors of new materials, e.g. John Dunlop, Charles Macintosh or John McAdam. Classifying materials.	-performing simple tests -identifying and classifying -using their observations and ideas to suggest answers to questions Context: Investigating the properties of materials: reversible change.	-identifying and classifying Context: Matching animals to offspringusing their observations and ideas to suggest answers to questions -gathering and recording data to help in answering questions Context: Collecting data around diet. E.g. 'What do you have for your snack?' Analysis of results.	-asking simple questions and recognising that they can be answered in different ways -observing closely, using simple equipment -performing simple tests -using their observations and ideas to suggest answers to questions -gathering and recording data to help in answering questions Context: investigating – a control investigation on growing.	-asking simple questions and recognising that they can be answered in different ways -identifying and classifying -using their observations and ideas to suggest answers to questions -gathering and recording data to help in answering questions Context: Researching -habitats.	-asking simple questions and recognising that they can be answered in different ways -observing closely, using simple equipment -identifying and classifying -using their observations and ideas to suggest answers to questions -gathering and recording data to help in answering questions Context: Investigating microhabitats in local area. Use equipment such as pootahs, focus frames and magnifying glasses and cameras.
Notes		Visit from Fire Brigade.		Visit Stockwood Discovery Centre – Life in a Garden.		Outdoor learning.
Writing Outcomes	Skill: report Context: the best material for a pirate boat	Skill: recount Context: 'GFoL burning buildings', using photos	Skill: instructions Context: how to look after a pet (use chickens & gerbils)	Skill: methodology write up Context: control investigation on growing	Skill: reports Context: different habitats – creating classroom display using a world map	Skill: extended captions Context: food chain diagrams with captions

Year 3	Autumn 1 – Houses and Homes	Autumn 2 – Time Detectives	Spring 1 – Mighty Metal	Spring 2 - On the Move	Summer 1 –Caribbean	Summer 2 – The Wonder of Plants
Statutory requirements These MUST be covered.	Light: -recognise that they need light in order to see things and that dark is the absence of light -notice that light is reflected from surfaces -recognise that light from the sun can be dangerous and that there are ways to protect their eyes -recognise that shadows are formed when the light from a light source is blocked by an opaque object -find patterns in the way that the size of shadows change.	Rocks: -describe in simple terms how fossils are formed when things that have lived are trapped within rock.	Forces and magnets: -compare how things move on different surfaces -notice that some forces need contact between two objects, but magnetic forces can act at a distance -observe how magnets attract or repel each other and attract some materials and not others -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 -describe magnets as having two poles -predict whether two magnets will attract or repel each other, depending on which poles are facing.	Sound (Yr 4 unit): -identify how sounds are made, associating some of them with something vibrating -recognise that vibrations from sounds travel through a medium to the ear -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 strength of the vibrations that produced it -recognise that sounds get fainter as the distance from the sound source increases.	Animals, including humans: -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 -identify that humans and some other animals have skeletons and muscles for support, protection and movement.	Plants: -identify and describe the functions of different parts of flowering plants: roots/stem/trunk, leaves and flowers -explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant -investigate the way in which water is transported within plants -explore the part that flowers play in the life cycle of flowering plants, includingpollination, seed formation and seed dispersal.
Working Scientifically Focus	-setting up simple practical enquiries, comparative and fair tests -making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers -recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables Context: Investigating opacity – whether light can pass through materials. Measure and record the light beam length. Create a labelled diagram.  Context: Investigating shadows. Draw around shadows on the playground. Observe changes throughout the day.	-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 Context: Writing an explanation of the process of fossilisation.	-asking relevant questions and using different types of scientific enquiries to answer them -setting up simple practical enquiries, comparative and fair tests -making systematic and careful observations -gathering, recording, classifying and presenting data in a variety of ways to help in answering questions -using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions -using straightforward scientific evidence to answer questions or to support their findings Context: Investigating materials that are magnetic. Focus on prediction.	-asking relevant questions and using different types of scientific enquiries to answer them -setting up simple practical enquiries, comparative and fair tests -making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment -recording findings using simple scientific language, drawings, labelled diagrams explanations, displays or presentations of results and conclusions -identifying differences, similarities or changes related to simple scientific ideas and processes Context: Investigating sounds: pitch/volume/distance travelled, etc. Fiocus on creating a abelled diagram: the ear.	-reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions -identifying differences, similarities or changes related to simple scientific ideas and processes -using straightforward scientific evidence to answer questions or to support their findings Context: Researching - diet and nutrition.	-asking relevant questions and using different types of scientific enquiries to answer them -setting up simple practical enquiries, comparative and fair tests -making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment Context: Investigating plants and water (celery). Investigating - growingrecording 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 -identifying differences, similarities or changes related to simple scientific ideas and processes Context: Studying seed dispersal.
Notes	Look at Sun safety. Outdoor learning.	Use fossil excavation kits – consider health and safety. Look at real fossils.	Link to recycling.	Make a string telephone.	Do some cooking/food preparation.	Done as 'trees'. Outdoor learning. Visit woods.
Writing Outcomes	Skill: methodology write up Context: shadow investigation (using Peter Pan as stimulus)	Skill: explanation Context: process of fossilisation	Skill: rap Context: magnetism	Skill: onomatopoeic poem Context: sound sources (using 'The Sound Collector' as stimulus	Skill: recipe Context: designing a healthy, balanced meal	Skill: script Context: a 'David Attenborough-style' presentation

Year 4	Autumn 1 – Chocolate	Autumn 2 – Ancient Egypt	Spring 1 – Water	Spring 2 – We've Got the Power	Summer 1 - Our Active Planet	Summer 2 – By the Sea
Year 4 Statutory requirements These MUST be covered.	Autumn 1 – Chocolate  Animals, including humans: - identify the different types of teeth in humans and their simple functions	Autumn 2 – Ancient Egypt  Animals, including humans: - describe the simple functions of the basic parts of the digestive system in humans.	Spring 1 – Water  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.	Electricity: -identify common appliances that run on 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 -recognise some common conductors and insulators, and associate metals	Rocks (Yr 3 unit): -compare and group together different kinds of rocks on the basis of their appearance and simple physical properties -recognise that soils are made from rocks and organic matter.	Summer 2 – By the Sea  Living things and their habitats: -recognise that living things can be grouped in a variety of ways -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 -construct and interpret a variety of food chains, identifying producers, predators and prey.
Working Scientifically Focus	-asking relevant questions and using different types of scientific enquiries to answer them -setting up simple practical enquiries, comparative and fair tests -making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment Context: Investigating the effects of substances on teeth (egg shell experiment).	-asking relevant questions and using different types of scientific enquiries to answer them -setting up simple practical enquiries, comparative and fair tests -making systematic and careful -recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables -reporting on findings from enquiries, including oral and written explanations Context: Investigating digestion (tights experiment).	-asking relevant questions and using different types of scientific enquiries to answer them -setting up simple practical enquiries, comparative and fair tests -making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers -gathering, recording, classifying and presenting data in a variety of ways to help in answering questions -using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Context: Explaining - the water cycle: children to see demonstrations on evaporation and condensation.	with being good conductors.  -asking relevant questions and using different types of scientific enquiries to answer them -setting up simple practical enquiries, comparative and fair tests -making systematic and careful observations -gathering, recording, classifying and presenting data in a variety of ways to help in answering questions -recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables Context: Asking and answering about circuits: If wewill the? Children to make buzz wire game. Children are to investigate their questions.	-making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers -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 -identifying differences, similarities or changes related to simple scientific ideas and processes Context: Studying rocks: children are to create labelled diagrams and extended captions. Children are to do comparive writing: the is, whereas Both the and are Neither nor is	-asking relevant questions and using different types of scientific enquiries to answer them -gathering, recording, classifying and presenting data in a variety of ways to help in answering questions explanations, displays or presentations of results and conclusions Context: Classifying animals in different ways, e.g. phyla/diet. Children to create dichotomous keys and food chain flow charts.
Notes	Outdoor learning. Chocolate workshop.	Visit British Museum.		Look at Benjamin Frankllin and Thomas Edison.	Outdoor learning.	Visit seaside.
Writing Outcomes	Skill: poster Context: how to look after your teeth (to display in a dentist's office)	Skill: story Context: the journey of food	Covered in English - water cycle work	Skill: methodology write up Context: electricity investigation	Skill: interactive class display – captions, questions, etc. Context: types of rocks	Skill: descriptive poem Context: animals, using 'Beast Feast' as stimulus

Year 5	Autumn 1 – Out of this World	Autumn 2 – The Victorians	Spring 1 – Invaders and Settlers	Spring 2 - Communication	Summer 1 – Is It Fair?	Summer 2 - Change
Statutory	Earth and space:	Light:	Forces:	Properties and changes	Properties and changes of materials:	Living things and their habitats:
requirements These MUST be covered.	-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 -explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.	-use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye -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 -use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.	-identify the effects of air resistance, water resistance and friction, that act between moving surfacesrecognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	of 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.	-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.
Working Scientifically Focus	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 Context: Considering the work of scientists such as Copernicus. Discuss evidence for geocentric/heliocentric models of Solar System. Look at how views change, as we become better informed.	-planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary -taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate -using test results to make predictions to set up further comparative and fair tests  Context: Looking at rainbows and colours on soap bubbles. Looking at prisms. Investigating chromatography.	-planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary -taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate -recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs -using test results to make predictions to set up further comparative and fair tests Context: Invesigating forces: parachutes/marble through a liquid, etc. A focus on fair testing, predictions and conclusions.	-planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary -taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate -recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs -using test results to make predictions to set up further comparative and fair tests Context: Investigating properties. Children to sort and and classify materials, having investigated their properties. Investigation: How can we keep our food cool?  Investigating separating mixtures/suspensions/solutions. Observation of irreversible changes: vinegar and milk/vinegar and bicarbonate of soda. A focus on explaining processes.		-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. Context: Presenting and explaining life cyles. Making comparisons between phyla.
Notes	Visit National Space Centre.		COTICIONOTIS.		Explore ir/reversible changes and how chemists create new materials, for example, Spencer Silver, who invented the glue for sticky notes or Ruth Benerito, who invented wrinkle-free cotton. Visit E-Learning Centre.	Study animal behaviourists, for example, David Attenborough and Jane Goodall. Visit Kew Gardens. Links to PSCHE/Sex Education.
Writing Outcomes	Skill: fact files Context: planets (covered in English)	Skill: cartoon strips – call outs, etc. Context: light concept cartoons	Skill: labelled diagrams with written explanations Context: forces	Skill: haikus Context: states of matter: so and gases/properties	Skill: instructions Context: how to separate materials mixed up in a delivery	Skill: letters Context: agony aunt (changes and puberty)

Year	Autumn 1 – Ancient Greece	Autumn 2 – Shakespearian England	Spring 1 – World War II	Spring 2 - Vikings	
Statutory requirements These MUST be covered.	Animals, including humans: -identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood -recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function -describe the ways in which nutrients and water are transported within animals, including humans.	Electricity: -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.	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.	provide information about living things that inhabited the Earth millions of years ago  -recognise that living things produce offspring of the same kind, but	
Working Scientifically Focus	-taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate -recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Context: Investigating the effects of exercise on heart rate. Recording and interpretting using mathematical skillsusing 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 Context: Explaining the cardiovascular system.	-planning different types of scientific 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 Context: Asking questions about circuits: If wewill the? Children are to investigate their questions.	-identifying scientific evidence that has been used to support or refute ideas or arguments.  Context: Classifying and sorting plants and animalsreporting 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  Context: Explaining adaptation and inheritance of traits.		
Notes	Links to PSCHE.	Look at safety and electricity.		Look at palaeontologists such as Mary Anning and about how Charles Darwin and Alfred Wallace developed their ideas on evolution.	
Writing Outcomes	Skill: presentation (ICT and verbal) Context: food groups/diet	Skill: story Context: the journey of an electron	Context: animals, using 'Lost	Skill: script Context: news report about Charles Darwin's discoveries	