Learning through faith,
we dream, believe and achieve.

St. Edmund's CofE Primary and Nursery School

Curriculum Overview

Foundation Subjects

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1. Art
2. Computing
3. Design Technology
4. Geography
5. History
6. Modern Foreign Languages (TBC)
7. Music (TBC)
8. Physical Education
9. Religious Education (TBC)
10. Science

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Art and Design curriculum Progression Map

Curriculum Thread	EYFS	KS1		KS2			
	ELG- To safely use and explore a variety of materials, tools, and techniques, experimenting with colour, design, texture, form and function.	• To use a range of materials creatively to design and make products. • To use drawing, painting and sculpture to develop and share their ideas, experiences and imagination. • To develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space. • Learn about the work of a range of artists, craft makers, and designers, describing different practices and disciplines and making links to their own work.		• To create sketch books to record their observations and use them to review and revisit ideas. • To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials(for example, pencil, charcoal, paint, clay) • Learn about great artists, architects and designers in history.			
Skill Element	**EYFS**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Artists covered during the year.		• Andy Goldsworthy (pattern, form, shape and space) • LS Lowry (Line technique) • Steven Brown (texture) • Giuseppe Arcimoldo (shape and form)	• Mark Rothko (colour Mixing) • Wassily Kandinksky- Concentric circles (colour mixing) • Gaudi Trencadis (animal sculpture) • Gary Hodges (pencil drawing, tone, texture)	• Michael Grab (stone sculpture) • Alfred Wallis (seaside scenes) • Van Gough (sunflower paintings • Georgia O'Keefe (flowers using shades and tints)	• Abigail brown (Papier Mache) • Henri Rousseau(exotic landscape) • Claude Monet (water colour) • Eric Kenning (realism/portrait work)	• Kandinsky- Gouache • South American art- Oil Pastels	• William Morris • John Singer Sargent. • Greek architecture
Drawing	• Learn to use graphic tools such as chalk, lens and pencils.	• Introduce techniques such as hatching, scribbling, stippling and blending using pencil.	• Investigate tone using pencil.	• Varied pencil grades will be introduced	• The techniques of using charcoal will be taught.	• Oil pastels will be introduced.	• Children will be expected to have learnt the skill of making an informed decision about what medium to use and why.
Painting	• Primary colours will be taught and the children will be given the opportunity to paint on different textures and surfaces.	• The children will be taught how to lighten paint. • Mixing secondary colours will be introduced.	• The use of layering and adding texture to paint will be taught. • The art of tinting colours will be introduced.	• Poster paint will be used with varied brushes and cotton buds.	• Water colour paints will be used with varied sizes of sable brushes	• Gouache paint will be used with varying thicknesses of brushes and the use of other tools to apply the paint.	• There will be a requirement that year 6 are able to make their own choice depending on the project using their background knowledge. Print making with rollers will be taught as an addition.
Sculpture (Texture and Form)	• Playdough, salt dough and magnetic sand will be used to learn basic construction techniques.	• Manipulate malleable materials by rolling, pinching, and kneading. •	• Use recyclable material as a form of construction.	• Clay will be used to form a sculpture. • Skills to shape, roll and join clay will be introduced.	• Papier Mache will be used to make a sculpture.	• Mod rock and wire will be combined in order to make a sculpture	• The art of carving will be taught.

Computing Curriculum – Key Stage 1

National Curriculum Pupils can:	Year 1	Year 2
Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. Unit 1.7 – Coding	**Algorithms and Programs** • Can they record their routes? • Do they understand forwards, backwards, up and down? • Can they put two instructions together to control a programmable toy? • Can they begin to plan and test a Bee-bot journey?	**Algorithms and Programs** • Can they predict the outcomes of a set of instructions? • Can they use right angle turns? • Can they use the repeat commands?
Create and debug simple programs. Unit 2.1 – Coding Unit 1.4 – Lego Builders	N/A	• Can they test and amend a set of instructions? • Can they write a simple program and test it?
Use logical reasoning to predict the behaviour of simple programs. Unit 1.5 – Maze Explorers Unit 2.1 – Coding Unit 2.7 – Making Music	• Can they create a simple series of instructions - left and right?	• Can they predict what the outcome of a simple program will be?
Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Unit 1.2 – Grouping & Sorting Unit 1.3 – Pictograms Unit 1.8 – Spreadsheets Unit 2.3 – Spreadsheets Unit 2.4 – Questioning Unit 2.6 – Creating Pictures	**Data Retrieving and Organising** • Can they capture images with a camera? • Can they print out a photograph from a camera with help? • Can they enter information into a template to make a graph? • Can they talk about the results shown on a graph?	**Data Retrieving and Organising** • Can they experiment with text, pictures and animation to make a simple slide show? • Can they use the shape tools to draw?
Recognise common uses of information technology beyond school. Unit 2.5 – Effective Searching Unit 1.6 – Animated Story Books Unit 1.9 – Technology Outside School Unit 2.8 – Presenting Ideas	**Communicating** • Do they recognise what an email address looks like? • Have they joined in sending a class email? • Can they use the @ key and type an email address? • Can they word process ideas using a keyboard? • Can they use the spacebar, back space, enter, shift and arrows? • Can they print out a page from the internet?	**Communicating** • Can they click links in a website? • Can they print a web page to use as a resource? • Can they find information on a website?

	E-safety in Key Stage 1	
	Knowledge & understanding	**Skills**
Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Unit 1.1 – Online Safety & Exploring Purple Mash Unit 2.2 – Online Safety	• Understand the different methods of communication (e.g. email, online forums etc). • Know you should only open email from a known source. • Know the difference between email and communication systems such as blogs and wikis. • Know that websites sometimes include pop-ups that take them away from the main site. • Know that bookmarking is a way to find safe sites again quickly. • Begin to evaluate websites and know that everything on the internet is not true. • Know that it is not always possible to copy some text and pictures from the internet. • Know that personal information should not be shared online. • Know they must tell a trusted adult immediately if anyone tries to meet them via the internet.	• Follow the school's safer internet rules. • Use the search engines agreed by the school. • Act if they find something inappropriate online or something they are unsure of (including identifying people who can help; minimising screen; online reporting using school system etc). • Use the internet for learning and communicating with others, making choices when navigating through sites. • Send and receive email as a class. • Recognise advertising on websites and learn to ignore it. • Use a password to access the secure network.

Computing Curriculum – Lower Key Stage 2

National Curriculum Pupils can:	Year 3	Year 4
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Unit 3.1 – Coding Unit 4.1 – Coding Unit 4.6 – Animations	**Algorithms and Programs** • Can they experiment with variables to control models? • Can they use 90 degree and 45 degree turns? • Can they give an on-screen robot directional instructions?	**Algorithms and Programs** • Can they make turns specifying the degrees? • Can they give an on-screen robot specific directional instructions to take them from x to y? • Can they make accurate predictions about the outcome of a program they have written?
Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Unit 3.7 – Simulations Unit 4.5 – Logo	• Can they draw a square, rectangle and other regular shapes on screen, using commands? • Can they write more complex programs?	• Can they use repeat instructions to draw regular shapes on screen, using commands? • Can they experiment with variables to control models?
Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Unit 3.8 – Graphing	**Data Retrieving and Organising** • Can they capture images with a camera? • Can they print out a photograph from a camera with help? • Can they enter information into a template to make a graph? • Can they talk about the results shown on a graph?	**Data Retrieving and Organising** • Can they experiment with text, pictures and animation to make a simple slide show? • Can they use the shape tools to draw?
Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. Unit 4.8 – Hardware Unit 4.4 – Writing for a different audience Unit 3.3 – Typing	**Communicating** • Do they recognise what an email address looks like? • Have they joined in sending a class email? • Can they use the @ key and type an email address? • Can they word process ideas using a keyboard? • Can they use the spacebar, back space, enter, shift and arrows? • Can they print out a page from the internet?	**Communicating** • Can they click links in a website? • Can they print a web page to use as a resource? • Can they find information on a website?
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Unit 4.2 – Online Safety Unit 4.7 – Effective Searching	**Using the Internet** • Can they find relevant information by browsing a menu. • Can they search for an image, copy and paste it into a document? • Can they use 'Save picture as' to save an image to the PC? • Can they copy and paste text into a document? • Do they begin to use note making skills to decide what text to copy?	**Using the Internet** • Can they use a search engine to find a specific site? • Can they use note-taking skills to decide which text to copy and paste into a document? • Can they use tabbed browsing to open two or more web pages at the same time? • Can they open a link to a new window? • Can they open a document (pdf) and view it?
Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Unit 3.6 – Branching Databases	**Databases** • Can they input data into a prepared database? • Can they sort and search a database to answer simple questions? • Can they use a branching database?	**Databases** • Can they input data into a prepared database? • Can they sort and search a database to answer simple questions? • Do they recognise what a spread sheet is? • Can they use the terms cells, rows and columns? • Can they enter data, highlight it and make bar charts?

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Unit 4.3 – Spreadsheets Unit 3.3 – Spreadsheets	**Presentation** • Can they create a presentation that moves from slide to slide and is aimed at a specific audience? • Can they combine text, images and sounds and show awareness of audience? • Do they know ow to manipulate text, underline text, centre text, change font and size and save text to a folder?	**Presentation** • Can they create a lengthy presentation that moves from slide to slide and is aimed at a specific audience? • Can they insert sound recordings into a multi-media presentation? • Do they know how to manipulate text, underline text, centre text, change font and size and save text to a folder?
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Unit 3.2 – Online Safety Unit 3.5 – Email Unit 4.2 – Online Safety	**E-safety in Lower Key Stage 2** **Knowledge & understanding** • Understand the need for rules to keep them safe when exchanging learning and ideas online. • Recognise that information on the internet may not be accurate or reliable and may be used for boas, manipulation or persuasion. • Understand that the internet contains fact, fiction and opinion and begin to distinguish between them. • Use strategies to verify information, e.g. cross-checking. • Understand the need for caution when using an internet search for images and what to do if they find an unsuitable image. • Understand that copyright exists on most digital images, video and recorded music. • Understand the need to keep personal information and passwords private. • Understand that if they make personal information available online it may be seen and used by others. • Know how to respond if asked for personal information or feel unsafe about content of a message. • Recognise that cyber bullying is unacceptable and will be sanctioned in line with the school's policy. • Know how to report an incident of cyber bullying. • Know difference between online communication tools used in school and those used at home. • Understand the need to develop an alias for some public online use. • Understand that the outcome of internet searches at home may be different than at school.	**Skills** • Follow the school's safer internet rules. • Recognise the difference between the work of others which has been copied (plagiarism) and re-structuring and re-presenting materials in ways which are unique and new. • Begin to identify when emails should not be opened and when an attachment may not be safe. • Explain how to use email safely. • Use different search engines

Computing Curriculum – Upper Key Stage 2

National Curriculum Pupils can:	Year 5	Year 6
Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Unit 5.1 – Coding Unit 6.1 – Coding	**Algorithms and Programs** • Can they use an ICT program to control an external device that is electrical and/or mechanical? • Can they use ICT to measure sound/light/temperate with sensors? • Can they explore 'What is' questions by playing adventure or quest games?	**Algorithms and Programs** • Can they explain how an algorithm works? • Can they detect errors in a program and correct them? • Can they check and refine a series of instructions?
Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Unit 6.8 – Understanding Binary Unit 5.5 – Game Creator Unit 6.5 – Text Adventure	• Can they combine sequences of instructions and procedures to turn devices on or off? • Do they understand input and output? • Can they write programs that have sequences and repetitions?	• Can they use an ICT program to control a number of events for an external device? • Can they use ICT to measure sound, light or temperature using sensors and interpret the data? • Can they explore 'what if' questions by planning different scenarios for controlled devices? • Can they use input from sensors to trigger events?
Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Unit 6.6 – Networks	**Data Retrieving and Organising** • Can they listen to streaming audio such as online radio? • Can they download and listen to podcasts? • Can they produce and upload a podcast? • Can they manipulate sounds using Audacity? • Can they select music from open sources and incorporate it into multimedia presentations? • Can they work on simple film editing?	**Data Retrieving and Organising** • Can they explore the menu options and experiment with images (colour effects, options, snap to grid, grid settings etc.)? • Can they add special effects to alter the appearance of a graphic? • Can they 'save as' gif or jpeg. wherever possible to make the file size smaller (for emailing or downloading)? • Can they make an information poster using their graphics skills?
Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; & the opportunities they offer for communication and collaboration. Unit 4.8 – Hardware Unit 4.4 – Writing for a different audience Unit 3.3 – Typing	**Communicating** • Can they use instant messaging to communicate with the class? • Can they conduct a video chat with someone elsewhere in the school or in another school? • Can they use the word count tool to check the length of a document? • Can they use bullets and numbering tools?	**Communicating** • Can they confidently choose the correct page set up option when creating a document? • Can they confidently use text formatting tools, including heading and body text? • Can they use the 'hanging indent' tool to help format work where appropriate (e.g. a play script)?
Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Unit 6.4 – Blogging	**Using the Internet** • Can they use a search engine using keyword searches? • Can they compare the results of different searches? • Can they decide which sections are appropriate to copy and paste from at least two web pages? • Can they save stored information following simple lines of enquiry? • Can they download a document and save it to the computer?	**Using the Internet** • Can they contribute to discussions online? • Can they use a search engine using keyword searches? • Can they use complex searches using such as '+' 'OR' "Find the phrase in inverted commas"?

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Unit 5.3 – Spreadsheets Unit 5.4 – Databases Unit 6.3 – Spreadsheets	**Databases** • Can they create a formula in a spreadsheet and then check for accuracy and plausibility? • Can they search databases for information using symbols such as = > or <? • Can they create databases planning the fields, rows and columns? • Can they create graphs and tables to be copied and pasted into other documents?	**Databases** • Can they collect live data using data logging equipment? • Can they identify data error, patterns and sequences? • Can they use the formulae bar to explore mathematical scenarios? • Can they create their own database and present information from it?
Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Unit 6.7 – Quizzing Unit 5.7 – Concept Maps Unit 5.6 – 3D Modelling	**Presentation** • Can they use a range of presentation applications? • Do they consider audience when editing a simple film? • Do they know how to prepare and then present a simple film? • Can they use ICT to record sounds and capture both still and video images? • Can they make a home page for a website that contains links to other pages? • Can they capture sounds, images and video?	**Presentation** • Can they present a film for a specific audience and then adapt same film for a different audience? • Can they create a sophisticated multimedia presentation?
Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Unit 5.2 – Online Safety Unit 3.5 – Email Unit 6.2 – Online Safety	**E-safety in Upper Key Stage 2** **Knowledge & understanding** • Discuss the positive and negative impacts of the use of ICT in their own lives and those of their peers and family. • Understand the potential risk of providing personal information online. • Recognise why people may publish content that is not accurate and understand the need to be critical evaluators of content. • Understand that some websites and/or pop-ups have commercial interests that may affect the way the information is presented. • Recognise the potential risks of using internet communication tools and understand how to minimise those risks (including scams and phishing). • Understand that some material on the internet is copyrighted and may not be copied or downloaded. • Understand that some messages may be malicious and know how to deal with this. • Understand that online environments have security settings, which can be altered, to protect users. • Understand the benefits of developing a 'nickname' for online use. • Understand that some malicious adults may use various techniques to make contact and elicit personal information. • Know that it is unsafe to arrange to meet unknown people online. • Know how to report any suspicions. • Understand they should not publish other people's pictures or tag them on the internet without permission. • Know that content put online is extremely difficult to remove. • Know what to do if they discover something malicious or inappropriate.	**Skills** • Follow the school's safer internet rules. • Make safe choices about use of technology. • Use technology in ways which minimises risk, e.g. responsible use of online discussions etc. • Create strong passwords and manage them so that they remain strong. • Independently, and with regard for e-safety, select and use appropriate communication tools to solve problems by collaborating and communicating with others within and beyond school. • Competently use the internet as a search tool. • Reference information sources. • Use appropriate strategies for finding, critically evaluating, validating and verifying information, e.g. using different keywords, skim reading to check relevance of information, cross checking with different websites or other not ICT resources. • Use knowledge of the meaning of different domain names and common website extensions (e.g. .co.uk; .com; .ac; .sch; .org; .gov; .net) to support validation of information.

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Design and Technology Curriculum Overview

Curriculum Thread	EYFS	KS1	Lower KS2	Upper KS2
	KUW Technology • To recognise a range of technology is used in places such as homes and schools. • Select and use technology for a particular purpose **Expressive arts and Design** **Exploring and using media and materials** • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function **Being imaginative** • Use what they have learnt about media and materials in original ways, thinking about uses and purposes. • Represent their own ideas, thoughts and feelings through design and technology. **Physical Development** **Health and self-care** • Understand the importance of a healthy diet • Talk about ways to keep healthy and safe.	**Design** • Design purposeful, functional, appealing products for themselves and other users based on design criteria • Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology **Make** • Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] • Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics **Evaluate** • Explore and evaluate a range of existing products • Evaluate their ideas and products against design criteria **Technical knowledge** • Build structures, exploring how they can be made stronger, stiffer and more stable • Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. **Cooking and nutrition** • Use the basic principles of a healthy and varied diet to prepare dishes • Understand where food comes from.	**Design** • Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** • Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately • Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities **Evaluate** • Investigate and analyse a range of existing products • Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work • Understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** • Apply their understanding of how to strengthen, stiffen and reinforce more complex structures • Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] • Apply their understanding of computing to program, monitor and control their products. **Cooking and nutrition** • Understand and apply the principles of a healthy and varied diet • Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	

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Skill Element	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working with tools, equipment, materials and components to make quality products	• Investigate simple hinges, wheels and axels. • Begin to use scissors to cut curved and straight edges. • Use hold punches to punch holes.	• Begin to build structures and explore how to make them stronger and more stable. • Explore and use mechanisms such as sliders, wheels and axels.	• Begin to measure and cut with accuracy. • Join and combine materials to make a pop-up card. • Use basic sewing techniques.	• Design and make a simple garment-linked to the stone age topic. • Create and use simple gears.	• Reinforce a 3D framework. • Create a more complex pop-up card using levers. • Include a circuit in a project where light is incorporated.	• Use an electrical circuit within a project to move a cam or pulley system. • Make a prototype of a project beforehand.	• Use sewing and stitching techniques. • Use a craft knife, cutting mat and safety ruler under close supervision.
Food and Nutrition	• Explore fruit and vegetables. • Weigh items using non-statutory measurements.	• Explore common food sources • Learn cutting, peeling and grating skills. •	• Start to understand where food comes from eg grown on a farm or caught from the sea. • Prepare a simple dish safely and hygienically without a heat source.	• Prepare a simple sweet dish safely and hygienically with a heat source. • Learn, mixing, kneading and baking skills. •	• Learn how to slice food safely. • Produce a savoury dish using a heat source.	• Start to measure food items using standard measurements. • Produce a savoury dish using a heat source but focus on the different substances that it contains, eg the nutrients and fibre content.	• Plan and make a healthy and affordable three course meal.

Geography: Foundation and Key Stage 1

National Curriculum Subject Content	30-50 months	40-60 months/ELG	Year 1	Year 2
Location knowledge *Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas.* *Name and locate the world's seven continents and five oceans.*	Comment and asks questions about aspects of their familiar word such as the place where they live. *house, family, shop, park*	Talk about the features of their own immediate environment. *house, home, town, road, path*	Know the names of the four countries that make up the UK and name the three main seas that surround the UK Know the name of and locate the four capital cities of England, Wales, Scotland and Northern Ireland *London, Edinburgh, Belfast, Cardiff, England, Northern Ireland, Scotland, Wales, North Sea, English Channel, Irish Sea, United Kingdom, country*	Know the names of and locate the seven continents of the world Know the names of and locate the five oceans of the world *North America, South America, Asia, Australasia, Antarctica, Europe, Africa, Atlantic, Pacific, Southern, Indian, Arctic, continent, ocean*
Place knowledge *Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country.*	Comment and ask questions about aspects of their familiar world such as the place where they live or the natural world *world, home, school, shop, church, house*	Know about similarities and differences in relation to places. Talk about how environments might vary from one another *town, road, flat, hill, journey, forest, cave, woods, seaside, farm, beach, sea, rock pool*	Know the main geographical similarities and differences between a place in England and that of a small place in a non-European country. What makes up a town/village? Different types of houses. *beach, cliff, coast, sea, ocean, city, factory, office, port, harbour, detached, semi-detached, terrace*	Know the main geographical similarities and differences between their own locality and that of a city in a non-European country (Kenya) *city, factory, plains, savanna, desert, valley, lake, river, mount, grassland*
Human and physical geography *Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles.* *Use basic geographical vocabulary to refer to: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather* *city, town, village, factory, farm, house, office, port, harbour and shop.*	To comment and/or ask questions about the daily weather. *sun, rain, frost, snow, wind, fog*	To know which type of clothing is appropriate to suit the changing weather. To know and observe seasonal changes. *spring, summer, autumn, winter, hot, cold, waterproof*	Know which the hottest and coldest season is in the UK. Know and recognise main weather symbols. *season, weather, climate, symbol, forecast, human features, physical features* Identify the following physical features: *forest, hill, mountain, town, village*	Explain some of the advantages and disadvantages of living in a city, town or village. Know where the equator, North Pole and South Pole are on a globe. Know features of hot and cold places in the world *advantage, disadvantage, river, soil, valley, farm, vegetation* *Equator, Arctic, Antarctic, North Pole, South Pole, human features, physical features,*
Geographical skills and fieldwork *Use world maps, atlases and globes.* *Use simple compass directions.* *Use aerial photos, construct simple maps.* *Undertake simple fieldwork within school locality.*		Make observations and explain why some things might occur, and talk about changes. *time, seasons, busy, quiet, pollution*	Know their address, including postcode. Name basic human and physical features on aerial photographs. Know how to construct a simple map with a key. *postcode, globe, map, atlas, key, left, right, below, next, near, aerial*	Know which is N, E, S and W on a compass Know and use the terminologies: left and right; below, next to, near, far *aerial, compass, north, south, east, west, key, left, right, below, next to, near, far, direction*

Geography: Key Stage 2

National Curriculum Subject Content	Year 3	Year 4	Year 5	Year 6
Location knowledge *Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.* *Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time.* *Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).*	Name and locate coastal cities in the UK and explore their features. Know the names of and locate at least eight European countries. Know the names of four countries from the southern and four from the northern hemisphere. *London, Edinburgh, Cardiff, Belfast, England, Scotland, Wales, Northern Ireland, United Kingdom, coast, cliff, beach, pier, river, sea, town, city, village, ocean, port, harbour, coastline, shoreline bridge, field, forest, hills, lake, mountain, path, pond, shop, factory, valley, farm*	Know the names of and locate at least eight counties and at least six cities in England. Know the names of and locate at least eight major capital cities across the world. Know where the main mountain regions are in the UK. Know, name and locate the main rivers in the UK. *longitude, latitude, hemisphere, time zone, location, equator, tropics, meridian, Greenwich*	Know the names of a number of European capitals. Know the names of, and locate, a number of South American countries. Know where the equator, Tropic of Cancer, Tropic of Capricorn and the Greenwich Meridian are on a world map. Know what is meant by the term 'tropics'. Know about time zones and work out differences. *capital city, South America, equator, tropic, time zone, Greenwich meridian,*	Know the names of, and locate, a number of North American countries. *USA, Mexico, Canada, Guatemala, Cuba, Haiti, Dominican Republic, Honduras, El Salvador, Panama, Jamaica*
Place knowledge *Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.*	Know key differences between the UK coastline and our local area.	Know at least five differences between living in the UK and a European country. *culture, food, environment, habitat, economy*	Know key differences between living in the UK and in a country in South America.	Know key differences between living in the UK and in a country in North America. *tourist, attraction, physical feature, human feature, man-made, rainfall, temperature, climate zone, landscape, language, population, currency*
Human and physical geography *Describe and understand key aspects of:* • *physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.* • *human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.*	Know how the disposal of waste, particularly plastics, affects our oceans and seas. Explain the features of the water cycle. *disposal, recycling, waste, evaporation, condensation, precipitation*	Know what is meant by biomes and what are the features of a specific biome Label layers of a rainforest and know what deforestation is. Label the different parts of a volcano. Know how the effect and importance of recycling. *Reuse, recycle, reduce, refuse, repurpose, climate, habitat, temperature, environment*	Know main human and physical differences between the UK and South American countries. Know the name of and locate a number of the world's longest rivers. Know the names of a number of the world's highest mountains. Know why pollution and climate change are important. *Climate, pollution, temperature rainfall*	Know and label the main features of a river. Know why most cities are located by a river. Know what causes an earthquake. *source, upper course, middle course, lower course, waterfall, flow, rapids, channel, valley, river, stream, tributary, oxbow lake, confluence, meander, erosion, deposition, floodplain, delta, estuary, mouth, evaporation, precipitation*
Geographical skills and fieldwork *Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.* *Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world. Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.*	Use maps to locate European countries and capitals. Know and name the eight points of a compass. Use fieldwork to observe and record physical features in the local area. *North, East, South, West*	Use maps and globes to locate the equator, the Tropics of Cancer and Capricorn and the Greenwich Meridian. Know how to plan a journey within the UK, using a road map.	Know how to use graphs to record features such as temperature or rainfall across the world. Know how to use four-figure grid references. *Four- figure grid reference*	Use Google Earth to locate a country or place of interest and to follow the journey of rivers, etc. Know what most of the ordnance survey symbols stand for. Know how to use six-figure grid references.

History: Foundation and Key Stage 1

National Curriculum Subject Content	30-50 months	40-60 months/ELG	Year 1	Year 2
Within living memory *changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life*	Remember and talk about significant events in their own experience. Recognise and describe special times or events for family or friends *family, friend, time, special, birthday, party*	Talk about past and present events in their own lives and in the lives of family members. *present, past, change, life, old, new, now, then, celebrations* Know about similarities and differences between families, communities and traditions.	Know how they have changed since they were born. Know that homes of the past were different to their own. Know that some objects belonged to the past. Know what a number of older objects were used for. *similarity, difference, artefact, timeline, chronological, period, living memory*	Know how the seaside is different to the way it used to be a long time ago. Explain how their local area was different in the past. Give examples of things that are different in their life from that of their grandparents when they were young. Organise a number of artefacts by age. Know the main differences between their homes and those of the past (all using primary and secondary sources).
Beyond living memory *events beyond living memory that are significant nationally or globally [for example, the Great Fire of London, the first aeroplane flight or events commemorated through festivals or anniversaries]*			Know that Remembrance Day recognises events which happened beyond living memory and changed the face of Britain. Recognise that we celebrate certain events, such as bonfire night, because of what happened many years ago. *beyond living memory*	Know about an event or events that happened long ago, even before their grandparents were born (Great Fire of London). Know what we use today instead of a number of older given artefacts. Know that children's lives today are different to those of children a long time ago. *event, source, memory, traditional*
Lives of significant people *the lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods*			Name a famous person from the past and explain why they are famous (George Stephenson, The Wright Brothers and Grace Darling). *famous, national, significant, achievement*	Know about a famous person from the UK and explain why they are famous (David Attenborough, Guy Fawkes, Samuel Pepys, Mary Anning) *international, global, cause, consequence, eye witness, influence, conservation, wildlife, discovery, environment, palaeontology, Tower of London, diary, sources, architect, cathedral, King Charles II, fire brigade, flammable,*
Local history *significant historical events, people and places in their own locality*			Know the name of a famous person, or a famous place, close to where they live. *local, importance*	Differentiate between things that were here 100 years ago and things that were not (using primary and secondary sources). *viewpoint, primary, secondary, evidence*

History: Key Stage 2

National Curriculum Content	Year 3	Year 4	Year 5	Year 6
Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time and develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources.	Know about, and name, some of the advanced societies that were in the world around 3000 years ago. Know about the key features of Ancient Egypt. Know how Britain changed between the beginning of the stone age and the iron age. Know the main differences between the stone, bronze and iron ages. Know what is meant by 'hunter-gatherers'. *Ancient Egypt, Egyptian, pharaoh, pyramid, mummy, canopic jar, Tutankhamun, sarcophagus, tomb, hieroglyphics, scarab, Nile, mammoth, jewellery, cave, spear, painting, tools, handaxe, farming, hunter-gatherer, pottery, bronze, iron, hammerstone, nomad*	Know how Britain changed from the iron age to the end of the Roman occupation. Know how the Roman occupation of Britain helped to advance British society. Know how there was resistance to the Roman occupation and know about Boudica. Know about at least one famous Roman emperor. Know about a period in history that has strong connections to their locality and understand the issues associated with the period. Know about the impact the Mayan civilization had on the world. Know why they were considered an advanced society in relation to that period of time in Europe. *past, present, Roman, chariot, Pompeii, empire, colosseum, villa, Rome, emperor, toga, shield, mosaic*	Know about a theme in British history which extends beyond 1066 (World War 2) and explain why this was important in relation to British history. Know how Britain changed between the end of the Roman occupation and 1066. Know about how the Anglo-Saxons attempted to bring about law and order into the country. Know that during the Anglo-Saxon period Britain was divided into many kingdoms. Know that the way the kingdoms were divided led to the creation of some of our county boundaries today. Use a time line to show when the Anglo-Saxons were in England. Know where the Vikings originated from and show this on a map. Know that the Vikings and Anglo-Saxons were often in conflict. Know why the Vikings frequently won battles with the Anglo-Saxons. *Adolf Hitler, Winston Churchill, Neville Chamberlain, Axis, Allied, blitzkrieg, blitz, Nazi, concentration camp, D-Day, Fuhrer, holocaust, Luftwaffe, RAF, air raid, bomb, spitfire, hurricane Angles, Saxons, Jutes, mead, rune, thatch, wattle-and-daub, Lindisfarne monk, farmer, warrior,illumination, manuscript, Christianity, longboat, longhouse, chieftain, berserker, feast, raid, trade, pagan, Danelaw, Asgard, chainmail, Valhalla*	Know how to place historical events and people from the past societies and periods in a chronological framework. Know how Britain has had a major influence on the world. Know about a period of history that has strong connections to their locality and understand the issues associated with the period (Local Mining Industry). Know how the lives of wealthy people were different from the lives of poorer people during this time (Victorians). Know some of the main characteristics of the Athenians and the Spartans. Know about the influence the gods had on Ancient Greece. Know at least five sports from the Ancient Greek Olympics. *stained glass, Great Exhibition, Crystal Palace, dolly & washtub, breeches, the cane, a slate, inkwell, orphan, bonnet, sampler, William Morris, workhouse, carpet beater, gruel, inventions, inventors, industrial revolution, mine shaft, coal, pit ponies* *winding house, conveyor belt, yard stick, safety lamp, hurrier, trapper,* *royal commission, chronological order* *timeline, source of evidence.* *Athens, Sparta, Olympic games, democracy, acropolis, city-state, Parthenon, marathon, citizen, philosopher, alphabet, tragedy, agora, phalanx, aristocrat, mythology, column, hoplite, peninsula, oracle*

Physical Education – Curriculum Overview						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	**Football** -Kicking a ball -Moving and stopping safely **Cricket** *(provided by Chance to Shine)* -Hitting a ball with a bat -Rolling a piece of equipment -Catching with both hands -Throwing underarm	**Dance** -move to music -copy moves -join moves to make short dance **Cricket** *(provided by Chance to Shine)*	**Gymnastics** -curl, stretch, relax -different travels, rolls, balances -body control in travel and balance	**Boccia** -underarm throws -catch with 2 hands -rolling	**Tennis** -hit ball with bat -catching with both hands	**Athletics** -move and stop safely -running in one direction -underarm throwing towards a target -jumping – 2 foot to 2 foot -Sports day practice
Year 2	**Football** -kicking in different ways -use kicking in a game -staying in a zone during a game -deciding where the best place to be is in a game **Cricket** *(provided by Chance to Shine)* -throwing underarm and overarm -using hitting in a game -following the rules of a game	**Dance** -change speed, level, direction -dancing imaginatively -control & co-ordination -making sequences -showing a mood or feeling **Cricket** (provided by Chance to Shine)	**Gymnastics** -controlled movements -plan and show sequences -following a set of 'rules' to make a sequence -individual and paired sequences	**Dodgeball** -staying in a zone -use throwing and rolling in a game -positional play	**Tennis** -hit ball with bat in a game	**Athletics** -running safely in different directions -different throws towards a target -jumping 1 foot to 2 foot -Sports day practice

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	**Invasion - Tag rugby** -throw & catch under limited pressure -aware of space -follow rules -keeping possession -use 1 tactic	**Dance** -improvise freely- ideas into movement -paired & small groups -repeat, remember, perform	**Gymnastics** -using own ideas in response to a stimulus -adapt sequences for different apparatus -compare & contrast sequences	**Ball games (basketball)** -throw & catch under limited pressure -aware of space -possession	**Orienteering** -follow a map in school grounds -use clues	**Athletics** -run at different speeds -link running & jumping -relays -throw variety of objects
Year 4	**Invasion -Tag rugby** -keeping possession -throw and catch accurately under pressure -movement when not in possession -varying tactics	**Dance** -lead groups -use dance to communicate ideas -refining movements -fluency	**Gymnastics** -control -include change of speed, direction, range of shapes -follow set of rules -paired sequence with 3 phases **Swimming**	**Striking and fielding (cricket)** -catch with one hand -throw & catch accurately -hit a ball with control **Swimming**	**Orienteering** -following maps in familiar context -time limits	**Athletics** -long distance running -short sprints -throw in different ways -hitting targets -different jumps
Year 5	**Football** -gain possession as a team -pass in different ways -tactics for attacking & defending -pass, dribble, shoot	**Dance** -compose own dances in imaginative ways -perform expressively -controlled movements -clarity, fluency, consistency, accuracy	**Gymnastics** -complex or extended sequences -combine action, balance & shape -consistency **Swimming**	**Striking and fielding (tennis/rounders)** -forehand and backhand -fielding **Swimming**	**Orienteering** -follow maps in an unknown location -clues and compass -change routes if there's a problem -change plans	**Athletics** -control in take off and landing -throw with accuracy -combine running & jumping -follow specific rules
Year 6	**Team games (basketball / netball)** -explain complicated rules -make team plans and communicate it -lead others	**Dance** -develop imaginative dances in a specific style -choose own music & style	**Gymnastics** -combine their work with that of others -link sequences with timings	**Team games (hockey)** -explain complicated rules -make team plans and communicate it -lead others	**Orienteering** -plan a route and clues for someone else -take into account of safety and danger	**Athletics** -stamina -use skills in different situations

Science Curriculum – Key Stage 1		
Working Scientifically	**Year 1**	**Year 2**
Observing Closely	• Can they talk about what they see, touch, smell, hear or taste? • Can they use simple equipment to help them make observations?	• Can they use see, touch, smell, hear or taste to help them answer questions? • Can they use some science words to describe what they have seen and measured? • Can they compare several things?
Performing Tests	• Can they perform a simple test? • Can they tell other people about what they have done?	• Can they carry out a simple fair test? • Can they explain why it might not be fair to compare two things? • Can they say whether things happened as they expected? • Can they suggest how to find things out? • Can they use prompts to find things out?
Identifying and Classifying	• Can they identify and classify things they observe? • Can they think of some questions to ask? • Can they answer some scientific questions? • Can they give a simple reason for their answers? • Can they explain what they have found out?	• Can they organise things into groups? • Can they find simple patterns (or associations)? • Can they identify animals and plants by a specific criteria, e.g, lay eggs or not; have feathers or not?
Recording Findings	• Can they show their work using pictures, labels and captions? • Can they record their finding using standard units? • Can they put some information in a chart or table?	• Can they use (text, diagrams, pictures, charts, tables)to record their observations? • Can they measure using simple equipment?
Breadth of Study	**Year 1**	**Year 2**
Everyday Materials	**Everyday materials (classifying and grouping)** • Can they describe materials using their senses? • Can they describe materials using their senses, using specific scientific words? • Can they explain what material objects are made from? • Can they explain why a material might be useful for a specific job? • Can they name some different materials? • Can they sort materials into groups by a given criteria?	**Classifying and grouping materials** • Can they distinguish between an object and the material from which it is made? • Can they identify and name a range of everyday materials? (wood, plastic, metal, water, rock) • Can they describe the simple physical properties of a variety of everyday materials? • Can they compare and classify a variety of materials based on their simple physical properties? **Changing materials** • Can they explore how the shapes of solid objects can be changed? (squashing, bending, twisting, stretching) • Can they find out about people who developed useful new materials? (Dunlop, MacKintosh, MacAdam) • Can they identify and compare the uses of a range of everyday materials? (wood, metal, plastic, glass, brick/rock, paper/cardboard) • Can they explain how things move on different surfaces?

Life Processes and Living Things	**Animals, including humans** • Can they point out some of the differences between different animals? • Can they sort photographs of living things and non-living things? • Can they classify common animals? (birds, fish, amphibians, reptiles, mammals, invertebrates) • Can they describe how an animal is suited to its environment? Can they name the parts of the human body that they can see? • Can they identify the main parts of the human body and link them to their senses? • Can they name the parts of an animal's body? • Can they name a range of domestic animals? • Can they classify animals by what they eat? (carnivore, herbivore, omnivore) • Can they compare the bodies of different animals? **Plants** • Can they name the petals, stem, leaf and root of a plant? • Can they identify and name a range of common plants and trees? • Can they recognise deciduous and evergreen trees? **Variation and classification** • Can they describe the parts of a plant (roots, stem, leaves, flowers)? Can they sort some plants by size? • Can they sort some animals by body covering, e.g, scales, fur and skin?	**All living things** • Can they match certain living things to the habitats they are found in? • Can they explain the differences between living and non-living things? • Can they describe some of the life processes common to plants and animals, including humans? • Can they decide whether something is living, dead or non-living? • Can they describe how a habitat provides for the basic needs of things living there? • Can they describe a range of different habitats? • Can they describe how plants and animals are suited to their habitat? **Animals, including humans** • Can they describe what animals need to survive? • Can they explain that animals grow and reproduce? • Can they explain why animals have offspring? • Can they describe the life cycle of some living things? (e.g. egg, chick, chicken) • Can they explain the basic needs of animals, including humans? • Can they describe why exercise and a balanced diet are important for humans? **Plants** • Can they describe what plants need to survive? • Can they describe how seeds and bulbs grow into plants? • Can they describe what a plant needs to grow and stay healthy? • Can they explain that plants grow and reproduce? **Variation and classification** • Can they sort living things into groups and say why they sorted them in that way? • Can they compare how plants grow in different conditions by making measurements? • Can they identify and compare a variety of plants and animals found in different habitats and microhabitats? • Can they collect weather data about a local habitat and use it to explain the plants and animals they will find there? • Can they explain how animals get their food and draw a simple food chain?
Physical Processes	**Electricity** • Can they identify everyday appliances which use electricity? **Movement** • Can they explain how solid shapes can be changed by squashing, bending, twisting and stretching? **Light** • Can they recognise that electricity is an important source of light? Can they describe and show how to make something move, e.g. push and pull? **The Earth and beyond** • Do they know that the sun lights up the Earth? • Can they stay safe when observing the sun? • Can they describe how the sun moves across the sky?	**Electricity** • Can they explain how bulbs work in an electrical circuit? **Sound** • Can they describe different ways of making sound? • Can they explain why a sound is louder the closer they are to the source? **Light** • Can they compare the brightness and colour of lights? • Can they explain what dark is; using words like shadow? • Can they explain why their shadow changes during the day?

Science Curriculum – Key Stage 2				
Working Scientifically	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Planning	• Can they use different ideas and suggest how to find something out? • Can they make and record a prediction before testing? • Can they plan a fair test and explain why it was fair? • Can they set up a simple fair test to make comparisons? • Can they explain why they need to collect information to answer a question?	• Can they set up a simple fair test to make comparisons? • Can they plan a fair test and isolate variables and explain why it was fair and explain which variables have been isolated? • Can they suggest improvements and predictions? • Can they decide which information needs to be collected and decide which is the best way to collect it? • Can they use their findings to draw a simple conclusion?	• Can they plan and carry out an investigation by controlling variables fairly and accurately? • Can they make a prediction with reasons? • Can they use test results to make further predictions and set up further comparative tests? • Can they present a report of their findings through writing, display and presentation?	• Can they explore different ways to test an idea and choose the best way, and give reasons? • Can they vary one factor whilst keeping the others the same in an experiment? Can they explain why they do this? • Can they plan and carry out an investigation by controlling variables fairly and accurately? • Can they make a prediction with reasons? • Can they use information to help make a prediction? • Can they use test results to make further predictions and set up further comparative tests? • Can they explain (in simple terms) a scientific idea and what evidence supports it? • Can they present a report of their findings through writing, display and presentation?
Obtaining and Presenting Evidence	• Can they measure using different equipment and units of measure? • Can they record their observations in different ways? (labelled diagrams, charts etc) • Can they describe what they have found using scientific words? • Can they make accurate measurements using standard units?	• Can they find any patterns in their evidence or measurements? • Can they make a prediction based on something they have found out? • Can they record and present what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?	• Can they take measurements using a range of scientific equipment with increasing accuracy and precision? • Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models?	• Can they explain why they have chosen specific equipment? (incl ICT based equipment) • Can they decide which units of measurement they need to use? • Can they explain why a measurement needs to be repeated? • Can they record their measurements in different ways? (incl bar charts, tables and line graphs) • Can they take measurements using a range of scientific equipment with increasing accuracy and precision?
Considering Evidence and Evaluating	• Can they explain what they have found out and use their measurements to say whether it helps to answer their question? • Can they use a range of equipment (including a data-logger) in a simple test?	• Can they find any patterns in their evidence or measurements? • Can they make a prediction based on something they have found out? • Can they record and present what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?	• Can they report findings from investigations through written explanations and conclusions? • Can they use a graph to answer scientific questions?	• Can they find a pattern from their data and explain what it shows? • Can they use a graph to answer scientific questions? • Can they link what they have found out to other science? • Can they suggest how to improve their work and say why they think this? • Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models? • Can they report findings from investigations through written explanations and conclusions?

Breadth of Study	Year 3	Year 4	Year 5	Year 6
Life Processes and Living Things	**Animals, including humans** • Can they explain the importance of a nutritious balanced diet? • Can they describe how nutrients, water and oxygen are transported within animals and humans? • Can they describe and explain the skeletal system of a human? • Can they describe and explain the muscular system of a human? **Plants** • Can they identify and describe the functions of different parts of plants? (roots, stem, leaves and flowers) • Can they identify what a plants needs for life and growth? • Can they describe the ways in which nutrients, water and oxygen are transported within plants? • Can they explain how the needs and functions of plant parts vary from plant to plant e.g. insect and wind pollinated plants? • Can they investigate the way in which water is transported within plants?	**Animals, including humans** • Can they identify and name the basic parts of the human digestive system? • Can they describe the function of the organs of the human digestive system? • Can they identify the simple function of different types of human teeth? • Can they compare the teeth of herbivores and carnivores? • Can they explain what a simple food chain shows? **All living things** • Can they use a classification key to group a variety of living things? (plants, vertebrates, invertebrates) • Can they compare the classification of common plants and animals to living things found in other places? (under the sea, prehistoric) • Can they name and group a variety of living things based on feeding patterns? (producer, consumer, predator, prey, herbivore, carnivore, omnivore) • Do they recognise that environments can change and this can sometimes pose a danger to living things?	**Animals, including humans** • Can they create a timeline to indicate stages of growth in humans? • Can they explain what puberty is? **All living things** • Can they describe and compare the life cycles of a range of animals, including humans, amphibians, insects and birds? • Can they describe the life cycles of common plants? • Can they describe and explain the process of respiration in humans and plants? • Can they talk with knowledge about birth, reproduction and death of familiar animals or plants? • Can they explore the work of well know naturalists? (David Attenborough and Jane Goodall)	**Evolution and inheritance** • Can they give reasons for why living things produce offspring of the same kind? • Can they give reasons for why offspring are not identical with each other or with their parents? • Can they explain the process of evolution and describe the evidence for this? • Can they begin to appreciate that variation in offspring over time can make animals more or less able to survive in particular environments? • Can they talk about the life of Charles Darwin? **Animals, including humans** • Can they identify and explain the function of the organs of the human circulatory system? (heart, blood vessels, blood, blood pressure, clotting) • Can they identify and explain the function of the organs of the human gaseous exchange system? (lungs, nose, throat, bronchi, bronchial tubes, diaphragm, ribs, breathing) • Can they name the major organs in the human body? • Can they locate the major human organs? • Can they make a diagram that outlines the main parts of a body? **All living things** • Can they explain the classification of living things into broad groups based on common observable characteristics? (five kingdoms of all living things, vertebrates, mammals, marsupials) • Can they sub divide their original groupings and explain their divisions? • Can they group animals into vertebrates and invertebrates?

Breadth of Study	Year 3	Year 4	Year 5	Year 6
Materials and their Properties	**Changing,classifying and grouping materials** • Can they sort the same group of materials in different ways? • Can they sort materials by a number of different criteria? • Can they suggest materials which could be used for specific jobs? • Can they set up a simple test to explore the differences between materials? • Can they set up a test to explore whether or not materials are attracted to magnets? • Can they set up a test to explore whether or not a material will float or sink? • Can they compare the properties of materials in different situations e.g. floating in salty water, magnetism in water? • Can they describe what it means to reverse a change? • Can they describe which changes can be reversed? • Can they describe which changes cannot be reversed **Rocks** • Can they compare and group together different rocks based on their simple physical properties? • Can they describe and explain how different rocks can be useful to us? • Can they describe and explain the differences between sedimentary and igneous rocks, considering the way they are formed? • Can they describe how fossils are formed within sedimentary rock?	**States of matter** • Can they compare and group materials based on their states of matter, ie, liquid, solid or gas? • Can they explain what happens to materials when they are heated or cooled? • Can they measure the temperature at which different materials change state? • Can they use measurements to explain changes to the state of water? • Can they explain the part that evaporation and condensation has in the water cycle?	**Properties and changes to materials** • Can they test and group materials based on scientific evidence? (hardness, solubility, transparency, conductivity, insulation, magnetism) • Can they explain the process of dissolving? • Can they recover a substance from a solution? • Can they decide how a mixture would best be separated? (filtering, sieving, evaporating) • Can they give reasons for the uses of everyday materials based on scientific evidence? • Can they show what they know about the properties of different materials? • Can they use their knowledge of materials to suggest ways to classify? (solids, liquids, gasses) • Can they describe changes using scientific words? (evaporation, condensation) • Can they use the terms 'reversible' and 'irreversible'?	

Breadth of Study	Year 3	Year 4	Year 5	Year 6
Physical Processes	**Forces and magnets** • Can they observe that magnetic forces can be transmitted without direct contact? • Can they talk about how some magnets attract or repel each other? • Can they classify which materials are attracted to magnets? • Can they describe the speed and direction of moving objects? **Light** • Can they explain the difference between transparent, translucent and opaque? • Can they compare the brightness and colour of lights? • Can they explain how bulbs work in an electrical circuit? • Can they explain how shadows are formed?	**Sound** • Can they describe a range of sounds and explain how they are made? • Can they compare sources of sound and explain how the sounds differ? • Can they explain how to change a sound (louder/softer)? • Can they describe and explain how a sound travels from a source to our ears? • Can they explain what happens to sound as it travels away from its source? • Can they explain how you could change the pitch of a sound? • Can they investigate how different materials can affect the pitch and volume of sounds? **Electricity** • Can they explain how electricity is useful to us? • Can they construct a simple circuit? • Can they explain what a conductor is and test materials for conductivity? • Can they explain closed and open circuits? • Can they construct a circuit with a switch? • Can they recognise some common conductors and insulators?	**Earth and space** • Can they identify and explain the movement of the Earth relative to the sun? • Can they explain how seasons and the associated weather is created? • Can they identify and explain the movement of the moon relative to the Earth? • Can they explain the size, shape and position of the earth, sun and moon? • Can they explain how night and day are created and use diagrams to show this? • Can they explain how planets are linked to stars? **Magnetism** • Can they explain how the force of magnetism works? • Can they describe how magnetism is used in everyday objects? • Can they describe magnets as having two poles? • Can they make predictions associated with whether two magnets will attract or repel depending on which poles are facing? **Forces** • Can they explain what gravity is and its impact on our lives? • Can they explain why a wheeled object that is initially pushed will slow down and stop? • Can they explain the impact of friction on a moving object? • Can they explain the effect of drag force on moving objects? • Can they explain how force and motion can be transferred through gears, pulleys, levers and springs?	**Electricity** • Can they identify and name the basic parts of a simple electric series circuit? (cells, wires, bulbs, switches, buzzers) • Can they compare and give reasons for variation in how components function, including bulb brightness, buzzer volume and on/off position of switches? • Can they explain how to make changes in a circuit? • Can they explain the impact of changes in a circuit? • Can they explain the effect of changing the voltage of a battery? **Light** • Can they explain how light travels? • Can they explain how the human eye sees objects? • Can they explain how different colours of light can be created? • Can they use and explain how simple optical instruments work? (periscope, telescope, binoculars, mirror, magnifying glass, Newton's first reflecting telescope) • Can they explain changes linked to light (and sound)?