



The Whitchurch CE Federation

Learning Goals



Our curriculum pays attention to the development of key concepts, knowledge and skills across a broad range of subjects in order to help our pupils to develop long-term retention of learning. Knowledge and skills are progressive and opportunities broaden across the key stages in building knowledge of the world, cultural literacy and vocabulary.

We have developed core drivers that shape our curriculum, bring about the aims and values of our Federation and St Bart's Multi-Academy Trust (**P**-passion, **E**-encouraging, **A**-ambition, **C**-commitment, **E** - enjoyment), allow pupils to make purposeful links and connections throughout their learning and to see how their subject learning is related to the world they live in.

Because the key concepts are repeated in each year group it is important that pupils progress in their understanding of them. Our curriculum sets out this progression in the form of three '**Learning Goals**'. Each **Learning Goal** contains a range of descriptors which give more detail to be discovered within the concept. Over a two-year period, pupils will become more and more familiar with these details by exploring them in a breadth of contexts. These descriptors are not exhaustive and should be used as a guide to support teacher judgements alongside other assessment materials.

This is Me - Responsibility and intrinsic motivation (Passion, Ambition)

Key Concept		Learning Goal 1	Learning Goal 2	Learning Goal 3
<p>Try new things</p> <p>This concept involves appreciating the range of life opportunities.</p>		<ul style="list-style-type: none"> • Try new things with the help of others. • Talk about some things of personal interest. • Join in with familiar activities. • Concentrate on things of interest. 	<ul style="list-style-type: none"> • Try new things when encouraged. • Enjoy new experiences. • Join clubs or groups. • Talk about new experiences with others. 	<ul style="list-style-type: none"> • Enjoy new things and take opportunities wherever possible. • Find things to do that give energy. • Become fully involved in clubs or groups. • Meet up with others who share interests in a safe environment.
<p>Concentrate</p> <p>This concept involves understanding how to become focused.</p>		<ul style="list-style-type: none"> • Give attention to areas of interest. • Begin to 'tune out' distractions. • Begin to show signs of concentration. • Begin to seek help when needed. 	<ul style="list-style-type: none"> • Focus on activities. • Tune out' some distractions. • Search for methods to help with concentration. • Develop areas of deep interest. 	<ul style="list-style-type: none"> • Give full concentration. • Tune out' most distractions. • Understand techniques and methods that aid concentration. • Develop expertise and deep interest in some things.
<p>Work hard</p> <p>This concept involves understanding the importance of effort.</p>		<ul style="list-style-type: none"> • Work hard with the help of others. • Enjoy the results of effort in areas of interest. • Take encouragement 	<ul style="list-style-type: none"> • Enjoy working hard in a range of activities. • Reflect on how effort leads to success. • Begin to encourage others to work hard. 	<ul style="list-style-type: none"> • Have fun working hard. • Understand the benefits of effort and commitment. • Continue to practise even when accomplished. • Encourage others by

		interest.		gain results.
<p>Persist</p> <p>This concept involves understanding how to overcome doubts and insecurities.</p>		<ul style="list-style-type: none"> • Express doubts and fears. • Explain feelings in uncomfortable situations. • Begin to push past fears (with encouragement). • Listen to people who try to help. • Begin to try to do something more than once. 	<ul style="list-style-type: none"> • Begin to understand why some activities feel uncomfortable. • Show a willingness to overcome fears. • Push past fears and reflect upon the emotions felt afterwards. • Begin to take encouragement and advice from others. • Keep trying after a first attempt. 	<ul style="list-style-type: none"> • Find ways to push past doubts, fears, or a drop in motivation even in challenging circumstances. • Push oneself in areas that are not so enjoyable. • Listen to others who encourage and help, thanking them for their advice. • Reflect upon how pushing past doubts, fears or a drop in motivation leads to a different outlook.
<p>Imagine</p> <p>This concept involves understanding how to apply knowledge inventively.</p>		<ul style="list-style-type: none"> • With help, develop ideas. • Respond to the ideas of others'. • Respond to questions about ideas. • Act on some ideas. 	<ul style="list-style-type: none"> • Begin to enjoy having new ideas. • Show some enthusiasm for the ideas of others. • Ask some questions in order to develop ideas. • Show enjoyment in trying out some ideas. 	<ul style="list-style-type: none"> • Generate lots of ideas. • Show a willingness to be wrong. • Know which ideas are useful and have value. • Act on ideas. • Ask lots of questions.

<p>Improve</p> <p>This concept involves an appreciation that small improvements make big differences.</p>		<ul style="list-style-type: none"> • Share with others likes about own efforts. • Choose one thing to improve (with help). • Make a small improvement (with help). 	<ul style="list-style-type: none"> • Share with others a number of positive features of own efforts. • Identify a few areas for improvement. • Attempt to make improvements. 	<ul style="list-style-type: none"> • Clearly identify own strengths. • Identify areas for improvement. • Seek the opinion of others to help identify improvements. • Show effort and commitment in refining and adjusting work.
<p>Understand others</p> <p>This concept involves an appreciation of others.</p>		<ul style="list-style-type: none"> • Show an awareness of someone who is talking. • Show an understanding that one's own behaviour affects other people. • Listen to other people's point of view. 	<ul style="list-style-type: none"> • Listen to others, showing attention. • Think of the effect of behaviour on others before acting. • Describe the points of view of others. 	<ul style="list-style-type: none"> • Listen first to others before trying to be understood. • Change behaviours to suit different situations. • Describe and understand others' points of view.
<p>Not give up</p> <p>This concept involves the understanding of the importance of persistence.</p>		<ul style="list-style-type: none"> • Try again with the help of others. • Try to carry on even if a failure causes upset. • Keep going in activities of interest. • Try to think of oneself as lucky. 	<ul style="list-style-type: none"> • Find alternative ways if the first attempt does not work. • Bounce back after a disappointment or failure. • Show the ability to stick at an activity (or a club or interest). • See oneself as lucky. 	<ul style="list-style-type: none"> • how a determination to keep going, despite failures or setbacks. • Reflect upon the reasons for failures and find ways to bounce back. • Stick at an activity even in the most challenging of circumstances. • See possibilities and opportunities even after a disappointment. • Consider oneself to be lucky and understand the need to

				look for luck.
--	--	--	--	----------------

The Creative Me Creativity and Imagination (Enjoyment)

Art and Design

Threshold Concept		Learning Goal 1	Learning Goal 2	Learning Goal 3
--------------------------	--	------------------------	------------------------	------------------------

To develop ideas

- Respond to ideas and starting points.
- Explore ideas and collect visual information.
- Explore different methods and materials as ideas develop.

- Develop ideas from starting points throughout the curriculum.
- Collect information, sketches and resources.
- Adapt and refine ideas as they progress.
- Explore ideas in a variety of ways.
- Comment on artworks using visual language.

- Develop and imaginatively extend ideas from starting points throughout the curriculum.
- Collect information, sketches and resources and present ideas imaginatively in a sketch book.
- Use the qualities of materials to enhance ideas.
- Spot the potential in unexpected results as work progresses.
- Comment on artworks with a fluent grasp of visual language.

To take inspiration from the greats (classic and modern)

- Describe the work of notable artists, artisans and designers.
- Use some of the ideas of artists studied to create pieces.

- Replicate some of the techniques used by notable artists, artisans and designers.
- Create original pieces that are influenced by studies of others.

- Give details (including own sketches) about the style of some notable artists, artisans and designers.
- Show how the work of those studied was influential in both society and to other artists.
- Create original pieces that show a range of influences and styles.

To master techniques

Painting

- Use thick and thin brushes.
- Mix primary colours to make secondary.
- Add white to colours to make tints and black to colours to make tones.
- Create colour wheels.

- Use a number of brush techniques using thick and thin brushes to produce shapes, textures, patterns and lines.
- Mix colours effectively.
- Use watercolour paint to produce washes for backgrounds then add detail.
- Experiment with creating mood with colour.

- Sketch (lightly) before painting to combine line and colour.
- Create a colour palette based upon colours observed in the natural or built world.
- Use the qualities of watercolour and acrylic paints to create visually interesting pieces.
- Combine colours, tones and tints to enhance the mood of a piece.
- Use brush techniques and the qualities of paint to create texture.
- Develop a personal style of painting, drawing upon ideas from other artists.

Collage

- Use a combination of materials that are cut, torn and glued.
- Sort and arrange materials.
- Mix materials to create texture.

- Select and arrange materials for a striking effect.
- Ensure work is precise.
- Use coiling, overlapping, tessellation, mosaic and montage.

- Mix textures (rough and smooth, plain and patterned).
- Combine visual and tactile qualities.
- Use ceramic mosaic materials and techniques.

	Sculpture	<ul style="list-style-type: none"> • Use a combination of shapes. • Include lines and texture. • Use rolled up paper, straws, paper, card and clay as materials. • Use techniques such as rolling, cutting, moulding and carving. 	<ul style="list-style-type: none"> • Create and combine shapes to create recognisable forms (e.g. shapes made from nets or solid materials). • Include texture that conveys feelings, expression or movement. • Use clay and other mouldable materials. • Add materials to provide interesting detail. 	<ul style="list-style-type: none"> • Show life-like qualities and real-life proportions or, if more abstract, provoke different interpretations. • Use tools to carve and add shapes, texture and pattern. • Combine visual and tactile qualities. • Use frameworks (such as wire or moulds) to provide stability and form.
	Drawing	<ul style="list-style-type: none"> • Draw lines of different sizes and thickness. • Colour (own work) neatly following the lines. • Show pattern and texture by adding dots and lines. • Show different tones by using coloured pencils. 	<ul style="list-style-type: none"> • Use different hardnesses of pencils to show line, tone and texture. • Annotate sketches to explain and elaborate ideas. • Sketch lightly (no need to use a rubber to correct mistakes). • Use shading to show light and shadow. • Use hatching and cross hatching to show tone and texture. 	<ul style="list-style-type: none"> • Use a variety of techniques to add interesting effects (e.g. reflections, shadows, direction of sunlight). • Use a choice of techniques to depict movement, perspective, shadows and reflection. • Choose a style of drawing suitable for the work (e.g. realistic or impressionistic). • Use lines to represent movement.
	Print	<ul style="list-style-type: none"> • Use repeating or overlapping shapes. 	<ul style="list-style-type: none"> • Use layers of two or more colours. 	<ul style="list-style-type: none"> • Build up layers of colours.

		<ul style="list-style-type: none"> • Mimic print from the environment e.g. wallpapers. • Use objects to create prints (e.g. fruit, vegetables or sponges). • Press, roll, rub and stamp to make prints. 	<ul style="list-style-type: none"> • Replicate patterns observed in natural or built environments. • Make printing blocks (e.g. from coiled string glued to a block). • Make precise repeating patterns. 	<ul style="list-style-type: none"> • Create an accurate pattern, showing fine detail. • Use a range of visual elements to reflect the purpose of the work.
	Textiles	<ul style="list-style-type: none"> • Use weaving to create a pattern. • Join materials using glue and/or a stitch. • Use plaiting. • Use dip dye techniques. 	<ul style="list-style-type: none"> • Shape and stitch materials. • Use basic cross stitch and back stitch. • Colour fabric. • Create weavings. • Quilt, pad and gather fabric. 	<ul style="list-style-type: none"> • Show precision in techniques. • Choose from a range of stitching techniques. • Combine previously learned techniques to create pieces.
	Digital media	<ul style="list-style-type: none"> • Use a wide range of tools to create different textures, lines, tones, colours and shapes. 	<ul style="list-style-type: none"> • Create images, video and sound recordings and explain why they were created. 	<ul style="list-style-type: none"> • Enhance digital media by editing (including sound, video, animation, still images and installations).
To take inspiration from the greats (classic and modern)		<ul style="list-style-type: none"> • Describe the work of notable artists, artisans and designers. • Use some of the ideas of artists studied to create pieces. 	<ul style="list-style-type: none"> • Replicate some of the techniques used by notable artists, artisans and designers. • Create original pieces that are influenced by studies of others. 	<ul style="list-style-type: none"> • Give details (including own sketches) about the style of some notable artists, artisans and designers. • Show how the work of those studied was influential in both

- Create original pieces that show a range of influences and styles.

Music

Learning Goal 1

- Take part in singing, accurately following the melody.
- Follow instructions on how and when to sing or play an instrument.
- Make and control long and short sounds, using voice and instruments.
- Imitate changes in pitch.

Learning Goal 2

- Sing from memory with accurate pitch.
- Sing in tune.
- Maintain a simple part within a group.
- Pronounce words within a song clearly.
- Show control of voice.
- Play notes on an instrument with care so that they are

Learning Goal 3

- Sing or play from memory with confidence.
- Perform solos or as part of an ensemble.
- Sing or play expressively and in tune.
- Hold a part within a round.
- Sing a harmony part confidently and accurately.

To perform

		<p>clear.</p> <ul style="list-style-type: none"> • Perform with control and awareness of others. 	<ul style="list-style-type: none"> • Sustain a drone or a melodic ostinato to accompany singing. • Perform with controlled breathing (voice) and skillful playing (instrument).
To compose	<ul style="list-style-type: none"> • Create a sequence of long and short sounds. • Clap rhythms. • Create a mixture of different sounds (long and short, loud and quiet, high and low). • Choose sounds to create an effect. • Sequence sounds to create an overall effect. • Create short, musical patterns. • Create short, rhythmic phrases. 	<ul style="list-style-type: none"> • Compose and perform melodic songs. • Use sound to create abstract effects. • Create repeated patterns with a range of instruments. • Create accompaniments for tunes. • Use drones as accompaniments. • Choose, order, combine and control sounds to create an effect. • Use digital technologies to compose pieces of music. 	<ul style="list-style-type: none"> • Create songs with verses and a chorus. • Create rhythmic patterns with an awareness of timbre and duration. • Combine a variety of musical devices, including melody, rhythm and chords. • Thoughtfully select elements for a piece in order to gain a defined effect. • Use drones and melodic ostinati (based on the pentatonic scale). • Convey the relationship between the lyrics and the melody. • Use digital technologies to compose, edit and refine pieces of music.
To transcribe	<ul style="list-style-type: none"> • Use symbols to represent a composition and use them to help with a performance. 	<ul style="list-style-type: none"> • Devise non-standard symbols to indicate when to play and rest. • Recognise the notes EGBDF and FACE on the musical 	<ul style="list-style-type: none"> • Use the standard musical notation of crotchet, minim and semibreve to indicate how many beats to play.

		<p>stave.</p> <ul style="list-style-type: none"> Recognise the symbols for a minim, crotchet and semibreve and say how many beats they represent. 	<ul style="list-style-type: none"> Read and create notes on the musical stave. Understand the purpose of the treble and bass clefs and use them in transcribing compositions. Understand and use the # (sharp) and b (flat) symbols. Use and understand simple time signatures.
<p>To describe music</p>	<ul style="list-style-type: none"> Identify the beat of a tune. Recognise changes in timbre, dynamics and pitch. 	<ul style="list-style-type: none"> Use the terms: duration, timbre, pitch, beat, tempo, texture and use of silence to describe music. Evaluate music using musical vocabulary to identify areas of likes and dislikes. Understand layers of sounds and discuss their effect on mood and feelings. 	<p>Choose from a wide range of musical vocabulary to accurately describe and appraise music including:</p> <p>pitch dynamics tempo timbre texture lyrics and melody sense of occasion expressive solo rounds harmonies accompaniments drones cyclic patterns combination of musical elements cultural context.</p>

Describe how lyrics often reflect the cultural context of music and have social meaning.

Dance

Threshold Concept

To develop practical skills in order to participate, compete and lead a healthy lifestyle

Dance

Learning Goal 1

- Copy and remember moves and positions.
- Move with careful control and coordination.
- Link two or more

Learning Goal 2

- Plan, perform and repeat sequences.
- Move in a clear, fluent and expressive manner.
- Refine movements

Learning Goal 3

- Compose creative and imaginative dance sequences.
- Perform expressively and hold a precise and strong body posture.
- Perform and create complex

The Independent Me *Communication and Investigation Passion and Enjoyment*

- actions to perform a sequence.
- Choose movements to communicate a mood, feeling or idea.

- into sequences.
- Create dances and movements that convey a definite idea.
- Change speed and levels within a performance.
- Develop physical strength and suppleness by practising moves and stretching.

- sequences.
- Express an idea in original and imaginative ways.
- Plan to perform with high energy, slow grace or other themes and maintain this throughout a piece.
- Perform complex moves that combine strength and stamina gained through gymnastics activities (such as cartwheels or handstands).

Speaking and Listening

Learning Goal 1

To listen carefully and understand

- Sift information and focus on the important points.
- Seek clarification when a message is not clear.
- Understand instructions with more than one point.

Learning Goal 2

- Engage in discussions, making relevant points.
- Ask for specific additional information to clarify.
- Understand the meaning of some phrases beyond the literal

Learning Goal 3

- Understand how to answer questions that require more than a yes/no or single sentence response.
- Recognise and explain some idioms.

		interpretation.	<ul style="list-style-type: none"> Understand irony (when it is obvious).
To develop a wide and interesting vocabulary	<ul style="list-style-type: none"> Use subject specific vocabulary to explain and describe. Suggest words or phrases appropriate to the topic being discussed. Identify homophones. 	<ul style="list-style-type: none"> Use time, size and other measurements to quantify. Use interesting adjectives, adverbial phrases and extended noun phrases in discussion. Use vocabulary that is appropriate to the topic being discussed or the audience that is listening. 	<ul style="list-style-type: none"> Use adventurous and sophisticated vocabulary. Explain the meaning of words, offering alternatives. Use a wide range of phrases that include determiners, modifiers and other techniques to add extra interest and clarity.
To speak with clarity	<ul style="list-style-type: none"> Speak in a way that is clear and easy to understand. Demonstrate good phonic knowledge by clearly pronouncing the sounds within words. Identify syllables within words. 	<ul style="list-style-type: none"> Use verbs with irregular endings. Use a mixture of sentence lengths to add interest to discussions and explanations. Use intonation to emphasise grammar and punctuation when reading aloud. 	<ul style="list-style-type: none"> Vary the length and structure of sentences. Ask questions and make suggestions to take an active part in discussions. Comment on the grammatical structure of a range of spoken and written accounts.
To tell stories with structure	<ul style="list-style-type: none"> Ensure stories have a setting, plot and a sequence of events. Recount experiences with interesting detail. Predict events in a story. Give just enough detail to keep the audience engaged. 	<ul style="list-style-type: none"> Bring stories to life with expression and intonation. Read the audience to know when to add detail and when to leave it out. 	<ul style="list-style-type: none"> Narrate detailed and exciting stories. Use the conventions and structure appropriate to the type of story being told. Interweave action, character descriptions, settings and dialogue.
To hold conversations and debates	<ul style="list-style-type: none"> Take turns to talk, listening carefully to the contributions of others. Vary language between formal and 	<ul style="list-style-type: none"> Make relevant comments or ask questions in a discussion or a debate. Seek clarification by actively seeking to understand others' 	<ul style="list-style-type: none"> Negotiate and compromise by offering alternatives. Debate, using relevant details to support points. Offer alternative explanations

- informal according to the situation.
- Add humour to a discussion or debate where appropriate.

- points of view.
- Respectfully challenge opinions or points, offering an alternative.

when others don't understand.

Reading – see also Pathways to Read progression document

Learning Goal 1

To read words accurately

- Apply phonic knowledge and skills as the route to decode words.
- Respond speedily with the correct sound to graphemes (letters or groups of letters) for all 40+ phonemes, including, where applicable, alternative sounds for graphemes.
- Read accurately by blending

Learning Goal 2

- Apply a growing knowledge of root words, prefixes and suffixes (etymology and morphology).
- Read further exception words, noting the spellings.

Learning Goal 3

- Apply knowledge of root words, prefixes and suffixes.
- Read age-appropriate books with confidence and fluency (including whole novels).
- (Note: this should be through normal reading rather than direct teaching.)

sounds in unfamiliar words containing GPCs that have been taught.

- Read common exception words, noting unusual correspondences between spelling and sound and where these occur in the word.
- Read words containing taught GPCs and -s, -es, -ing, -ed, -er and -est endings.
- Read other words of more than one syllable that contain taught GPCs.
- Read words with contractions (for example, I'm, I'll, we'll) and understand that the apostrophe represents the omitted letter(s).
- Read aloud accurately books that are consistent with phonic knowledge and that do not require other strategies to work out words.
- Re-read these books to build up fluency and confidence in word reading.
- Read accurately by blending the sounds in words that contain the graphemes taught so far, especially recognising alternative sounds for graphemes.
- Read accurately words of two or more syllables that contain the same graphemes as above.
- Read words containing common suffixes.
- Read most words quickly and accurately, without overt sounding and blending, when they have been frequently encountered.
- Read aloud books closely matched to their improving phonic

	<p>knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation.</p> <ul style="list-style-type: none"> • Re-read books to build up fluency and confidence in word reading. 		
<p>To understand texts</p>	<ul style="list-style-type: none"> • Discuss events. • Predict events. • Link reading to own experiences and other books. • Join in with stories or poems. • Check that reading makes sense and self-correct. • Infer what characters are like from actions. • Ask and answer questions about texts. • Discuss favourite words and phrases. • Listen to and discuss a wide range of texts. • Recognise and join in with (including role-play) recurring language. • Explain and discuss understanding of texts. • Discuss the significance of the title and events. • Make inferences on the basis of what is being said and done. 	<ul style="list-style-type: none"> • Draw inferences from reading. • Predict from details stated and implied. • Recall and summarise main ideas. • Discuss words and phrases that capture the imagination. • Retrieve and record information from non-fiction, using titles, headings, sub-headings and indexes. • Prepare poems and plays to read aloud with expression, volume, tone and intonation. • Identify recurring themes and elements of different stories (e.g. good triumphing over evil). • Recognise some different forms of poetry. • Explain and discuss understanding of reading, maintaining focus on the topic. • Draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and 	<ul style="list-style-type: none"> • Recommend books to peers, giving reasons for choices. • Identify and discuss themes and conventions in and across a wide range of writing. • Make comparisons within and across books. • Learn a wide range of poetry by heart. • Prepare poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience. • Check that the book makes sense, discussing understanding and exploring the meaning of words in context. • Ask questions to improve understanding. • Draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence. • Predict what might happen from

justifying inferences with evidence.

- Predict what might happen from details stated and implied.
- Identify main ideas drawn from more than one paragraph and summarise these.
- Identify how language, structure and presentation contribute to meaning.
- Ask questions to improve understanding of a text.

details stated and implied.

- Summarise the main ideas drawn from more than one paragraph, identifying key details that support the main ideas.
- Identify how language, structure and presentation contribute to meaning.
- Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader.
- Retrieve and record information from non-fiction.
- Participate in discussion about books, taking turns and listening and responding to what others say.
- Distinguish between statements of fact and opinion.
- Provide reasoned justifications for views.

Writing – see also Pathways to Write progression documentation

Key Concept		Learning Goal 1	Learning Goal 2	Learning Goal 3
Composition	To write with purpose	<ul style="list-style-type: none"> • Say first and then write to tell others about ideas. • Write for a variety of purposes. • Plan by talking about ideas and writing notes. • Use some of the characteristic features of the type of writing used. • Write, review and improve. 	<ul style="list-style-type: none"> • Use the main features of a type of writing (identified in reading). • Use techniques used by authors to create characters and settings. • Compose and rehearse sentences orally. • Plan, write, edit and improve. 	<ul style="list-style-type: none"> • Identify the audience for writing. • Choose the appropriate form of writing using the main features identified in reading. • Note, develop and research ideas. • Plan, draft, write, edit and improve.
	To use imaginative description	<ul style="list-style-type: none"> • Use well-chosen adjectives to add detail. • Use names of people, places and things. • Use nouns and pronouns for variety. • Use adverbs for extra detail. 	<ul style="list-style-type: none"> • Create characters, settings and plots. • Use alliteration effectively. • Use similes effectively. • Use a range of descriptive phrases including some collective nouns. 	<ul style="list-style-type: none"> • Use the techniques that authors use to create characters, settings and plots. • Create vivid images by using alliteration, similes, metaphors and personification. • Interweave descriptions of characters, settings and atmosphere with dialogue.
	To organise writing appropriately	<ul style="list-style-type: none"> • Re-read writing to check it makes sense. 	<ul style="list-style-type: none"> • Use organisational devices such as headings and sub headings. • Use the perfect form of verbs to 	<ul style="list-style-type: none"> • Guide the reader by using a range of organisational devices, including a range

		<ul style="list-style-type: none"> • Use the correct tenses. • Organise writing in line with its purpose. 	<p>mark relationships of time and cause.</p> <ul style="list-style-type: none"> • Use connectives that signal time, shift attention, inject suspense and shift the setting. 	<p>of connectives.</p> <ul style="list-style-type: none"> • Choose effective grammar and punctuation. • Ensure correct use of tenses throughout a piece of writing.
	<p>To use paragraphs</p>	<ul style="list-style-type: none"> • Write about more than one idea. • Group related information. 	<ul style="list-style-type: none"> • Organise paragraphs around a theme. • Sequence paragraphs. 	<ul style="list-style-type: none"> • Write paragraphs that give the reader a sense of clarity. • Write paragraphs that make sense if read alone. • Write cohesively at length.
	<p>To use sentences appropriately</p>	<ul style="list-style-type: none"> • Write so that other people can understand the meaning of sentences. • Sequence sentences to form clear narratives. • Convey ideas sentence by sentence. • Join sentences with conjunctions and connectives. • Vary the way sentences begin. 	<ul style="list-style-type: none"> • Use a mixture of simple, compound and complex sentences. • Write sentences that include: <ul style="list-style-type: none"> • conjunctions • adverbs • direct speech, punctuated correctly • clauses • adverbial phrases. 	<ul style="list-style-type: none"> • Write sentences that include: <ul style="list-style-type: none"> • relative clauses • modal verbs • relative pronouns • brackets • parenthesis • a mixture of active and passive voice • a clear subject and

object

- hyphens, colons and semi colons

- bullet points.

- Write fluently and legibly with a personal style.

- Use prefixes appropriately.

- Spell some words with

To present neatly

- Sit correctly and hold a pencil correctly.
- Begin to form lower-case letters correctly.
- Form capital letters.
- Form digits 0-9.
- Understand letters that are formed in similar ways.
- Form lower-case letters of a consistent size.
- Begin to join some letters.
- Write capital letters and digits of consistent size.
- Use spacing between words that reflects the size of the letters.

To spell correctly

- Spell words containing 40+ learned phonemes.

- Join letters, deciding which letters are best left un-joined.

- Make handwriting legible.

- Use prefixes and suffixes and understand how to add them.

Transcription

- Spell common exception words (the, said, one, two and the days of the week).

- Name letters of the alphabet in order.

- Use letter names to describe spellings of words.

- Add prefixes and suffixes, learning the rule for adding s and es as a plural marker for nouns, and the third person singular marker for verbs (I drink - he drinks).

- Use the prefix un.

- Use suffixes where no change to the spelling of the root word is needed: helping, helped, helper, eating, quicker, quickest.

- Use spelling rules.

- Write simple sentences dictated by the teacher.

- Spell by segmenting words into phonemes and represent them with the correct graphemes.

- Learn some new ways to

- Spell homophones correctly.

- Spell correctly often misspelt words.

- Place the possessive apostrophe accurately in words with regular plurals (for example, girls', boys') and in words with irregular plurals (for example, children's).

- Use the first two or three letters of a word to check its spelling in a dictionary.

- Write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.

silent letters (knight, psalm and solemn).

- Distinguish between homophones and other words that are often confused.

- Use knowledge of morphology and etymology in spelling and understand that some words need to be learned specifically.

- Use dictionaries to check spelling and meaning of words.

- Use the first three or four letters of a word to look up the meaning or spelling of words in a dictionary.

- Use a thesaurus.

- Spell the vast majority of words correctly.

represent phonemes.

- Spell common exception words correctly.
- Spell contraction words correctly (can't, don't).
- Add suffixes to spell longer words (-ment, -ness, -ful and -less).
- Use the possessive apostrophe. (singular) (for example, the girl's book)
- Distinguish between homophones and near-homophones.

To punctuate accurately

- Leave spaces between words.
- Use the word 'and' to join words and sentences.
- Begin to punctuate using a capital letter for the name of people, places, the days of the week and I.
- Use both familiar and new punctuation correctly, including full stops, capital letters, exclamation marks, question marks, commas for lists and apostrophes

• Develop understanding of writing concepts by:

- Extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although.
- Using the present perfect form of verbs in contrast to the past tense.
- Choosing nouns or pronouns appropriately for clarity and

• Develop understanding of writing concepts by:

- Recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms.
- Using passive verbs to affect the presentation of information in a sentence.
- Using the perfect form of verbs to mark relationships of

for contracted forms.

- Use sentences with different forms: statement, question, exclamation and command.
- Use extended noun phrases to describe and specify (e.g. the blue butterfly).
- Use subordination (when, if, that or because).
- Use coordination (or, and, but).
- Use some features of standard written English.
- Use the present and past tenses correctly, including the progressive form.

cohesion and to avoid repetition.

- Using conjunctions, adverbs and prepositions to express time and cause.
- Using fronted adverbials.
- Indicate grammatical and other features by:
 - Using commas after fronted adverbials.
 - Indicating possession by using the possessive apostrophe with plural nouns.
 - Using and punctuating direct speech.

time and cause.

- Using expanded noun phrases to convey complicated information concisely.
- Using modal verbs or adverbs to indicate degrees of possibility.
- Using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun.
- Indicate grammatical and other features by:
 - Using commas to clarify meaning or avoid ambiguity in writing.
 - Using hyphens to avoid ambiguity.
 - Using brackets, dashes or commas to indicate parenthesis.
 - Using semi-colons, colons or dashes to mark boundaries between independent

				clauses.
				<ul style="list-style-type: none"> • Using a colon to introduce a list. • Punctuating bullet points consistently.
Analysis and presentation	To analyse writing	<ul style="list-style-type: none"> • Discuss writing with the teacher and other pupils. • Use and understand grammatical terminology in discussing writing: <ul style="list-style-type: none"> • word, sentence, letter, capital letter, full stop, punctuation, singular, plural, question mark, exclamation mark. • Use and understand grammatical terminology in discussing writing: <ul style="list-style-type: none"> • verb, tense (past, present), adjective, noun, suffix, apostrophe, comma. 	<ul style="list-style-type: none"> • Use and understand grammatical terminology when discussing writing and reading: <p>Year 3</p> <ul style="list-style-type: none"> • word family, conjunction, adverb, preposition, direct speech, inverted commas (or 'speech marks'), prefix, consonant, vowel, clause, subordinate clause. <p>Year 4</p> <ul style="list-style-type: none"> • pronoun, possessive pronoun, adverbial. 	<ul style="list-style-type: none"> • Use and understand grammatical terminology when discussing writing and reading: <p>Year 5</p> <ul style="list-style-type: none"> • relative clause, modal verb, relative pronoun, parenthesis, bracket, dash, determiner, cohesion, ambiguity. <p>Year 6</p> <ul style="list-style-type: none"> • active and passive voice, subject and object, hyphen, synonym, colon, semi-colon, bullet points.
	To present writing	<ul style="list-style-type: none"> • Read aloud writing clearly enough to be heard by peers and the teacher. 	<ul style="list-style-type: none"> • Read aloud writing to a group or whole class, using appropriate intonation. 	<ul style="list-style-type: none"> • Perform compositions, using appropriate intonation and volume.

- Read aloud writing with some intonation.

Geography

Key Concept		Learning Goal 1	Learning Goal 2	Learning Goal 3
To investigate places		<ul style="list-style-type: none"> • Ask and answer geographical questions (such as: What is this place like? What or who will I see in this place? What do people do in this place?). 	<ul style="list-style-type: none"> • Ask and answer geographical questions about the physical and human characteristics of a location. • Explain own views about 	<ul style="list-style-type: none"> • Collect and analyse statistics and other information in order to draw clear conclusions about locations. • Identify and describe how the physical features affect the human

- Identify the key features of a location in order to say whether it is a city, town, village, coastal or rural area.

- Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied.

- Use simple fieldwork and observational skills to study the geography of the school and the key human and physical features of its surrounding environment.

- Use aerial images and plan perspectives to recognise landmarks and basic physical features.

- 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 continents and oceans.

locations, giving reasons.

- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features.

- Use fieldwork to observe and record the human and physical features in the local area using a range of methods including sketch maps, plans and graphs and digital technologies.

- Use a range of resources to identify the key physical and human features of a location.

- Name and locate counties and cities of the United

Kingdom, geographical regions and their identifying human and physical characteristics, including hills, mountains, cities, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.

- Name and locate the countries of Europe and identify their main physical and human characteristics.

activity within a location.

- Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location.

- Use different types of fieldwork sampling (random and systematic) to observe, measure and record the human and physical features in the local area. Record the results in a range of ways.

- Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps - as in London's Tube map).

- Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.

- Name and locate the countries of North and South America and identify their main physical and human characteristics.

To investigate patterns

- Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom and of a contrasting non-European country.

- 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.

- Identify land use around the school.

- Name and locate the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle and date time zones. Describe some of the characteristics of these geographical areas.

- Describe geographical similarities and differences between countries.

- Describe how the locality of the school has changed over time.

- Identify and describe the geographical significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night).

- Understand some of the reasons for geographical similarities and differences between countries.

- Describe how locations around the world are changing and explain some of the reasons for change.

- Describe geographical diversity across the world.

- Describe how countries and geographical regions are interconnected and interdependent.

To communicate geographically

- Use basic geographical vocabulary to refer to:

- **key physical features**, including: beach, coast, forest, hill, mountain, ocean, river, soil, valley, vegetation and weather.

- **key human features**, including: city, town, village, factory, farm, house, office and shop.

- Describe key aspects of:

- **physical geography**, including: rivers, mountains, volcanoes and earthquakes and the water cycle.

- **human geography**, including: settlements and land use.

- Use the eight points of a compass, four-figure grid

- 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: settlements, land use, economic activity including trade links, and the distribution of natural resources

		<ul style="list-style-type: none"> • Use compass directions (north, south, east and west) and locational language (e.g. near and far) to describe the location of features and routes on a map. • Devise a simple map; and use and construct basic symbols in a key. Use simple grid references (A1, B1). 	<p>references, symbols and key to communicate knowledge of the United Kingdom and the wider world.</p>	<p>including energy, food, minerals, and water supplies.</p> <ul style="list-style-type: none"> • Use the eight points of a compass, four-figure grid references, symbols and a key (that uses standard Ordnance Survey symbols) to communicate knowledge of the United Kingdom and the world. • Create maps of locations identifying patterns (such as: land use, climate zones, population densities, height of land).
--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

History			
Key Concept	Learning Goal 1	Learning Goal 2	Learning Goal 3
To investigate and interpret the past	<ul style="list-style-type: none"> • Observe or handle evidence to ask questions and find answers to questions about the past. 	<ul style="list-style-type: none"> • Use evidence to ask questions and find answers to questions about the past. • Suggest suitable sources of evidence for 	<ul style="list-style-type: none"> • Use sources of evidence to deduce information about the past. • Select suitable sources of evidence,

- Ask questions such as: What was it like for people? What happened? How long ago?
- Use artefacts, pictures, stories, online sources and databases to find out about the past.
- Identify some of the different ways the past has been represented.

historical enquiries.

- Use more than one source of evidence for historical enquiry in order to gain a more accurate understanding of history.
- Describe different accounts of a historical event, explaining some of the reasons why the accounts may differ.
- Suggest causes and consequences of some of the main events and changes in history.

giving reasons for choices.

- Use sources of information to form testable hypotheses about the past.
- Seek out and analyse a wide range of evidence in order to justify claims about the past.
- Show an awareness of the concept of propaganda and how historians must understand the social context of evidence studied.
- Understand that no single source of evidence gives the full answer to questions about the past.
- Refine lines of enquiry as appropriate.

To build an overview of world history

- Describe historical events.
- Describe significant people from the past.
- Recognise that there are reasons why people in the past acted as they did.

- Describe changes that have happened in the locality of the school throughout history.
- Give a broad overview of life in Britain from ancient until medieval times.
- Compare some of the times studied with those of other areas of interest around the world.
- Describe the social, ethnic, cultural or religious diversity of past society.

- Identify continuity and change in the history of the locality of the school.
- Give a broad overview of life in Britain from medieval until the Tudor and Stuarts times.
- Compare some of the times studied with those of the other areas of interest around the world.
- Describe the social, ethnic, cultural or religious diversity of past society.

		<ul style="list-style-type: none"> • Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children. 	<ul style="list-style-type: none"> • Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children.
To understand chronology	<ul style="list-style-type: none"> • Place events and artefacts in order on a time line. • Label time lines with words or phrases such as: past, present, older and newer. • Recount changes that have occurred in their own lives. • Use dates where appropriate. 	<ul style="list-style-type: none"> • Place events, artefacts and historical figures on a time line using dates. • Understand the concept of change over time, representing this, along with evidence, on a time line. • Use dates and terms to describe events. 	<ul style="list-style-type: none"> • Describe the main changes in a period of history (using terms such as: social, religious, political, technological and cultural). • Identify periods of rapid change in history and contrast them with times of relatively little change. • Understand the concepts of continuity and change over time, representing them, along with evidence, on a time line. • Use dates and terms accurately in describing events.
To communicate historically	<ul style="list-style-type: none"> • Use words and phrases such as: a long time ago, recently, when my parents/carers were children, years, decades and centuries to describe the passing of time. • Show an understanding of the concept of nation and a nation's history. • Show an understanding of concepts such as civilisation, monarchy, parliament, democracy, and war and peace. 	<ul style="list-style-type: none"> • Use appropriate historical vocabulary to communicate, including: <ul style="list-style-type: none"> • dates • time period • era • change 	<ul style="list-style-type: none"> • Use appropriate historical vocabulary to communicate, including: <ul style="list-style-type: none"> • dates • time period • era • chronology

		<ul style="list-style-type: none"> • chronology. • Use literacy, numeracy and computing skills to a good standard in order to communicate information about the past. 	<ul style="list-style-type: none"> • continuity • change • century • decade • legacy. • Use literacy, numeracy and computing skills to an exceptional standard in order to communicate information about the past. • Use original ways to present information and ideas.
--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Languages

Key Concepts	Learning Goal 1	Learning Goal 2	Learning Goal 3
To read fluently	From Year 3 onwards.	<ul style="list-style-type: none"> • Read and understand the main points in 	<ul style="list-style-type: none"> • Read and understand the main points

		<p>short written texts.</p> <ul style="list-style-type: none"> • Read short texts independently. • Use a translation dictionary or glossary to look up new words. 	<p>and some of the detail in short written texts.</p> <ul style="list-style-type: none"> • Use the context of a sentence or a translation dictionary to work out the meaning of unfamiliar words. • Read and understand the main points and opinions in written texts from various contexts, including present, past or future events. • Show confidence in reading aloud, and in using reference materials.
<p>To write imaginatively</p>	<p>From Year 3 onwards</p>	<ul style="list-style-type: none"> • Write a few short sentences using familiar expressions. • Express personal experiences and responses. • Write short phrases from memory with spelling that is readily understandable. 	<ul style="list-style-type: none"> • Write short texts on familiar topics. • Use knowledge of grammar (or pitch in Mandarin) <p>to enhance or change the meaning of phrases.</p> <ul style="list-style-type: none"> • Use dictionaries or glossaries to check words. • Refer to recent experiences or future plans, as well as to everyday activities. • Include imaginative and adventurous word choices. • Convey meaning (although there may be some mistakes, the meaning can be

			<p>understood with little or no difficulty).</p> <ul style="list-style-type: none"> • Use dictionaries or glossaries to check words.
To speak confidently	From Year 3 onwards	<ul style="list-style-type: none"> • Understand the main points from spoken passages. • Ask others to repeat words or phrases if necessary. • Ask and answer simple questions and talk about interests. • Take part in discussions and tasks. • Demonstrate a growing vocabulary. 	<ul style="list-style-type: none"> • Understand the main points and opinions in spoken passages. • Give a short prepared talk that includes opinions. • Take part in conversations to seek and give information. • Refer to recent experiences or future plans, everyday activities and interests. • Vary language and produce extended responses. • Be understood with little or no difficulty.
To understand the culture of the countries in which the language is spoken	From Year 3 onwards	<ul style="list-style-type: none"> • Describe with some interesting details some aspects of countries or communities where the language is spoken. • Make comparisons between life in countries or communities where the language is spoken and this country. 	<ul style="list-style-type: none"> • Give detailed accounts of the customs, history and culture of the countries and communities where the language is spoken. • Describe, with interesting detail, some similarities and differences between countries and communities where the language is spoken and this country.

The Inquisitive Me Curiosity and Problem Solving (Enjoyment)

Maths – in addition see White Rose Block / Term assessment documents

Key Concept		Learning Goal 1	Learning Goal 2	Learning Goal 3
To know and use numbers	Counting	<ul style="list-style-type: none"> Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count, read and write numbers to 100 in numerals. Given a number, identify one more and one less. Count in steps of 2, 3, 5 and 10 from 0 or 1 and in tens from any number, forward and backward. 	<ul style="list-style-type: none"> Count in multiples of 2 to 9, 25, 50, 100 and 1000. Find 1000 more or less than a given number. Count backwards through zero to include negative numbers. 	<ul style="list-style-type: none"> Read numbers up to 10 000 000. Use negative numbers in context and calculate intervals across zero.
	Representing	<ul style="list-style-type: none"> Identify, represent and estimate numbers using different representations, including the number line. Read and write numbers initially from 1 to 20 and then to at least 100 in numerals and in words. 	<ul style="list-style-type: none"> Identify, represent and estimate numbers using different representations. Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. 	<ul style="list-style-type: none"> Write numbers up to 10 000 000 Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
	Comparing	<ul style="list-style-type: none"> Use the language of: equal to, more than, less than (fewer), most and least. Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs. 	<ul style="list-style-type: none"> Order and compare numbers beyond 1000. 	<ul style="list-style-type: none"> Order and compare numbers up to 10 000 000.
	Place value	<ul style="list-style-type: none"> Recognise the place value of each 	<ul style="list-style-type: none"> Recognise the place value of each digit in a four-digit number. 	<ul style="list-style-type: none"> Round any whole number to a

		digit in a two-digit number (tens, ones).	(thousands, hundreds, tens, and ones) <ul style="list-style-type: none"> • Round any number to the nearest 10, 100 or 1000. 	required degree of accuracy. <ul style="list-style-type: none"> • Determine the value of each digit in any number.
	Solving problems	<ul style="list-style-type: none"> • Use place value and number facts to solve problems. 	<ul style="list-style-type: none"> • Solve number and practical problems with increasingly large positive numbers. 	<ul style="list-style-type: none"> • Solve number and practical problems.
To add and subtract	Complexity	<ul style="list-style-type: none"> • Solve one-step problems with addition and subtraction: <ul style="list-style-type: none"> • Using concrete objects and pictorial representations including those involving numbers, quantities and measures. • Using the addition (+), subtraction (-) and equals (=) signs. • Applying their increasing knowledge of mental and written methods. 	<ul style="list-style-type: none"> • Solve two-step addition and subtraction problems in contexts, deciding which operations and methods to use and why. 	<ul style="list-style-type: none"> • Solve multi-step addition and subtraction problems in contexts, deciding which operations and methods to use and why.
	Methods	<ul style="list-style-type: none"> • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: <ul style="list-style-type: none"> • One-digit and two-digit numbers to 20, including zero. • A two-digit number and ones. • A two-digit number and tens. 	<ul style="list-style-type: none"> • Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. • Add and subtract numbers mentally, including: <ul style="list-style-type: none"> • A three-digit number and ones. 	<ul style="list-style-type: none"> • Add and subtract whole numbers with more than 4 digits, including using formal written methods. (columnar addition and subtraction) • Add and subtract numbers mentally with increasingly large numbers.

		<ul style="list-style-type: none"> • Two two-digit numbers. • Adding three one-digit numbers. • Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. 	<ul style="list-style-type: none"> • A three-digit number and tens. • A three-digit number and hundreds. 	
	Checking	<ul style="list-style-type: none"> • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. 	<ul style="list-style-type: none"> • Estimate and use inverse operations to check answers to a calculation. 	<ul style="list-style-type: none"> • Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
	Using number facts	<ul style="list-style-type: none"> • Represent and use number bonds and related subtraction facts within 20. • Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100. 	<ul style="list-style-type: none"> • Solve problems, including missing number problems, using number facts, place value and more complex addition and subtraction. 	<ul style="list-style-type: none"> • Add and subtract negative integers.
To multiply and divide	Complexity	<ul style="list-style-type: none"> • Solve one-step (two-step at greater depth) problems involving multiplication and division. 	<ul style="list-style-type: none"> • Solve problems involving multiplying and dividing, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems (such as n objects are connected to m objects). 	<ul style="list-style-type: none"> • Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign. • Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

				<ul style="list-style-type: none"> • Use knowledge of the order of operations to carry out calculations involving the four operations.
	Methods	<ul style="list-style-type: none"> • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs. • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. • Solve problems involving multiplication and division using mental methods. 	<ul style="list-style-type: none"> • Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. • Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers. • Recognise and use factor pairs and commutativity in mental calculations. 	<ul style="list-style-type: none"> • Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. • Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. • Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context. • Perform mental calculations, including with mixed operations and large numbers.
	Checking	<ul style="list-style-type: none"> • Use known multiplication facts to check the accuracy of calculations. 	<ul style="list-style-type: none"> • Recognise and use the inverse relationship between multiplication and division and use this to 	<ul style="list-style-type: none"> • Estimate and use inverse operations and rounding to check answers to a calculation.

			check calculations and solve missing number problems.	
	Using multiplication and division facts	<ul style="list-style-type: none"> • Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables. • Recognise odd and even numbers. • Use multiplication and division facts to solve problems. 	<ul style="list-style-type: none"> • Recall multiplication and division facts for multiplication tables up to 12×12. 	<ul style="list-style-type: none"> • Identify common factors, common multiples and prime numbers. • Establish whether a number up to 100 is prime and recall prime numbers up to 19. • Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. • Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3). • Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.
Fractions (including decimals, percentages, ratio and proportion)	Recognising fractions	<ul style="list-style-type: none"> • Recognise, find and name a half as one of two equal parts of an object, shape or quantity. • Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. • Recognise, find, name and write fractions $\frac{1}{2}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a 	<ul style="list-style-type: none"> • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small 	<ul style="list-style-type: none"> • Compare and order fractions whose denominators are all multiples of the same number. • Compare and order fractions, including fractions > 1. • Recognise mixed numbers and improper fractions and convert from one form to the other and

		length, shape, set of objects or quantity.	<p>denominators.</p> <ul style="list-style-type: none"> • Round decimals with one decimal place to the nearest whole number. • Compare numbers with the same number of decimal places up to two decimal places. • Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. • Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. • Compare and order unit fractions and fractions with the same denominators. 	<p>write mathematical statements > 1 as a mixed number.</p> <ul style="list-style-type: none"> • Round decimals with two decimal places to the nearest whole number and to one decimal place. • Read, write, order and compare numbers with up to three decimal places. • Identify the value of each digit in numbers given to three decimal places. • Solve problems involving number up to three decimal places. • Recognise the percent symbol (%) and understand that percent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.
	Equivalence	<ul style="list-style-type: none"> • Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. 	<ul style="list-style-type: none"> • Recognise and show, using diagrams, families of common equivalent fractions. • Recognise and write decimal equivalents of any number of tenths or hundredths. • Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$. 	<ul style="list-style-type: none"> • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. • Read and write decimal numbers as fractions. • Recognise and use thousandths and relate them to tenths, hundredths and decimal

				<p>equivalents.</p> <ul style="list-style-type: none"> • Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. • Associate a fraction with division and calculate decimal fraction equivalents. • Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.
	<p>Solving problems</p>	<ul style="list-style-type: none"> • Write simple fractions for example, $\frac{1}{2}$ of 6 = 3. 	<ul style="list-style-type: none"> • Add and subtract fractions with the same denominator within one whole. • Solve problems involving increasingly harder fractions. • Calculate quantities and fractions to divide quantities (including non-unit fractions where the answer is a whole number). • Add and subtract fractions with the same denominator. • Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. • Solve simple measure and 	<ul style="list-style-type: none"> • Add and subtract fractions with the same denominator and denominators that are multiples of the same number. • Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. • Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. • Multiply simple pairs of proper fractions, writing the answer in its simplest form. • Solve problems which require knowing percentage and decimal equivalents of, $\frac{1}{2}$, $\frac{1}{4}$,

			<p>money problems involving fractions and decimals to two decimal places.</p>	<p>$\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.</p> <ul style="list-style-type: none"> • Divide proper fractions by whole numbers. • Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places. <p>Ratio and proportion</p> <ul style="list-style-type: none"> • Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. • Solve problems involving the calculation of percentages and the use of percentages for comparison. • Solve problems involving similar shapes where the scale factor is known or can be found. • Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.
<p>To understand the properties of shapes</p>		<ul style="list-style-type: none"> • Recognise and name common 2D and 3D shapes. 	<ul style="list-style-type: none"> • Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different 	<ul style="list-style-type: none"> • Identify 3-D shapes, including cubes and other cuboids, from 2-

- Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
- Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.
- Identify 2-D shapes on the surface of 3-D shapes.
- Compare and sort common 2-D and 3-D shapes and everyday objects.

orientations and describe them.

- Recognise angles as a property of shape or a description of a turn.
- Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle.
- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.
- Identify acute and obtuse angles and compare and order angles up to two right angles by size.
- Identify lines of symmetry in 2-D shapes presented in different orientations.
- Complete a simple symmetric figure with respect to a specific line of symmetry.

D representations.

- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
- Draw given angles, and measure them in degrees ($^{\circ}$).
- Identify:
 - Angles at a point and one whole turn (total 360°).
 - Angles at a point on a straight line and a turn (total 180°).
 - Other multiples of 90° .
- Use the properties of rectangles to deduce related facts and find missing lengths and angles.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- Draw 2-D shapes using given dimensions and angles.
- Recognise, describe and build simple 3-D shapes, including making nets.
- Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular

				<p>polygons.</p> <ul style="list-style-type: none"> • Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. • Recognise angles where they meet at a point, are on a straight line, or are vertically opposite and find missing angles.
To describe position, direction and movement		<ul style="list-style-type: none"> • Describe position, direction and movement, including whole, half, quarter and three-quarter turns. • Order and arrange combinations of mathematical objects in patterns and sequences. • Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). 	<ul style="list-style-type: none"> • Recognise angles as a property of shape and as an amount of rotation. • Identify right angles, recognise that 2 right angles make a half turn and 4 make a whole turn. • Identify angles that are greater than a right angle. • Describe positions on a 2-D grid as coordinates in the first quadrant. • Describe movements between positions as translations of a given unit to the left/right and up/down. • Plot specified points and draw sides to complete a given polygon. 	<ul style="list-style-type: none"> • Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed. • Describe positions on the full coordinate grid. (all four quadrants) • Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.
To use measures		<ul style="list-style-type: none"> • Compare, describe and solve practical problems for: 	<ul style="list-style-type: none"> • Measure, compare, add and subtract: lengths (m/cm/mm); mass 	<ul style="list-style-type: none"> • Convert between different units of metric measure.

- lengths and heights
- mass/weight
- capacity and volume
- time.
- Measure and begin to record:
 - lengths and heights
 - mass/weight
 - capacity and volume
 - time (hours, minutes, seconds).
- Recognise and know the value of different denominations of coins and notes.
- Sequence events in chronological order using language.
- Recognise and use language relating to dates, including days of the week, weeks, months and years.
- Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
- Use standard units to estimate and measure length/height (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.
- Compare and order lengths, mass,

- (kg/g); volume/capacity (l/ml).
- Measure the perimeter of simple 2-D shapes.
- Add and subtract amounts of money to give change. (£ and p)
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use appropriate vocabulary.
- Know the number of seconds in a minute and the number of days in each month, year and leap year.
- Compare durations of events.
- Convert between different units of measure. (for example, kilometre to metre; hour to minute)
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.
- Find the area of rectilinear shapes by counting squares.
- Estimate, compare and calculate different measures, including

- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes.
- Estimate volume and capacity.
- Solve problems involving converting between units of time.
- Use all four operations to solve problems involving measure (for example, length, mass, volume, money) using decimal notation, including scaling.
- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.
- Use, read, write and convert between standard

		<p>volume/capacity and record the results using >, < and =.</p> <ul style="list-style-type: none"> • Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. • Find different combinations of coins that equal the same amounts of money. • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. • Compare and sequence intervals of time. • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. • Know the number of minutes in an hour and the number of hours in a day. 	<p>money in pounds and pence.</p> <ul style="list-style-type: none"> • Read, write and convert time between analogue and digital 12- and 24-hour clocks. • Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. 	<p>units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation up to three decimal places.</p> <ul style="list-style-type: none"> • Convert between miles and kilometres. • Recognise that shapes with the same areas can have different perimeters and vice versa. • Recognise when it is possible to use formulae for area and volume of shapes. • Calculate the area of parallelograms and triangles. • Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units.
To use statistics		<ul style="list-style-type: none"> • Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. • Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. 	<ul style="list-style-type: none"> • Interpret and present data using bar charts, pictograms and tables. • Solve one-step and two-step questions (for example, 'How many more?' and 'How many fewer?') using information presented in scaled bar charts, pictograms and 	<ul style="list-style-type: none"> • Solve comparison, sum and difference problems using information presented in a line graph. • Complete, read and interpret information in tables, including timetables.

		<ul style="list-style-type: none"> • Ask and answer questions about totalling and comparing categorical data. 	<p>tables.</p> <ul style="list-style-type: none"> • Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. • Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. 	<ul style="list-style-type: none"> • Interpret and construct pie charts and line graphs and use these to solve problems. • Calculate and interpret the mean as an average.
To use algebra		<ul style="list-style-type: none"> • Solve addition and subtraction problems involving missing numbers. 	<ul style="list-style-type: none"> • Solve addition and subtraction, multiplication and division problems that involve missing numbers. 	<ul style="list-style-type: none"> • Use simple formulae. • Generate and describe linear number sequences. • Express missing number problems algebraically. • Find pairs of numbers that satisfy an equation with two unknowns. • Enumerate possibilities of combinations of two variables.

Computing

Key Concept

Learning Goal 1

Learning Goal 2

Learning Goal 3

To code (using Scratch)	Motion	<ul style="list-style-type: none"> Control motion by specifying the number of steps to travel, direction and turn. 	<ul style="list-style-type: none"> Use specified screen coordinates to control movement. 	<ul style="list-style-type: none"> Set IF conditions for movements. Specify types of rotation giving the number of degrees.
	Looks	<ul style="list-style-type: none"> Add text strings, show and hide objects and change the features of an object. 	<ul style="list-style-type: none"> Set the appearance of objects and create sequences of changes. 	<ul style="list-style-type: none"> Change the position of objects between screen layers (send to back, bring to front).
	Sound	<ul style="list-style-type: none"> Select sounds and control when they are heard, their duration and volume. 	<ul style="list-style-type: none"> Create and edit sounds. Control when they are heard, their volume, duration and rests. 	<ul style="list-style-type: none"> Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.
	Draw	<ul style="list-style-type: none"> Control when drawings appear and set the pen colour, size and shape. 	<ul style="list-style-type: none"> Control the shade of pens. 	<ul style="list-style-type: none"> Combine the use of pens with movement to create interesting effects.
	Events	<ul style="list-style-type: none"> Specify user inputs (such as clicks) to control events. 	<ul style="list-style-type: none"> Specify conditions to trigger events. 	<ul style="list-style-type: none"> Set events to control other events by 'broadcasting' information as a trigger.
	Control	<ul style="list-style-type: none"> Specify the nature of events (such as a single event or a loop). 	<ul style="list-style-type: none"> Use IF THEN conditions to control events or objects. 	<ul style="list-style-type: none"> Use IF THEN ELSE conditions to control events or objects.
	Sensing	<ul style="list-style-type: none"> Create conditions for actions by waiting for a user input (such as responses to questions like: What is your name?). 	<ul style="list-style-type: none"> Create conditions for actions by sensing proximity or by waiting for a user input (such as proximity to a specified colour or a line or responses to questions). 	<ul style="list-style-type: none"> Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions.

Variables and lists

- From Year 3 onwards.

- Use variables to store a value.
- Use the functions define, set, change, show and hide to control the variables.

- Use lists to create a set of variables.

Operators

- From Year 3 onwards.

- Use the Reporter operators

() + ()

() - ()

() * ()

() / ()

to perform calculations.

- Use the Boolean operators

() < ()

() = ()

() > ()

() and ()

() or ()

Not ()

to define conditions.

- Use the Reporter operators

() + ()

() - ()

() * ()

() / ()

				<p>to perform calculations.</p> <p>Pick Random () to ()</p> <p>Join () ()</p> <p>Letter () of ()</p> <p>Length of ()</p> <p>() Mod () This reports the remainder</p> <p>after a division calculation</p> <p>Round ()</p> <p>() of ().</p>
<p>To connect</p>		<ul style="list-style-type: none"> • Participate in class social media accounts. • Understand online risks and the age rules for sites. 	<ul style="list-style-type: none"> • Contribute to blogs that are moderated by teachers. • Give examples of the risks posed by online communications. • Understand the term 'copyright'. • Understand that comments made online that are hurtful or offensive are the same as bullying. • Understand how online services work. 	<ul style="list-style-type: none"> • Collaborate with others online on sites approved and moderated by teachers. • Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems. • Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or

				<p>games, without express written permission, from the copyright holder.</p> <ul style="list-style-type: none"> • Understand the effect of online comments and show responsibility and sensitivity when online. • Understand how simple networks are set up and used.
To communicate		<ul style="list-style-type: none"> • Use a range of applications and devices in order to communicate ideas, work and messages. 	<ul style="list-style-type: none"> • Use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally. 	<ul style="list-style-type: none"> • Choose the most suitable applications and devices for the purposes of communication. • Use many of the advanced features in order to create high quality, professional or efficient communications.
To collect		<ul style="list-style-type: none"> • Use simple databases to record information in areas across the curriculum. 	<ul style="list-style-type: none"> • Devise and construct databases using applications designed for this purpose in areas across the curriculum. 	<ul style="list-style-type: none"> • Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner.

Design Technology

Key Concept		Learning Goal 1	Learning Goal 2	Learning Goal 3
To master practical skills	Food	<ul style="list-style-type: none"> • Cut, peel or grate ingredients safely and hygienically. • Measure or weigh using measuring cups or electronic scales. • Assemble or cook ingredients. 	<ul style="list-style-type: none"> • Prepare ingredients hygienically using appropriate utensils. • Measure ingredients to the nearest gram accurately. • Follow a recipe. • Assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking). 	<ul style="list-style-type: none"> • Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms). • Measure accurately and calculate ratios of ingredients to scale up or down from a recipe. • Demonstrate a range of baking and cooking techniques. • Create and refine recipes, including ingredients, methods, cooking times and temperatures.
	Materials	<ul style="list-style-type: none"> • Cut materials safely using tools provided. • Measure and mark out to the nearest centimetre. • Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling). • Demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen). 	<ul style="list-style-type: none"> • Cut materials accurately and safely by selecting appropriate tools. • Measure and mark out to the nearest millimetre. • Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs). • Select appropriate joining techniques. 	<ul style="list-style-type: none"> • Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape). • Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).

	Textiles	<ul style="list-style-type: none"> • Shape textiles using templates. • Join textiles using running stitch. • Colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing). 	<ul style="list-style-type: none"> • Understand the need for a seam allowance. • Join textiles with appropriate stitching. • Select the most appropriate techniques to decorate textiles. 	<ul style="list-style-type: none"> • Create objects (such as a cushion) that employ a seam allowance. • Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration). • Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).
	Electricals and electronics	<ul style="list-style-type: none"> • Diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage). 	<ul style="list-style-type: none"> • Create series and parallel circuits 	<ul style="list-style-type: none"> • Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).
	Computing	<ul style="list-style-type: none"> • Model designs using software. 	<ul style="list-style-type: none"> • Control and monitor models using software designed for this purpose. 	<ul style="list-style-type: none"> • Write code to control and monitor models or products.
	Construction	<ul style="list-style-type: none"> • Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products. 	<ul style="list-style-type: none"> • Choose suitable techniques to construct products or to repair items. • Strengthen materials using suitable techniques. 	<ul style="list-style-type: none"> • Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).
	Mechanics	<ul style="list-style-type: none"> • Create products using levers, wheels and winding mechanisms. 	<ul style="list-style-type: none"> • Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and 	<ul style="list-style-type: none"> • Convert rotary motion to linear using cams. • Use innovative combinations of electronics (or computing) and

			gears).	mechanics in product designs.
To design, make, evaluate and improve		<ul style="list-style-type: none"> • Design products that have a clear purpose and an intended user. • Make products, refining the design as work progresses. • Use software to design. 	<ul style="list-style-type: none"> • Design with purpose by identifying opportunities to design. • Make products by working efficiently (such as by carefully selecting materials). • Refine work and techniques as work progresses, continually evaluating the product design. • Use software to design and represent product designs. 	<ul style="list-style-type: none"> • Design with the user in mind, motivated by the service a product will offer (rather than simply for profit). • Make products through stages of prototypes, making continual refinements. • Ensure products have a high quality finish, using art skills where appropriate. • Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.
To take inspiration from design throughout history		<ul style="list-style-type: none"> • Explore objects and designs to identify likes and dislikes of the designs. • Suggest improvements to existing designs. • Explore how products have been created. 	<ul style="list-style-type: none"> • Identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs. • Improve upon existing designs, giving reasons for choices. • Disassemble products to understand how they work. 	<ul style="list-style-type: none"> • Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices. • Create innovative designs that improve upon existing products. • Evaluate the design of products so as to suggest improvements to the user experience.

Science

Key Concept		Learning Goal 1	Learning Goal 2	Learning Goal 3
	To work scientifically	<ul style="list-style-type: none"> • Ask simple questions. • Observe closely, using simple equipment. • Perform simple tests. • Identify and classify. • Use observations and ideas to suggest answers to questions. • Gather and record data to help in answering questions. 	<ul style="list-style-type: none"> • Ask relevant questions. • Set up simple, practical enquiries and comparative and fair tests. • Make accurate measurements using standard units, using a range of equipment, e.g. thermometers and data loggers. • Gather, record, classify and present data in a variety of ways to help in answering questions. • Record findings using simple scientific language, drawings, labelled diagrams, bar charts and tables. • Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. • Use results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests. • Identify differences, similarities or 	<ul style="list-style-type: none"> • Plan enquiries, including recognising and controlling variables where necessary. • Use appropriate techniques, apparatus, and materials during fieldwork and laboratory work. • Take measurements, using a range of scientific equipment, with increasing accuracy and precision. • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models. • Report findings from enquiries, including oral and written explanations of results, explanations involving causal relationships, and conclusions. • Present findings in written form, displays and other presentations. • Use test results to make predictions to set up further comparative and fair tests.

			<p>changes related to simple, scientific ideas and processes.</p> <ul style="list-style-type: none"> • Use straightforward, scientific evidence to answer questions or to support their findings. 	<ul style="list-style-type: none"> • Use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments.
Biology	To understand plants	<ul style="list-style-type: none"> • Identify and name a variety of common plants, including garden plants, wild plants and trees and those classified as deciduous and evergreen. • Identify and describe the basic structure of a variety of common flowering plants, including roots, stem/trunk, leaves and flowers. • Observe and describe how seeds and bulbs grow into mature plants. • Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy. 	<ul style="list-style-type: none"> • Identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers. • Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. • Investigate the way in which water is transported within plants. • Explore the role of flowers in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. 	<ul style="list-style-type: none"> • Relate knowledge of plants to studies of evolution and inheritance. • Relate knowledge of plants to studies of all living things.
	To understand animals and humans	<ul style="list-style-type: none"> • Identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates. • Identify and name a variety of common animals that are carnivores, herbivores and 	<ul style="list-style-type: none"> • Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat. • Construct and interpret a variety 	<ul style="list-style-type: none"> • Describe the changes as humans develop to old age. • Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and

		<p>omnivores.</p> <ul style="list-style-type: none"> • Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates, including pets). • Identify name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. • Notice that animals, including humans, have offspring which grow into adults. • Investigate and describe the basic needs of animals, including humans, for survival (water, food and air). • Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene. 	<p>of food chains, identifying producers, predators and prey.</p> <ul style="list-style-type: none"> • Identify that humans and some animals have skeletons and muscles for support, protection and movement. • Describe the simple functions of the basic parts of the digestive system in humans. • Identify the different types of teeth in humans and their simple functions. 	<p>blood.</p> <ul style="list-style-type: none"> • Recognise the importance of diet, exercise, drugs and lifestyle on the way the human body functions. • Describe the ways in which nutrients and water are transported within animals, including humans.
	<p>To investigate living things</p>	<ul style="list-style-type: none"> • Explore and compare the differences between things that are living, that are dead and that have never been alive. • Identify that most living things live in habitats to which they are 	<ul style="list-style-type: none"> • Recognise that living things can be grouped in a variety of ways. • Explore and use classification keys. • Recognise that environments 	<ul style="list-style-type: none"> • Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. • Describe the life process of reproduction in some plants and

suited and describe how different habitats provide for the basic needs of different kinds of animals and plants and how they depend on each other.

- Identify and name a variety of plants and animals in their habitats, including micro-habitats.
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

can change and that this can sometimes pose dangers to specific habitats.

animals.

- Describe how living things are classified into broad groups according to common observable characteristics.
- Give reasons for classifying plants and animals based on specific characteristics.

To understand evolution and inheritance

• Identify how humans resemble their parents in many features.

• Identify how plants and animals, including humans, resemble their parents in many features.

• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.

• Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.

• Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.

• Identify how animals and plants are suited to and adapt to their environment in different ways.

• Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Chemistry

To investigate materials

- Distinguish between an object and the material from which it is made.
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.
- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.
- Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard for particular uses.

Rocks and Soils

- Compare and group together different kinds of rocks on the basis of their simple, physical properties.
- Relate the simple physical properties of some rocks to their formation (igneous or sedimentary).
- Describe in simple terms how fossils are formed when things that have lived are trapped within sedimentary rock.
- Recognise that soils are made from rocks and organic matter.

States of Matter

- Compare and group materials together, according to whether they are solids, liquids or gases.
- Observe that some materials change state when they are heated or cooled, and measure the temperature at which this happens in degrees Celsius ($^{\circ}\text{C}$), building on their teaching in mathematics.
- Identify the part played by evaporation and condensation in

- Compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets.
- Understand how some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.
- Demonstrate that dissolving, mixing and changes of state are reversible changes.
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with

			the water cycle and associate the rate of evaporation with temperature.	burning, oxidation and the action of acid on bicarbonate of soda.
Physics	To understand movement, forces and magnets	<ul style="list-style-type: none"> • <i>Notice and describe how things move, using simple comparisons such as faster and slower.</i> • <i>Compare how different things move.</i> 	<ul style="list-style-type: none"> • Compare how things move on different surfaces. • Notice that some forces need contact between two objects, but magnetic forces can act at a distance. • Observe how magnets attract or repel each other and attract some materials and not others. • Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. • Describe magnets as having two poles. • Predict whether two magnets will attract or repel each other, depending on which poles are facing. 	<p>Magnets</p> <ul style="list-style-type: none"> • Describe magnets as having two poles. • Predict whether two magnets will attract or repel each other, depending on which poles are facing. <p>Forces</p> <ul style="list-style-type: none"> • Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. • Identify the effect of drag forces, such as air resistance, water resistance and friction that act between moving surfaces. • Describe, in terms of drag forces, why moving objects that are not driven tend to slow down. • Understand that force and motion can be transferred through mechanical devices such

				<p>as gears, pulleys, levers and springs.</p> <ul style="list-style-type: none"> • Understand that some mechanisms including levers, pulleys and gears, allow a smaller force to have a greater effect.
	<p>To understand light and seeing</p>	<ul style="list-style-type: none"> • <i>Observe and name a variety of sources of light, including electric lights, flames and the Sun, explaining that we see things because light travels from them to our eyes.</i> 	<ul style="list-style-type: none"> • Recognise that they need light in order to see things and that dark is the absence of light. • Notice that light is reflected from surfaces. • Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. • Recognise that shadows are formed when the light from a light source is blocked by a solid object. • Find patterns in the way that the size of shadows change. 	<ul style="list-style-type: none"> • Understand that light appears to travel in straight lines. • Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eyes. • Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them, and to predict the size of shadows when the position of the light source changes. • Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
	<p>To investigate sound and hearing</p>	<ul style="list-style-type: none"> • <i>Observe and name a variety of sources of sound, noticing that we hear with our ears.</i> 	<ul style="list-style-type: none"> • Identify how sounds are made, associating some of them with something vibrating. • Recognise that vibrations from sounds travel through a medium to 	<ul style="list-style-type: none"> • Find patterns between the pitch of a sound and features of the object that produced it. • Find patterns between the volume of a sound and

			the ear.	the strength of the vibrations that produced it.
				<ul style="list-style-type: none"> • Recognise that sounds get fainter as the distance from the sound source increases.
To understand electrical circuits	<ul style="list-style-type: none"> • <i>Identify common appliances that run on electricity.</i> • <i>Construct a simple series electrical circuit.</i> 	<ul style="list-style-type: none"> • Identify common appliances that run on electricity. • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. • Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. • Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. • Recognise some common conductors and insulators, and associate metals with being good conductors. 	<ul style="list-style-type: none"> • Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. • Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. • Use recognised symbols when representing a simple circuit in a diagram. 	
To understand the	• Observe the apparent	• Describe the movement of the	• Describe the movement of the	

Earth's movement in space

movement of the Sun during the day.

Earth relative to the Sun in the solar system.

Earth, and other planets, relative to the Sun in the solar system.

- Observe changes across the four seasons.

- Describe the movement of the Moon relative to the Earth.

- Describe the movement of the Moon relative to the Earth.

- Observe and describe weather associated with the seasons and how day length varies.

- Describe the Sun, Earth and Moon as approximately spherical bodies.

- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Physical Education

Key Concept		Learning Goal 1	Learning Goal 2	Learning Goal 3
<p>To develop practical skills in order to participate, compete and lead a healthy lifestyle</p>	<p>Games</p>	<ul style="list-style-type: none"> • Use the terms 'opponent' and 'team-mate'. • Use rolling, hitting, running, jumping, catching and kicking skills in combination. • Develop tactics. • Lead others when appropriate. 	<ul style="list-style-type: none"> • Throw and catch with control and accuracy. • Strike a ball and field with control. • Choose appropriate tactics to cause problems for the opposition. • Follow the rules of the game and play fairly. • Maintain possession of a ball (with, e.g. feet, a hockey stick or hands). • Pass to team mates at appropriate times. • Lead others and act as a respectful team member. 	<ul style="list-style-type: none"> • Choose and combine techniques in game situations (running, throwing, catching, passing, jumping and kicking, etc.). • Work alone, or with team mates in order to gain points or possession. • Strike a bowled or volleyed ball with accuracy. • Use forehand and backhand when playing racket games. • Field, defend and attack tactically by anticipating the direction of play. • Choose the most appropriate tactics for a game. • Uphold the spirit of fair play and respect in all competitive

situations.

- Lead others when called upon and act as a good role model within a team.

Gymnastics

- Copy and remember actions.
- Move with some control and awareness of space.
- Link two or more actions to make a sequence.
- Show contrasts (such as small/tall, straight/curved and wide/narrow).
- Travel by rolling forwards, backwards and sideways.
- Hold a position whilst balancing on different points of the body.
- Climb safely on equipment.
- Stretch and curl to develop flexibility.
- Jump in a variety of ways and land with increasing control and balance.

- Plan, perform and repeat sequences.
- Move in a clear, fluent and expressive manner.
- Refine movements into sequences.
- Show changes of direction, speed and level during a performance.
- Travel in a variety of ways, including flight, by transferring weight to generate power in movements.
- Show a kinaesthetic sense in order to improve the placement and alignment of body parts (e.g. in balances experiment to find out how to get the centre of gravity successfully over base and organise body parts to create an interesting body shape).
- Swing and hang from equipment safely (using hands).

- Create complex and well-executed sequences that include a full range of movements including:
 - travelling
 - balances
 - swinging
 - springing
 - flight
 - vaults
 - inversions
 - rotations
 - bending, stretching and twisting
 - gestures
 - linking skills.

- Hold shapes that are strong, fluent and expressive.
- Include in a sequence set pieces, choosing the most appropriate linking elements.
- Vary speed, direction, level and body rotation during floor performances.
- Practise and refine the gymnastic techniques used in performances (listed above).
- Demonstrate good kinaesthetic awareness (placement and alignment of body parts is usually good in well-rehearsed actions).
- Use equipment to vault and to swing (remaining upright).

Religious Education

Key Concept	Learning Goal 1	Learning Goal 2	Learning Goal 3
To understand beliefs and teachings	<ul style="list-style-type: none"> • Describe some of the teachings of a religion. • Describe some of the main festivals or celebrations of a religion. 	<ul style="list-style-type: none"> • Present the key teachings and beliefs of a religion. • Refer to religious figures and holy books to explain answers. 	<ul style="list-style-type: none"> • Explain how some teachings and beliefs are shared between religions. • Explain how religious beliefs shape the lives of individuals and communities.
To understand practices and lifestyles	<ul style="list-style-type: none"> • Recognise, name and describe some religious artefacts, places and practices. 	<ul style="list-style-type: none"> • Identify religious artefacts and explain how and why they are used. • Describe religious buildings and explain how they are used. • Explain some of the religious practices of both clerics and individuals. 	<ul style="list-style-type: none"> • Explain the practices and lifestyles involved in belonging to a faith community. • Compare and contrast the lifestyles of different faith groups and give reasons why some within the same faith may adopt different lifestyles. • Show an understanding of the role of a spiritual leader.
To understand how beliefs are conveyed	<ul style="list-style-type: none"> • Name some religious symbols. • Explain the meaning of some religious symbols. 	<ul style="list-style-type: none"> • Identify religious symbolism in literature and the arts. 	<ul style="list-style-type: none"> • Explain some of the different ways that individuals show their beliefs.
To reflect	<ul style="list-style-type: none"> • Identify the things that are important in their own lives and compare these to religious beliefs. • Relate emotions to some of the 	<ul style="list-style-type: none"> • Show an understanding that personal experiences and feelings influence attitudes and actions. • Give some reasons why religious figures 	<ul style="list-style-type: none"> • Recognise and express feelings about their own identities. Relate these to religious beliefs or teachings. • Explain their own ideas about the

	<p>experiences of religious figures studied.</p> <ul style="list-style-type: none"> • Ask questions about puzzling aspects of life. 	<p>may have acted as they did.</p> <ul style="list-style-type: none"> • Ask questions that have no universally agreed answers. 	<p>answers to ultimate questions.</p> <ul style="list-style-type: none"> • Explain why their own answers to ultimate questions may differ from those of others.
<p>To understand values</p>	<ul style="list-style-type: none"> • Identify how they have to make their own choices in life. • Explain how actions affect others. • Show an understanding of the term 'morals'. 	<ul style="list-style-type: none"> • Explain how beliefs about right and wrong affect people's behaviour. • Describe how some of the values held by communities or individuals affect behaviour and actions. • Discuss and give opinions on stories involving moral dilemmas. 	<ul style="list-style-type: none"> • Explain why different religious communities or individuals may have a different view of what is right and wrong. • Show an awareness of morals and right and wrong beyond rules (i.e. wanting to act in a certain way despite rules). • Express their own values and remain respectful of those with different values.

Key Concept	Learning Goal 1	Learning Goal 2	Learning Goal 3
Being Me in My World	<ul style="list-style-type: none"> • I understand the rights and responsibilities as a member of my class and School • I can listen to other people and contribute my own ideas about rewards and consequences. • I can recognise the choices I make and understand the consequences • I understand my rights and responsibilities. • 	<ul style="list-style-type: none"> • I know my attitudes and actions make a difference to the class team. • I understand who is in my school community, the roles they play and how I fit • I understand how democracy works through the school council • I understand that my actions affect myself and others; I care about other people's feelings and try to empathise with them • I understand how groups come together to make decisions • I understand how democracy and having a voice benefits the school community 	<ul style="list-style-type: none"> • I can identify my goals for this year, understand my fears and worries about the future and know how to express them • I know that there are universal rights for all children but for many children these rights are not met • I understand that my actions affect other people locally and globally • I can make choices about my own behaviour because I understand how rewards and consequences feel and I understand how these relate to my rights and responsibilities • I understand how an individual's behaviour can impact on a group • I understand how an individual's behaviour can impact on a group
Celebrating Difference	<p>I am starting to understand that sometimes people make assumptions about boys and girls (stereotypes)</p> <p>I can recognise what is right and wrong and know how to look after myself I know how to make new friends</p>	<p>I understand that, sometimes, we make assumptions based on what people look like</p> <p>I understand what influences me to make assumptions based on how people look</p>	<p>I understand how an individual's behaviour can impact on a group</p> <p>I understand how having a disability could affect someone's life</p> <p>I can explain some of the ways in which one person or a group can have power</p>

I can tell you some ways I am different from my friends

I know that sometimes bullying is hard to spot and I know what to do if I think it is going on but I'm not sure

I can tell you why witnesses sometimes join in with bullying and sometimes don't tell

I can identify what is special about me and value the ways in which I am unique

I can tell you a time when my first impression of someone changed when I got to know them

over another

I know some of the reasons why people use bullying behaviours

I can give examples of people with disabilities who lead amazing lives

I can explain ways in which difference can be a source of conflict and a cause for celebration

Dreams and Goals

I can choose a realistic goal and think about how to achieve it.

I can persevere even when I find tasks difficult

I can recognise who it is easy for me to work with and who it is more difficult for me to work with.

I can work cooperatively in a group to create an end product

I can tell you about some of my hopes and dreams

I understand that sometimes hopes and dreams do not come true and that this can hurt

I know that reflecting on positive and happy experiences can help me to counteract disappointment

I know how to make a new plan and set new goals even if I have been disappointed

I know my learning strengths and can set challenging but realistic goals for myself (e.g. one in-school goal and one out-of-school goal)

I can work out the learning steps I need to take to reach my goal and understand how to motivate myself to work on these

I can identify problems in the world that concern me and talk to other people about them

I can work with other people to help

		<p>I know how to work out the steps to take to achieve a goal, and can do this successfully as part of a group</p> <p>I can identify the contributions made by myself and others to the group's achievement</p>	<p>make the world a better place</p> <p>I can describe some ways in which I can work with other people to help make the world a better place</p> <p>I know what some people in my class like or admire about me and can accept their praise</p>
<p>Healthy Me</p>	<p>I know what I need to keep my body healthy.</p> <p>I can show or tell you what relaxed means and I know some things that make me feel relaxed and some that make me feel stressed.</p> <p>I understand how medicines work in my body and how important it is to use them safely.</p> <p>I can sort foods into the correct food groups and know which foods my body needs every day to keep me healthy</p> <p>I can make some healthy snacks and explain why they are good for my body</p> <p>I know how to keep safe when crossing the road, and about people who can help me to stay safe</p>	<p>I can recognise how different friendship groups are formed, how I fit into them and the friends I value the most</p> <p>I can recognise the changing dynamics between people in different groups, see who takes on which role, e.g. leader, follower, and understand the roles I take on in different situations</p> <p>I understand the facts about smoking and its effects on health, and also some of the reasons some people start to smoke</p> <p>I understand the facts about alcohol and its effects on health, particularly the liver, and also some of the reasons some people drink alcohol</p> <p>I can recognise when people are putting me under pressure and can explain ways to resist this when I want</p> <p>I know myself well enough to have a clear picture of what I believe is right and</p>	<p>I know the impact of food on the body, e.g. creating energy, giving comfort and altering mood</p> <p>I know about different types of drugs and their uses and their effects on the body particularly the liver and heart</p> <p>I can evaluate when alcohol is being used responsibly, anti-socially or being misused</p> <p>I know and can put into practice basic emergency aid procedures (e.g. the recovery position) and know how to get help in emergency situations</p> <p>I understand what it means to be emotionally well and can explore people's attitudes towards mental health/illness</p> <p>I can recognise when I feel stressed and the triggers that cause this and I understand how stress can cause alcohol</p>

		wrong	misuse
Relationships	<p>I can identify the different members of my family, understand my relationship with each of them and know why it is important to share and cooperate I can identify what being a good friend means to me</p> <p>I understand that there are lots of forms of physical contact within a family and that some of this is acceptable and some is not</p> <p>I can identify some of the things that cause conflict with my friends</p> <p>I understand that sometimes it is good to keep a secret and sometimes it is not good to keep a secret</p> <p>I recognise and appreciate people who can help me in my family, my school and my community</p> <p>I can express my appreciation for the people in my special relationships</p>	<p>I can identify the web of relationships that I am part of, starting from those closest to me and including those more distant</p> <p>I can identify someone I love and can express why they are special to me</p> <p>I can tell you about someone I know that I no longer see</p> <p>I can explain different points of view on an animal rights issue</p> <p>I can explain different points of view on an animal rights issue</p> <p>I know how to show love and appreciation to the people and animals who are special to me</p>	<p>I can identify the most significant people to be in my life so far</p> <p>I know some of the feelings we can have when someone dies or leaves</p> <p>I understand that there are different stages of grief and that there are different types of loss that cause people to grieve</p> <p>I can recognise when people are trying to gain power or control</p> <p>I understand how technology can be used to try to gain power or control and I can use strategies to prevent this from happening</p> <p>I can use technology positively and safely to communicate with my friends and family</p>
Changing Me	<p>I can recognise cycles of life in nature</p> <p>I can tell you about the natural process of growing from young to old and understand that this is not in my control</p> <p>I can recognise how my body has</p>	<p>I understand that some of my personal characteristics have come from my birth parents and that this happens because I am made from the joining of their egg and sperm</p> <p>I can correctly label the internal and</p>	<p>I am aware of my own self-image and how my body image fits into that</p> <p>I can explain how girls' and boys' bodies change during puberty and understand the importance of looking after yourself</p>

changed since I was a baby and where I am on the continuum from young to old

I can recognise the physical differences between boys and girls, use the correct names for parts of the body (penis, testicles, vagina) and appreciate that some parts of my body are private

I understand there are different types of touch and can tell you which ones I like and don't

external parts of male and female bodies that are necessary for making a baby

I can correctly label the internal and external parts of male and female bodies that are necessary for making a baby

I know how the circle of change works and can apply it to changes I want to make in my life

I know how the circle of change works and can apply it to changes I want to make in my life

I can identify changes that have been and may continue to be outside of my control that I learnt to accept

physically and emotionally

I can ask the questions I need answered about changes during puberty

I can describe how a baby develops from conception through the nine months of pregnancy, and how it is born

I understand how being physically attracted to someone changes the nature of the relationship

I can identify what I am looking forward to and what worries me about the transition to secondary school