OVERVIEW LOWER KS2 – Years 3/4

	Autumn Term	Spring Term	Summer Term
Year A	**YEAR 3 & 4** **Topic: Digging Up The Past** **History & Geography – Pre Roman Britain: The Stone Age/Bronze/ Iron Age:** Celts and the way of life, including homes, food, clothing, tribes, Gods and patterns. **Science – Animals including humans:** skeletons, muscles, digestive system, teeth and nutrition. **R.E. – Judaism:** showing awareness and similarities between Judaism and other religions, learning about festivals including Hanukkah, the importance of the Jewish faith. **Art – Investigating patterns:** Celtic patterns/ using patterns around us. **D.T. – Designing and making:** round houses (technical knowledge), jewellery and shields and investigating patterns. **PSHCE – New beginnings and bullying:** Being individuals, rules and laws, facing new challenges with positivity, reflection on ourselves, using our imaginations and experiences, taking responsibility, understanding consequences / effects of bullying. **P.E. – Tag Rugby / Football** **Language –** French – listening, speaking & writing	**YEAR 3 & 4** **Topic: Waves and Cycles** **History & Geography – The Water Cycle:** natural cycle and manmade cycle. **Water throughout the UK/World:** Oceans, seas and rivers, atlas skills. **Science – Plants:** Functions of different parts, requirement for life and growth, life cycles – pollination, seed formation and seed dispersal **Sound:** how sound is made, how it travels, the ear (parts) finding patterns, pitch/volume/distance. **States of Matter:** evaporation. **R.E. – Sikhism / festivals:** Learning about the lifestyle of Sikhs, where Sikhism originated, important Sikh leaders such as Guru Nanak. **Art – Claude Monet** (mixing colour / water colour painting and collage) **D.T. – Textiles:** fabric cards / patterns to link with festivals from RE. **PSHCE – Getting on and falling out:** being unique/ individuals, everyone makes mistakes, setting personal goals, how actions affect others / consequences / rules, relationships between friends and resolving differences, how we can change rules, making decisions and explaining choices. **P.E. – Dance / Health Related Fitness** (circuit/ interval/ continuous training) **Language –** French – listening, speaking & writing	**YEAR 3 & 4** **Topic: Invaders & Settlers** **History & Geography – Pre-Roman History:** Anglo-Saxons and Scots, Vikings. Alfred The Great and Athelstan. The way of life, including homes, food, clothing, tribes, Gods and invasion. **Place names:** Cities and capitals of the UK and name origin and mapping skills. **Science – Rocks & fossils:** compare and group different kinds, identify simple physical properties, how fossils are formed, recognise soils are made from rocks/ organic matter. **R.E. – Journey of life:** birth, baptism, confirmation, marriage and death. Looking at students own timelines, important events for them and significant events in their future, particularly to do with faith and beliefs / traditions. **Art – Piet Mondrian:** Looking at lines and limited use of colour. Work on primary colours. **D.T. – Designing and making / Resistant materials:** Clay pots and Viking Longship. **PSHCE – Going for goals:** recognise your worth and positive things about yourself, recognising others worth and being individuals, achievements, setting goals, looking at other peoples points of views and developing effective relationships/ friendship skills. **P.E. – Rounders / Athletics (yr4: swimming)** **Language –** French – listening, speaking & writing

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Year B	**YEAR 3 & 4** **Topic: Past and Present Britain** **History & Geography – Roman Britain:** British resistance- Boudicca, invasion of Julius Caesar and Claudius and 'Romanisation' of Britain. **Science – Light and shadows:** light and dark/ reflection, how this relates to vision, how shadows are formed, patterns of changing shadows. **Electricity:** electrical appliances, simple series circuits, switches, buzzers, bulbs, cells, wires and common conductors and insulators. **R.E. – Natural world:** what religions teach about the natural world and why we should care about it. Creation and the stories from various faiths. **Art – Wassily Kandinsky:** Looking at geometric shapes and abstract art. How colour and lines can be used to create mood. **D.T. – Designing and making:** Clay pot roman lights. Design and make a quiz game using an electrical circuit (including a switch and bulb for correct answers). **PSHCE – New beginnings and bullying:** Being individuals, rules and laws, facing new challenges with positivity, reflection on ourselves, using our imaginations and experiences, taking responsibility, understanding consequences / effects of bullying. **P.E. – Netball / Hockey** (ball skills and competitive sports) **Language –** French – listening, speaking & writing	**YEAR 3 & 4** **Topic: Our Local Area** **History & Geography – Local History:** How Houghton Regis has changed over time, traditions/ buildings/ legends and landmarks. **Science – Forces and Magnets:** friction on different surfaces, attract and repel, magnetic poles and magnetic force of everyday materials. **R.E. – Life of Jesus:** From birth to death to resurrection. Important miracles and parables during his ministry. **Art –** Linking to research and design of various pastries/ traditional foods- sketching, designing and evaluating own Bedfordshire Clanger. **D.T. – Food technology:** Bread making visitor (EDEN foods), Bedfordshire Clanger (design, make and evaluate). **PSHCE – Getting on and falling out:** being unique/ individuals, everyone makes mistakes, setting personal goals, how actions affect others / consequences / rules, relationships between friends and resolving differences, how we can change rules, making decisions and explaining choices. **P.E. – Gymnastics / Health Related Fitness** (circuit/ interval/ continuous training) **Language –** French – listening, speaking & writing	**YEAR 3 & 4** **Topic: Mysterious Earth** **History & Geography –** Deserts and atlas and mapping skills including compass grids and symbols. **Science – living things and their habitats:** grouping living things, exploring and using classification, identifying living things in local and the wider environment, changing environments, danger to living things. **Animals including humans:** food chains, producers, predators and prey. **R.E. – Places of worship:** Looking at and comparing churches, synagogues, temples, mosques and a gurdwara. (If possible a visit). **Art – Materials / Collage:** Sand painting various Deserts designs. **D.T. – Movement and Mechanisms:** Making and animal with moving parts using mechanisms. **PSHCE – Going for goals:** recognise your worth and positive things about yourself, recognising others worth and being individuals, achievements, setting goals, looking at other peoples points of views and developing effective relationships/ friendship skills. **P.E. – Rounders / Athletics (yr4- swimming)** **Language –** French – listening, speaking & writing

Year 3 & 4 English (throughout the year)

Reading – word reading

Pupils should be taught to:

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-apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology), both to read aloud and to understand the meaning of new words they meet -read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.

Reading – comprehension

Pupils should be taught to:

- develop positive attitudes to reading and understanding of what they read by:
- listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
- reading books that are structured in different ways and reading for a range of purposes
- using dictionaries to check the meaning of words that they have read
- increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally
- identifying themes and conventions in a wide range of books
- preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action
- discussing words and phrases that capture the reader's interest and imagination
- recognising some different forms of poetry [for example, free verse, narrative poetry]
- understand what they read, in books they can read independently, by:
- checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context
- asking questions to improve their understanding of a text
- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
- predicting what might happen from details stated and implied
- identifying main ideas drawn from more than one paragraph and summarising these
- identifying how language, structure, and presentation contribute to meaning
- retrieve and record information from non-fiction
- participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say.

Writing – transcription

Spelling

Pupils should be taught to:

- use further prefixes and suffixes and understand how to add them (English Appendix 1)

- spell further homophones
- spell words that are often misspelt (English Appendix 1)
- 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.

Pupils should learn to spell new words correctly and have plenty of practice in spelling them. As in years 1 and 2, pupils should continue to be supported in understanding and applying the concepts of word structure.
Pupils need sufficient knowledge of spelling in order to use dictionaries efficiently.

Writing – handwriting

Pupils should be taught to:
- use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined
- increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].

Writing – composition

Pupils should be taught to:
- plan their writing by:
- discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar
- discussing and recording ideas
- draft and write by:
- composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures.
- organising paragraphs around a theme
- in narratives, creating settings, characters and plot
- in non-narrative material, using simple organisational devices [for example, headings and sub-headings]
- evaluate and edit by:
- assessing the effectiveness of their own and others' writing and suggesting improvements

- proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences
- proof-read for spelling and punctuation errors
- read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear.

Writing – vocabulary, grammar and punctuation

Pupils should be taught to:

- 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 cohesion and to avoid repetition
- using conjunctions, adverbs and prepositions to express time and cause
- using fronted adverbials
- learning the grammar for years 3 and 4
- 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
- use and understand the grammatical terminology accurately and appropriately when discussing their writing and reading.

Year 3 Maths

Number – number and place value

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Pupils should be taught to:
- count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
- recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- compare and order numbers up to 1000
- identify, represent and estimate numbers using different representations
- read and write numbers up to 1000 in numerals and in words
- solve number problems and practical problems involving these ideas.

Number – addition and subtraction

Pupils should be taught to:
- add and subtract numbers mentally, including:
- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Number – multiplication and division

Pupils should be taught to:
- recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
- solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Number – fractions

Pupils should be taught to:
- 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
- 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 denominators
- recognise and show, using diagrams, equivalent fractions with small denominators
- add and subtract fractions with the same denominator within one whole [for example, 7 5 + 7 1 = 7 6]
- compare and order unit fractions, and fractions with the same denominators
- solve problems that involve all of the above.

Measurement

Pupils should be taught to:

- measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- measure the perimeter of simple 2-D shapes
- add and subtract amounts of money to give change, using both £ and p in practical contexts
- 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 vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
- know the number of seconds in a minute and the number of days in each month, year and leap year
- compare durations of events [for example to calculate the time taken by particular events or tasks].

Geometry – properties of shapes

Pupils should be taught to:

- draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different 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.

Statistics

Pupils should be taught to:

- 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 and pictograms and tables.

Year 4 Maths

Number – number and place value

Pupils should be taught to

- count in multiples of 6, 7, 9, 25 and 1000
- find 1000 more or less than a given number
- count backwards through zero to include negative numbers
- recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- order and compare numbers beyond 1000
- identify, represent and estimate numbers using different representations
- round any number to the nearest 10, 100 or 1000
- solve number and practical problems that involve all of the above and with increasingly large positive numbers
- 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.

Number – addition and subtraction

Pupils should be taught to:

- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- estimate and use inverse operations to check answers to a calculation

Number – multiplication and division

Pupils should be taught to:

- recall multiplication and division facts for multiplication tables up to 12 × 12

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- 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
- multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- solve problems involving multiplying and adding, 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.

Number – fractions (including decimals)

Pupils should be taught to:

- recognise and show, using diagrams, families of common equivalent fractions
- count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.
- solve problems involving increasingly harder fractions to 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
- recognise and write decimal equivalents of any number of tenths or hundredths
- recognise and write decimal equivalents to quarter, half and third
- 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
- 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
- solve simple measure and money problems involving fractions an decimals to two decimal places.

Measurement

Pupils should be taught to:

- 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 money in pounds and pence
- 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.

Geometry – properties of shapes

Pupils should be taught to:

- 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.

Geometry – position and direction

Pupils should be taught to:

- 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.

Statistics

Pupils should be taught to:

- 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.