

Overarching Big Questions			
Y4/5 year cycle	Autumn	Spring	Summer
Purple	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
	Where does energy come from?	How do living things change and grow?	What can we learn from our environment?

SUBJECT: MATHEMATICS

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
KNOWLEDGE	<p>Pre-formal – Begin to be proactive in their interactions. Communicate consistent preferences and affective responses. Recognising familiar people, events, and objects. Perform actions often by trial and improvement and remember learned responses over short period of times. Cooperate with shared exploration and supported participation.</p> <p>Semi-formal- Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.</p> <p>Formal –Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line Identify 2-D shapes on the surface of 3-D shapes, (for example, a circle on a cylinder and a triangle on a pyramid) Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p> <p>Functional – Sort shapes into different properties (shape, size, colour, weight, thickness) e.g. items from the washing basket, food from a shopping basket, fruits from a fruit basket</p>	<p>Pre formal- Show an awareness of number activities and counting</p> <p>Pupils are aware of cause and effect in familiar mathematical activities.</p> <p>Show awareness in changes of:</p> <p>Shape</p> <p>Position</p> <p>Quantity</p> <p>Anticipate, follow and join in with familiar activities when given a contextual clue.</p> <p>Search for objects out of sight, hearing or touch.</p> <p>Match big and small objects.</p> <p>Demonstrate interest in position and the relationship between objects.</p>	<p>Pre formal - Expresses preference for items not present via symbolic means</p> <p>Early problem solving – tries new strategies when old one fails</p> <p>Exerts autonomy in a variety of contexts</p> <p>Develop early problem solving – e.g. ability to try a new strategy when old one fails.</p> <p>Look for a reduction in the time during which the learner tries the original action.</p> <p>Semi formal –</p> <p>Metric Measures</p> <ul style="list-style-type: none"> • Measure, compare, add & subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • Measure the perimeter of simple 2-D shapes <p>Money</p> <ul style="list-style-type: none"> • Add & subtract amounts of money to give change, using both £ & p in practical contexts <p>Time</p> <ul style="list-style-type: none"> • Tell & write the time from an analogue clock, including using Roman numerals from I to XII, & 12-hour & 24-hour clocks

		<p>Semi formal –</p> <p>The learner is;</p> <ul style="list-style-type: none"> supported to join in rote counting to 9/10 taught to count back from 5 taught to rote count onwards from a given small number <p>Counting</p> <p>The learner is;</p> <ul style="list-style-type: none"> taught to count at up to 10 objects reliably taught to estimate a small number (up to 10) and check by counting taught to show an understanding that the last number counted represents the total number of the count <p>Recognising representations</p> <p>The learner is;</p> <ul style="list-style-type: none"> taught to make a subset of up to 5 objects <p>Recognising and recording numerals</p> <p>The learner is;</p> <ul style="list-style-type: none"> taught to recognise numerals 1-5 in familiar contexts. Understand that each numeral represents a constant number, <p>Compare and order</p> <p>The learner is;</p> <ul style="list-style-type: none"> taught to recognise the difference in quantity taught to use the language of ‘more’ and ‘less’ to compare two sets of objects. Taught to find one more or less from a group of five objects. <p>Fractions</p> <p>The learner is;</p> <p>Taught to Break/share things into two or more parts</p> <p>Formal –</p>	<ul style="list-style-type: none"> Estimate & read time with increasing accuracy to the nearest minute; record & compare time in terms of seconds, minutes & hours; use vocabulary such as o’clock, a.m./p.m., morning, afternoon, noon & midnight Know the number of seconds in a minute & the number of days in each month, year & leap year <p>Compare durations of events [e.g. to calculate the time taken by events or tasks]</p> <p>Formal –</p> <p>Rote Counting</p> <p>The learner is;</p> <ul style="list-style-type: none"> supported to join in rote counting to 9/10 taught to count back from 5 taught to rote count onwards from a given small number <p>Counting</p> <p>The learner is;</p> <ul style="list-style-type: none"> taught to count at up to 10 objects reliably <ul style="list-style-type: none"> taught to estimate a small number (up to 10) and check by counting taught to show an understanding that the last number counted represents the total number of the count <p>Recognising representations</p> <p>The learner is;</p> <ul style="list-style-type: none"> taught to make a subset of up to 5 objects <p>Recognising and recording numerals</p> <p>The learner is;</p> <ul style="list-style-type: none"> taught to recognise numerals 1-5 in familiar contexts. Understand that each numeral represents a constant number, <p>Compare and order</p> <p>The learner is;</p> <ul style="list-style-type: none"> taught to recognise the difference in quantity taught to use the language of ‘more’ and ‘less’ to compare two sets of objects. Taught to find one more or less from a group of five objects.
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		<p>Rote Counting</p> <ul style="list-style-type: none"> •Independently rote count to 20 •Count back from 10 <p>Counting</p> <ul style="list-style-type: none"> •Be able to count at least 20 objects accurately 1 by 1 •Reliably count up to 10 objects that move or can't be seen (e.g. bubbles, runners in a race, objects being dropped into a tin) •Accurately count out a small number of objects from a larger group (e.g. count out twelve pieces of Lego from a box of bricks) •Apply counting skills 0-20 to play simple games and use in role play/life skills activities (contextual) •Show an understanding that the number items remain the same, even when rearranged. •Understand that the order in which a number of items are counted does not matter but that each object in a collection must be counted once <p>Recognising Representations</p> <ul style="list-style-type: none"> •Automatically recognise pictorial representation of numbers 1-10 e.g. dice and Numicon <p>Compare and Order</p> <ul style="list-style-type: none"> •Order numbers to 10 then 20 e.g. place numbers correctly on a 0-10 •Compare two or more numbers up to a value of 10 •Begin to use in context the language of more/less, bigger/smaller, the same •Know the number that is one more or one less than any given number to 10 then 20 •Automatically recognise pictorial representation of numbers 0-10 •Recognise 0 as an empty set 	<p>Fractions</p> <p>The learner is;</p> <p>Taught to Break/share things into two or more parts</p>
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		<p>Counting</p> <ul style="list-style-type: none"> •Count at least 30 objects accurately, one by one <p>Compare and Order</p> <ul style="list-style-type: none"> •Order numbers 0-30 •Know the number that is one more or one less than any given number to 30 •Compare two or more numbers up to a value of 20 <p>Compare, describe & solve practical problems for:</p> <ul style="list-style-type: none"> • Compare objects directly focusing on one dimension where the difference in size is less obvious. • Begin to use comparative language e.g fast/slow, long/short, heavy/ light, full/empty in a range of contexts and practical applications • to make simple estimates and check accuracy using non-standard units. <p>Money</p> <ul style="list-style-type: none"> • In shopping activities use up to ten 1p coins to buy objects up to a value of 10p. • Recognise and sort 1p, 2p and 5p coins by the size, shape and colour. <p>Time</p> <ul style="list-style-type: none"> • Sequence chronologically three daily events. <p>Understand and use in context some terminology relating to passage of time i.e. before, after, later, next.</p>	
KEY VOCABULARY	<p>Pre-formal – Big, small, heavy, lifgt, shape, feel, look, hard, soft,</p> <p>Semi-formal- Addition and subtraction: add, more, and, make, sum, total, altogether, double, one more, two more ... ten more, how many more to make ...?, how many more is ... than ...?, how much more is ...?, take away, how many are left/left over?, how many have gone?, one less, two less, ten less ... , how many fewer is ... than ...?, how much less is ...?, difference between.</p> <p>Formal – Properties of shape: shape, pattern, flat, curved, straight, round, hollow, solid Sort, make, build, draw, size bigger, larger, smaller, symmetrical, pattern, repeating pattern, match 2-D shape: corner, side,</p>	<p>Pre formal</p> <p>long, short, bigger, smaller, heavier, lighter, empty, full, half full, days of the week, months of the year, seasons, coins</p> <p>Semi formal</p> <p>o'clock, half past, mass, weight, volume and capacity, before and after, next, first, morning, afternoon and evening, use</p>	<p>Pre formal before, after, next, last, now, soon, early, late, quick,</p> <p>Semi formal</p> <p>Greater, lesser</p> <p>Add More Sum Total Double Half</p> <p>Formal</p>

	rectangle (including square), circle, triangle 3-D shape: face, edge, vertex, vertices, cube, pyramid, sphere, cone.	language relating to dates, day, days of the week, month/names of months, year, money, coin, penny, pence, pound, Formal short, tall, high, low, thick, thin, longer, shorter, taller, higher, full, half full, empty, holds, containers, money, coin, total, buy, morning, afternoon, evening, night, midnight, today, yesterday, tomorrow, price, cost, buy, sell, spend, spent, pay, change,	Halve Subtract Take away Difference between Equals Number bonds Number pairs Missing number Count Sort Group Set List Table Count Sort Group Set List Table
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SUBJECT: IT

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
DISCIPLINARY KNOWLEDGE	<p>Pre-formal – To attend an adult in a 1:1 situation for up to 5 seconds. To track and follow a visual stimulus moving through visual field. To carry out meaningful actions when exploring mediums.</p> <p>Functional Pre-Formal – To track moving images. To respond to cues that signal the start of an activity. To identify activities, they like and don’t like.</p>	<p>Pre-formal – To choose a sound they would like to listen to using their communication method. To know how to contribute to music making. To know they can vocalise and use instruments to tap expressively along to popular songs.</p> <p>Functional Pre-Formal – To identify activities they would like to do or have no interest in doing.</p>	<p>Pre-Formal - To make a choice of three or more real objects or photos. To approach another person, then vocalise/touch/gesture to get attention.</p> <p>Functional Pre-Formal – To attend by looking at or towards another person talking to them.</p>

	<p>Semi-formal – To know not to give name and personal details out online without checking with an adult. To name adults that they know and trust. To know to tell an adult if a stranger is talking to them online.</p> <p>Functional Semi-Formal – To interact with familiar and unfamiliar adults appropriately.</p> <p>Formal – To understand not to give personal details online if someone asks. To know how to stay SMART. To watch videos about online safety. To explain what is good online behaviour and what is not.</p> <p>Functional Formal – To know who trusted adults are. To know the difference between good and bad.</p>	<p>Semi-formal – To listen and use audio equipment to make sound. To know how to use functions on technical devices to manipulate a sound for a purpose. To use on screen symbols to navigate a program.</p> <p>Functional Semi-Formal – To communicate preferences.</p> <p>Formal – To use a recording device to record sounds and people. To use equipment to record sound and then play back to share with others. To know how to manipulate sounds on a range of devices.</p> <p>Functional Formal – To communicate their personal needs to another individual.</p>	<p>Semi-formal –To identify marked differences and similarities between themselves and others. To take part in collecting data with their friends. To look towards a graph when a teacher is talking about it.</p> <p>Functional Semi-Formal – To demonstrate understanding of an increasing number of verbal requests.</p> <p>Formal – To explore simple counting and data handling programs.</p> <p>To contribute to a simple class graph or table. To use a simple data collection programme to create a graph using data from peers.</p> <p>Functional Formal – To follow one step directions.</p>
VOCABULARY	<p>Pre-formal – track, follow, visual stimulus, meaningful</p> <p>Functional Pre-Formal – track, respond, identify</p> <p>Semi-formal – personal details, check, tell, stranger</p> <p>Functional Semi-Formal – interact, appropriate</p> <p>Formal – personal details, SMART, videos, online safety</p> <p>Functional Formal – trusted adult, good, bad</p>	<p>Pre-formal – choose, listen, contribute</p> <p>Functional Pre-Formal – identify, like, dont like</p> <p>Semi-formal – use, audio, functions, navigate</p> <p>Functional Semi-Formal – communicate</p> <p>Formal – use, recording, equipment, manipulate</p> <p>Functional Formal – communicate to another</p>	<p>Pre-formal – real objects, approach, attention</p> <p>Functional Pre-Formal – attend, talk</p> <p>Semi-formal – identify, differences, similarities, collecting data, graph</p> <p>Functional Semi-Formal – understanding</p> <p>Formal – explore, handling data, graph</p> <p>Functional Formal – follow directions</p>

SUBJECT: Science

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
DISCIPLINARY KNOWLEDGE	<p>Disciplinary Knowledge</p> <p>Explain what a force is ... understanding of. pushing, pulling,.(twisting, gravity, magnetism, friction, electric)</p> <p>Think about consequences of too much force / too little force (door will or will not close)</p> <p>Learn about / explore everyday use and value of knowing how much force is needed to e.g. open close doors, open packet of crisps, *using puppets, reading pop-up books, performing actions, threading beads, digging and lifting sand, riding bikes, weaving and playing percussion instruments. Explore twisting toys, magnets</p> <p>Know what gravity is</p> <p>Know how to record on simple charts – eg. Tally or tick in simple columned chart – gentle /little force, more force, lots of force, loads of force.</p> <p>Evaluate risk of e.g. too much force when slamming a door – not pushing peddles hard enough on a bike</p> <p>Welcome the views of others...</p> <p>Communicate efficiently to a range of audiences</p> <p>Plan and observe how far a ball travels when different amounts of forces are used - Test, Hypothesise, (guess) Explore...</p> <p>Use a range of apparatus and materials safely including measuring equipment, chosen everyday items, recording items, mark making items, graphs / charts</p> <p>Make accurate measurements and observations</p> <p>Experiment with e.g. different sized balls</p> <p>Where appropriate, collect present and analyse data</p> <p>Estimate</p> <p>Notice patterns, repetitions</p>	<p>Learn about the changes experienced in puberty</p> <p>Know that good food & nutrition give energy to all living things</p> <p>Know that not all living things thrive (<i>plants that have not been watered, living eggs that did not make it, may be an opportunity to remember friends in the special garden</i>)</p> <p>Know that the correct combination of nutrients are needed for living things to thrive (<i>identify what is needed to thrive including sunshine – what happens when we do not have these</i>)</p> <p>Know that photosynthesis relies on the sun (<i>what do students think will happen if plants do not have sunshine? Explore shades / hues of green, yellow – do they see them at different stages of plants that do not thrive?</i>)</p> <p>Know that crops and plants can spread (<i>e.g. chives, mint</i>)</p> <p>Know that humans affect eco-systems negatively (<i>e.g. plants, animals and tiny tiny animals (organisms) interacting together - if we allow too much water – will plants grow? Too many animals in one space, will they survive? Too many plants, will they grow well?</i>)</p> <p>Know that humans affect eco-systems positively (<i>ensure there is just about enough water - will plants grow?</i>)</p> <p>Know that farmers breed animals for food – <i>cows- beef, chicken, sheep– lamb / mutton, turkey</i></p>	<p>Know that electricity can be used safely for a number of purposes that will help them to enjoy everyday life.</p> <p><i>Lights / noises & bleeps to indicate on / off/ too hot/ cold.</i></p> <p><i>Switches in different places for e.g. footspa, hair dryer, hair styling items, nail drying items, shavers, hair grooming items, TV, ipads, phones, fridges, freezers, dishwashers, microwaves, ovens, automatic bins, vacuum cleaners etc</i></p> <p>Know that electricity can be dangerous if not used safely (<i>dry hands, no loose wires, not too many plugs, away from water, with a responsible adult</i>)</p> <p>Know how to safely activate electrical devices</p> <p>Know that plugs are wired with different coloured wires - -yellow and green = <i>Earth</i>, Blue = <i>Neutral</i> and Brown = <i>Live</i>.</p> <p>Know that there are colours of the wires on a plug.</p> <p>Know that we have a circulatory system.</p> <p>Know that an electrical signal helps our hearts to beat</p>

	<p>Draw conclusions about how much force is needed for everyday activities</p> <p>Know that force is an amount of energy. Know that when a ball is dropped, thrown, bounced or rolled, the force will impact on how hard it touches a surface and how far, high it may bounce or roll. Know that a force is a push or a pull. Forces change how fast an object goes and its direction.</p> <p>Know that the impact of forces can be measured e.g. a big bounce makes a ball bounce higher - or the big push of a ball makes it go higher – basketball</p> <p>Know how forces relate to everyday life</p>	<p>Know farmers intensively farm crops</p> <p>Know that science intervention aids the growth of crops and animals (<i>making a change in order to study the outcome of what has been changed – e.g free range, grass, corn fed animals, = healthier animals = better quality meat. Check quality of food – make comparisons – e.g healthy grass, dry grass – what will be better for animals to eat? </i>)</p> <p>Know the difference between water, soils and the atmosphere- (abiotic non living components) , and plants, animals and bacteria – (biotic ecosystems – living things within an ecosystem)</p>	
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KEY VOCABULARY	<p>Pre-formal – push pull twist</p> <p>Semi-formal – friction</p> <p>Formal – magnetism</p> <p>Functional – gravity - <i>because of a little something we call gravity, everything is pulled towards the ground... Including you without the force of gravity. There would be no life on earth. what is gravity - Google Search</i></p>	<p>Pre-formal- energy.</p> <p>Semi- formal- photosynthesis</p> <p>Formal eco-systems</p> <p>Functional- non living (<i>abiotic</i>) and living (<i>biotic</i>)</p>	<p>Pre-formal- Power</p> <p>Semi- formal Plug</p> <p>Formal- Electricity</p> <p>Functional Bodily functions. Cardio vascular and Circulatory.</p>


Communication and Interaction



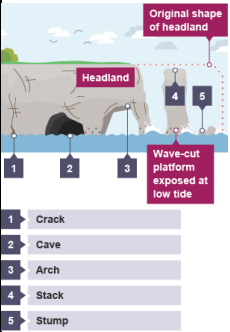

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
KNOWLEDGE	<p>Communication, Tracking, Phonics, Reading, Writing, Handwriting, Early Reading and Prerequisites for Literacy are taught through a variety of schemes appropriate to each student, such as the use of an Eye Gaze, Read Write Inc. (RWI) Fresh Start programme and See and Learn.</p> <p>Please follow sequenced plans / schemes etc for individual students identified to follow a scheme.</p> <p>Pre-formal – to continue to respond consistently to familiar voices.</p> <p>To continue to track familiar objects and people in social spaces.</p> <p>To be proactive in their interactions.</p> <p>Semi-formal-</p> <p>Speaking- To retell a simple past event in correct order.</p> <p>Listening – Is able to stop what they are doing and briefly give attention to adult speaking to them.</p> <p>Reading – To show reading like behaviour by turning the pages in the book.</p>	<p>Communication, Tracking, Phonics, Reading, Writing, Handwriting, Early Reading and Prerequisites for Literacy are taught through a variety of schemes appropriate to each student, such as the use of an Eye Gaze, Read Write Inc. (RWI) Fresh Start programme and See and Learn.</p> <p>Please follow sequenced plans / schemes etc for individual students identified to follow a scheme.</p> <p>Pre-formal – to begin to sustain concentration for short periods.</p> <p>To begin to sustain interest in mark-making for short periods.</p> <p>To manipulate objects with hands.</p> <p>Semi-formal-</p> <p>Speaking- To answer a variety of questions.</p> <p>Listening – To listen and respond appropriately to instructions</p> <p>Reading – To use finger to point to words and symbols.</p> <p>Writing – To copy some letters/letter shapes accurately.</p>	<p>Communication, Tracking, Phonics, Reading, Writing, Handwriting, Early Reading and Prerequisites for Literacy are taught through a variety of schemes appropriate to each student, such as the use of an Eye Gaze, Read Write Inc. (RWI) Fresh Start programme and See and Learn.</p> <p>Please follow sequenced plans / schemes etc for individual students identified to follow a scheme.</p> <p>Pre-formal – to continue to sustain concentration for short periods.</p> <p>To continue to sustain interest in mark-making for short periods.</p> <p>To show interest in objects.</p> <p>Semi-formal-</p> <p>Speaking- To discuss why?</p> <p>Listening – To show a response to humour</p> <p>Reading – To recognise some letters of the alphabet</p>

	<p>Writing – To make marks using a variety of media pens, pencil, paint brush, etc.</p> <p>Formal –</p> <p>Reading – To begin to learn new vocabulary, relating it explicitly to known vocabulary and understanding it with the help of context and dictionaries</p> <p>Writing - To begin to consider how their writing reflects the audiences and purposes for which it was intended</p> <p>Grammar and vocabulary – To continue to understand the differences between spoken and written language.</p> <p>Spoken English – To begin to summarise and/or build on what has been said in previous structured discussions.</p> <p>Functional – To share with others a newspaper article, video, news broadcast about a current energy related issue e.g. wind farms etc.</p>	<p>Formal –</p> <p>Reading – To continue to learn new vocabulary, relating it explicitly to known vocabulary and understanding it with the help of context and dictionaries</p> <p>Writing - To continue to consider how their writing reflects the audiences and purposes for which it was intended</p> <p>Grammar and vocabulary – To use Standard English in their own speech.</p> <p>Spoken English – To continue to summarise and/or build on what has been said in previous structured discussions.</p> <p>Functional – To make a ‘how to’ video, book for a younger cluster.</p>	<p>Writing – To copy some letters/letter shapes accurately</p> <p>Formal –</p> <p>Reading – To begin to study setting, plot, and characterisation</p> <p>Writing - To consider how their writing reflects the audiences and purposes for which it was intended</p> <p>Grammar and vocabulary – To begin to use new vocabulary and grammatical constructions from their reading and listening, within their writing</p> <p>Spoken English – To begin to use standard English confidently in a range of formal contexts, including classroom discussion</p> <p>Functional – To hold an event / story session in the library to give students the opportunity to share the story they create with others</p>
KEY VOCABULARY	<p>Pre-formal – Use and describe writing genres - piece</p> <p>Semi-formal – Use and describe writing genres - newspaper article</p> <p>Formal – Use and describe writing genres - controversy</p> <p>Functional – Use and describe writing genres – problem</p>	<p>Pre-formal – grow - verb</p> <p>Semi-formal – progress (uncountable noun)</p> <p>Formal – life process (noun or verb)</p> <p>Functional – instructional - adjective</p>	<p>Pre-formal – adventure - noun</p> <p>Semi-formal – character - noun</p> <p>Formal – plot - noun</p> <p>Functional – book collection - noun</p>

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SUBJECT: HISTORY / GEOGRAPHY

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
KNOWLEDGE	<p>Know what it is to be fair.</p> <p>Know that all people have rights to live freely, safely, food, water, exercise, fresh air, health, vote, work & earn, financial stability, share views, travel, choose lifestyles (<i>Use text, or textures found near beach, to create posters / banners to say yes to each of these – create chant e.g. water for all, yes, yes – use drums to create rhythm as they march around chosen environment, role play unfair situations – what should happen?</i>)</p> <p>Know that there are legal documents to protect all people (<i>sign make marks on own documents to say that e.g. everyone must have food and water – include rights pertinent to purple cluster</i>)</p> <p>Know how to make good choices and show fairness in range of scenarios.</p> <p>Know that coastlines can be made up of sand, rocks, plants including seaweed, pebbles, water, animals (<i>use real items to explore and create own coastlines</i>)</p> <p>Know what low energy is (e.g. small waves –)</p> <p>Know how to represent experiences of low energy waves <i>create own small waves.</i></p> <p>Know that low energy coastlines are usually near sandy beaches (outline of Britain surround with sand and name of key destinations – <i>ask families where they have visited – e.g. Devon and Cornwall.</i></p> <p>Know low energy coastlines in Britain that could be visited (e.g. Devon / Cornwall)</p> <p>Know what high energy is (e.g. larger waves)</p> <p>Know how to represent experiences of high energy waves</p>	<p>Know how a river grows as it forges through landscapes – <i>make a model river -some information can be found in this video</i></p> <p><u>Geography with Grammarsaurus - How is a river formed? (youtube.com)</u></p> <p><i>make water source, make water run downhill through different pathways, quickly, narrow pathways, wider pathways, slowly, loops, curves, erosion of mud, oxbow lakes disappearing, lower flatter water ocean, lake, flood</i></p> <p>Know what an ox-bow lake is -</p> <p>Know how an ox-bow lake is formed (the remains of a bend in a river where water stays still and stagnates)</p> <p>Know what tides are – the regular rise and fall of sea levels</p> <p>Know that tides grow and fall away from the edge of land.</p> <p>Know that high tides are not safe.</p> <p>Know how to be safe at the seaside.</p>	<p>Know what an activist is (someone who takes action to improve e.g. for clean water, to keep landscapes, to stop trains going through towns and villages,</p> <p>Know how people protest about environmental change (<i>check own environment – is it polluted? How can it improve? How can the message be shared? Role play not having enough water – no water, no washing, drinking, cleaning, growing, pool fun etc what would they like to protest about? Are the school grounds clean enough? Is there enough pool access to stay fit and healthy?</i>)</p> <p>Know where the Suez canal is – <i>know that it is the shortest link between the east and west – Asia and Africa</i></p> <div data-bbox="2318 1596 2549 1709"></div> <p><i>Know that historically men engineered the Suez canal - an artificial waterway between the east and west – Asia and Africa – Use previous knowledge to make an artificial waterway – find an appropriate spot outside to make an artificial</i></p>

	<p>Know that high energy coastlines are usually seen near rocks and cliffs.</p> <p>Know that the larger waves of high energy coastlines usually cause erosion.</p> <p>Know high energy coastlines in Britain that could be visited (e.g. Devon / Cornwall)</p> <p>Identify photographs of low energy coastlines in Britain.</p> <p>Identify photographs of high energy coastlines in Britain.</p> <p>Compare coastlines in Britain</p> <div></div> <p>The UK's best coastlines Stay In Cornwall</p>	<p>Know how the sea is affected by climate change.</p> <p>Know that the polar ice caps are melting.</p> <p>Know that this means more water in the sea.</p> <p>Know man’s affect to coastal regions (<i>how can we look after our environment?</i>)</p> <p>Know what a stack and an arch are (<i>weathering of a rock making an arch or a stack</i>); (<i>a cave becomes larger. The back breaks through and becomes an arch. The roof becomes heavy and collapses into the sea leaving a stack or stump</i>)</p> <p>Use chalk to help demonstrate erosion</p> <div></div> <p>Know where Durdle Door is (Dorset) <i>Durdle Door is probably the most famous stone arch anywhere in the world. It was created when the sea pierced through the Portland limestone around 10,000 years ago.</i></p> <div></div> <p>Recognise arches within own environments.</p> <p>Know what weathering means.</p>	<p><i>waterway ideally from one place to another – can be small scale!</i></p> <p>Know a famous female engineer</p> <p>Celebrating our women in engineering Canal & River Trust (canalrivertrust.org.uk)</p> <p>5 Famous Women Engineers That Shaped The World - ESILV Graduate School of Engineering, Paris</p> <p>Thomas Edison Biography, Early Life, Inventions, & Facts Britannica</p>
KEY VOCABULARY	<p>Pre-formal – share, beaches</p> <p>Semi-formal – fair, sandy beaches, rock beaches</p> <p>Formal – protected, high energy waves</p>	<p>Pre-formal- River Mouth</p> <p>Semi- formal- Tides</p> <p>Formal- Weathering</p>	<p>Pre-formal- unhappy</p> <p>Semi- formal- protest</p> <p>Formal- activist</p>

	Functional - Good choices coastline	Functional- Durdle Dor	Functional- engineer
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SEMH

SUBJECT: PSHE

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER <i>(Healthy lifestyles and self-awareness focus)</i>	GROWTH AND CHANGES <i>(Managing feelings and self-care, support and safety focus)</i>	LIFE IN THE ENVIRONMENT <i>(The world I live in and changing and growing focus)</i>
KNOWLEDGE	Know how to use functional objects safely. Know how to interact with trusted adults appropriately. Know what is meant by personal safety. Know and explain what is mean by ‘risky’ (something could go wrong). Know and identify situations and behaviours in and out of school including online which may not be safe. Know who trusted adults are how they can help us in risky situations. know and respond to ways of reducing risk and keeping safe in a range of environments including online. Know when and why taking risks can be positive e.g. trying something new. Know and respond to what it means to take care of their bodies and keep them safe.	Know and give examples of when we might feel strong emotions. Know ways of managing strong emotions. Know about stereotypes; how they can negatively influence behaviours and attitudes towards others; Know and identify some things we can do to support our physical and mental wellbeing. Know what unwanted physical contact means. Know when to tell someone if anyone makes us uncomfortable or worried. Know and explain what personal space means.	Know and give examples of how to stay safe at the beach, in the home, on the road, in public places (stranger danger) etc. Know and identify different living things people can care for e.g. pets. Know and show compassion for other living things e.g. wildlife, pets and identify Know the shared responsibilities we all have for taking care of other people, living things and the environment we live in. Know how everyday choices can affect the environment positively e.g. reducing, reusing, recycling and negatively e.g. single use plastic, waste, pollution.
KEY VOCABULARY	Pre-formal – safer Semi-formal – risk Formal – risky Functional – reduced risk	Strong emotion, stereotypes, behaviour, physical/ mental well-being, physical contact, personal space.	Care, compassion, dangerous,

SUBJECT: RE

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
DISCIPLINARY KNOWLEDGE	<p><i>Know that people can have different views/opinions</i></p> <p><i>Know that different religions have different ideas about the creation of the world</i></p> <p><i>Know how Christians believe the world was created</i></p> <p><i>Know how Hindus believe the world was created</i></p> <p><i>Know how Sikhs believe the world was created</i></p> <p><i>Know that we belong to a community</i></p> <p><i>Know that there are lots of different communities nationally and globally</i></p> <p><i>Know how to develop community cohesion</i></p> <p><i>Know what respect is and its importance</i></p> <p><i>Know what diversity is</i></p> <p>Pre-formal –</p> <p>Semi-formal –</p>	<p><i>Know some of the key celebrations that the focus religions celebrate (e.g. Christmas, Easter, Eid, Hanukkah) and compare these with the ones that you celebrate</i></p> <p><i>Know that a birthday is a celebration of the day you were born</i></p> <p><i>Know how focus religions celebrate birthdays and compare similarities and differences</i></p> <p><i>Know some of the key rites of passage for the focus religions e.g. Baptisms, Bar Mitzvah, Marriages, Muslim birth ceremony, Hajj (pilgrimage to Mecca)</i></p> <p><i>Know how the focus religions celebrate/mark the occasions of birth and death</i></p> <p><i>Know that people are born and people die</i></p> <p><i>Know that some religions believe in an after life</i></p> <p><i>Know that some religions believe in resurrection</i></p> <p><i>Know that some religions believe in heaven and hell</i></p> <p>Pre-formal –</p> <p>Semi-formal –</p>	<p><i>Know what traditions are</i></p> <p><i>Know some key traditions for Christians including ways in which individuals express their commitment and identity</i></p> <p><i>Know some key traditions for Buddhists including ways in which individuals express their commitment and identity</i></p> <p><i>Know how to make comparisons with personal traditions and those of the focus religions</i></p> <p><i>Know some of the key changes in religion and culture over time</i></p> <p><i>Know how to explore diversity within religion</i></p> <p><i>Know how to explore different worldviews both religious and non-religious</i></p> <p><i>Know that peoples ethical judgements can be based off their religious beliefs</i></p> <p><i>Know how and why individuals and communities express the meanings of their beliefs, traditions and values in many different forms and ways of living</i></p> <p>Pre-formal –</p>

	Formal – Functional –	Formal – Functional –	Semi-formal – Formal – Functional –
KEY VOCABULARY	Pre-formal – Different Semi-formal – Community Formal – Unique Functional – Diversity	Pre-formal – Birth / Death Semi-formal – After Life Formal – Resurrection Functional – Rites of passage	Pre-formal – Commitment Semi-formal – Tradition Formal – Religious Identity Functional – Ethical judgement

PSM

SUBJECT: ART

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
DISCIPLINARY KNOWLEDGE	<i>Know how to use ICT to experiment with different colours and patterns</i> <i>Know how to use painting programs to create a picture/poster for a purpose</i> <i>Know how to use a range of tools on an ICT art program e.g. fill, brushes in a painting package</i> <i>Know how to save their work</i> <i>Know how to go back and edit/change their work</i> <i>Know how to create a pattern using ICT thinking about colour and design</i> Pre-formal –	<i>Know how to experiment with drawing using a range of different lines, tones, forms, shapes and sizes</i> <i>Know how to experiment drawing from observation of real objects/artefacts</i> <i>Know how to communicate ideas through drawings</i> <i>Know how to draw for a specific purpose and audience e.g. create a poster for an event</i> <i>Know how colour, shape and size can have an effect on a drawing</i>	<i>Know how to make choices about what materials and techniques would work best for each specific purpose</i> <i>Know how to select the right tool for the job e.g. camera/iPad device to take a photograph</i> <i>Know the difference between landscape and portrait</i> <i>Know the difference between 3-Dimentional (3D) and 2-Dimentional (2D) artworks</i> <i>Know how to create 3D collages using a range of materials collected and joining them together using appropriate techniques</i>

	Semi-formal – Formal – Functional –	<i>Know what a still life drawing is</i> <i>Know some of the key famous still life artists throughout history e.g. Jan Davidsz de Heem, Paul Cézanne, Vincent van Gogh</i> Pre-formal – Semi-formal – Formal – Functional –	<i>Know how to use a device to take photographs from a range of perspectives/angles</i> <i>Know how to make independent creative choices about the composition of artworks created</i> Pre-formal – Semi-formal – Formal – Functional –
KEY VOCABULARY	Pre-formal – pattern Semi-formal – edit Formal – digital evaluate Functional – design	Pre-formal – shadow Semi-formal – background Formal – still life Functional – perspective	Pre-formal – photograph Semi-formal – 3D/2D Formal – landscape/portrait Functional – composition

SUBJECT: DT

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
KNOWLEDGE	Know how to use manual appliances Know how much energy is needed to e.g whip an egg / whip an egg white for a meringue Know that energy can be manual or electronic Know that manual energy usually takes longer than electronic Using own knowledge and experience, develop a recipe for an occasion Using own mode of communication, share recipe Develop menu including original recipe Prepare foods with e.g. different herbs – complete a pol – e.g. cheese toastie with origami / mint / rosemary Know how to prepare a nutritious meal Know that recipes may go wrong Know how to make necessary changes Know how to solve problems	Know how our bodies change and what nutrition we need to sustain them Know how to research ideas for a project (<i>explore plants at different stages of growth, use leaflets to gather information about growth of e.g. plants, how to grow certain fruit and vegetables, safe internet research, use DT models to show changes following research</i>)	Know how our environment makes you happy (<i>Design and make happy / xxx boxes consider shape, colours size to match items inside</i>) Know where to go to find peace (Develop peace item (e.g. flower window box, peace pebbles from environment, music tracks, photo album with positive memories...ensure it is easily accessible))

		<p>Know our inspiration for ideas might be different now compared to when we were younger (planning a meal e.g. fish fingers when younger, now may think about vegetables. Ice cream, now may consider fruit – plan healthier meals – make healthier choices)</p> <p>Know how to work as a team effectively (<i>work together on a project – e.g. making a simple model, a working model or planning a healthier meal</i>)</p> <p>Know how to predict an outcome – e.g. <i>what will happen if we....leave a carrot in a bag in a warm environment over a long period of time...</i></p> <p>Know that fresh foods spoil...<i>predict, observe, record</i></p> <p>Know how to store fresh food safely – <i>design safe effective storage for fresh food – what do they need to remain as fresh as possible? Holes, space, cold environment...</i></p>	<p>Know how to research ideas to better your favourite school environments (<i>exploration of items, environments, music, simple bird boxes for bird watching, bug hotel design</i>)</p> <p>Know how to build a project from your own plans</p> <p>Know how to evaluate your own project</p> <p>Know how to be safe working with hazardous tools</p>
KEY VOCABULARY	<p>Pre-formal – recipe</p> <p>Semi-formal – electronic</p> <p>Formal – manual</p> <p>Functional – appliances</p>	<p>Pre-formal- grow</p> <p>Semi-formal- blight (diseased – e.g. rust or mildew)</p> <p>Formal- Arable (land suitable for growing crops)</p> <p>Functional- Harvest</p>	<p>Pre-formal sunshine</p> <p>Semi-formal- flora and fauna (Flora are all the plants and fauna are all the animals – e.g. trees and birds)</p> <p>Formal facilities</p> <p>Functional – Health and Safety</p>

SUBJECT: MUSIC

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
DISCIPLINARY KNOWLEDGE	<p><i>Know that you can play music using different dynamics</i></p> <p><i>Know how to recognise the difference between loud and quiet sounds</i></p> <p><i>Know how to play a simple instrument /sing quiet and softly (piano)</i></p> <p><i>Know how to play a simple instrument/sing loudly (forte)</i></p> <p><i>Know how to copy a simple beat / song using pitch and expression</i></p> <p><i>Know how to use devices to record sounds made</i></p>	<p><i>Know that you can compose your own music</i></p> <p><i>Know that it is important to write down what you have composed so that you can remember it and so that other people can play what you have written</i></p> <p><i>Know that what you have written is called music notation and this can be presented in different ways</i></p> <p><i>Know/explore some of the ways that music can be notated e.g. sheet music, pictures</i></p>	<p><i>Know what a tuned percussion instrument is</i></p> <p><i>Know what an untuned percussion instrument is</i></p> <p><i>Know that tuned percussion instruments have set specific notes and pitches, whereas untuned do not</i></p> <p><i>Know some examples of tuned and untuned instruments and how to pay them</i></p>

	<p><i>Know how to replay sounds that have been recorded</i></p> <p><i>Know how to make music for a specific purpose</i></p> <p><i>Know the difference between the terms crescendo (getting louder) and diminuendo (getting quieter) and how to recognise this in songs</i></p> <p><i>Know how to create a crescendo and diminuendo using simple instruments/voice</i></p> <p>Pre-formal – Semi-formal – Formal – Functional –</p>	<p><i>Know how to notate music by using pictures to show different instruments and recognise when a new sound/ instrument is being added</i></p> <p><i>Know how to compose music with different sections e.g. verse, chorus</i></p> <p>Pre-formal – Semi-formal – Formal – Functional –</p>	<p><i>Know that you can use materials from the environment to create untuned instruments</i></p> <p><i>Know how to use and play percussion instruments in a set performance</i></p> <p><i>Know the difference between performing as a group and as a solo</i></p> <p><i>Know how to create tunes, beats and melodies on a range of tuned and untuned percussion instruments</i></p> <p>Pre-formal – Semi-formal – Formal – Functional –</p>
KEY VOCABULARY	Pre-formal – introduction/ending Semi-formal – forte /piano Formal – Crescendo/ diminuendo Functional – dynamics	Pre-formal – structure Semi-formal – verse, chorus Formal – music notation Functional – composition	Pre-formal – instrument Semi-formal – percussion Formal – tuned/untuned (World percussion instruments) Functional – music scores

SUBJECT: PE

Year 4	Autumn	Spring	Summer
PURPLE	ENERGY AND POWER	GROWTH AND CHANGES	LIFE IN THE ENVIRONMENT
KNOWLEDGE	<p>Know that physical activity is necessary to promote bone, muscle and heart health.</p> <p>Know that games help to develop bones, muscles and the heart.</p> <p>Know the basic rules of team games.</p> <p>Know that they can participate in team games.</p> <p>Know that they can lead games.</p> <p>Know that they can plan sports with support</p>	<p>Know that as we get older our bodies change.</p> <p>Know the importance of warming up.</p> <p>Know that teams are identified using strips.</p> <p>Know to stretch and reach for objects.</p> <p>Know simple rules.</p> <p>Know how to remain safe using equipment in PE.</p> <p>Know to cheer for your team.</p> <p>Know how to be a good loser.</p>	<p>Know that there are summer games.</p> <p>Know how to apply sun cream.</p> <p>Know how to adapt if the weather becomes inclement.</p> <p>Know how to collect PE resources.</p> <p>Know how to be safe during PE.</p> <p>Know how to shower and cleanse our bodies.</p> <p>Know how to dry bodies after showering.</p> <p>Know how to apply deodorant or personal hygiene products.</p>
KEY VOCABULARY	<p>Vocabulary</p> <p>Pre-formal – strong muscles</p> <p>Semi formal – improved skills</p> <p>Formal – lead</p> <p>Functional- organised games</p>	<p>Pre-formal- warm up</p> <p>Semi-formal- Stretch</p> <p>Formal- Team work</p> <p>Functional collaboration</p>	<p>Pre- formal- Outside games</p> <p>Semi-formal- equipment</p> <p>Formal- Hygiene</p> <p>Functional- Personal Hygiene products.</p>