# CURRICULUM SUMMARY

SUBJECT: Maths YEAR GROUP: 4 TEACHER: Monika Zabowka

| Week | Learning objectives | Activities (in brief) |
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| 1 | **Addition and Subtraction to 1000**<br>Continue to use the relationship between addition and subtraction.<br>Use informal pencil and paper methods to support, record or explain additions/subtractions.<br>Develop and refine written methods for: column addition and subtraction of two whole numbers less than 1000, and addition of more than two such numbers. | Expanded recording, most significant digits first<br>18 Expanded recording, least significant digits first; pupil sheets 17-18<br>Introducing a standard method; No bridging/bridging 10<br>Extending the standard method ; Bridging 100<br>In pairs, ask pupils to think of two three-digit numbers and challenge their partner to add them together.<br>For each correct answer score a point.<br>Textbook pp.23-24<br>Expanded recording, two-/three-digit numbers, no exchange |
| 2 | **Subtraction to 1000**<br>Use informal pencil and paper methods to support record or explain subtractions.<br>Develop and refine written methods for: subtraction of two whole numbers less than 1000.<br>Choose and use appropriate number operations and appropriate ways of calculating (mental, mental with jottings, pencil and paper) to solve problems. | Exchanging a ten for units and a hundred for tens<br>Expanded recording, two-/three-digit numbers, exchanging 10 and two-/three-digit numbers, exchanging 100<br>Textbook pp.34-37<br>Introducing a standard written method for subtraction<br>Vertical recording; Exchanging a ten for units and a hundred for tens<br>Pupil sheet 27-33 |
| 3 | **Capacity**<br>Know and use the relationships between familiar units of capacity.<br>Know the equivalent of one half, one quarter, three quarters and one tenth of 1litre in ml.<br>Suggest suitable units and measuring equipment to estimate or measure capacity.<br>Record estimates and readings from scales to a suitable degree of accuracy. | Revising the litre, half-litre and millilitre relationship, introducing the quarter litres<br>Litres and millilitres, textbook pp.101-102<br>Provide pupils with some containers. Ask them to estimate the capacity of each to the nearest 10ml. They must then see how accurate their estimates were by measuring.<br>Put a list of capacities on the board such as, 'the amount of coke in a can', 'the amount of water in a watering can'. Ask pupils to suggest appropriate measurements for each. Discuss answers.<br>Pupil sheets 83, 84 |

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| 4 | **Estimating and rounding.**<br>Read and write the vocabulary of estimation and approximation. Make and justify estimates up to about 250, and estimate a proportion. Round any positive integer less than 1000 to the nearest 10 or 100. | Estimating numbers on a 0-100 line, 2-digit numbers to the nearest 10, 3-digit numbers to the nearest 100<br>Textbook pp.9-10<br>Rounding to find approximate totals<br>Approximating<br>Having made their approximations, ask the pupils to find the actual answer to each question using a method of their choice. |
| 5 | **Written methods of multiplication**<br>Use doubling or halving, starting from known facts.<br>Partition (e.g. 23 × 4 = (20 × 4) + (3 × 4)).<br>Use the relationship between multiplication and division.<br>Approximate first. Use informal pencil and paper methods to support record or explain multiplications and divisions. | Cross method; Introducing an informal written method of multiplication<br>Vertical recording; Introducing an expanded vertical recording for multiplication<br>Adapting the expanded recording and introducing a standard method of recording<br>Halving even numbers to 100 and multiples of 10 to 200<br>Doubling a multiple of 10 to 500 and a multiple of 100 to 5000 and halving an even multiple of 10 to 1000 and an even multiple of 100 to 10000 |
| 6 | **Division**<br>Use the relationship between multiplication and division.<br>Use known number facts and place value to multiply and divide integers, including by 10 and then 100 (whole-number answers).<br>Approximate first. Use informal pencil and paper methods to support, record or explain multiplications and divisions. | Linking multiplication and division, textbook p.56<br>Multiplying and dividing by 10 and 100, Investigating digit shift patterns<br>Division of two-digit numbers beyond the tables; Informal and standard written method<br>Introducing remainders beyond the tables<br>Dealing with remainders, Rounding answers; pounds<br>Textbook pp.57-60 |
| 7 | **Green Camp** | Alternative lessons and activities |

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| 8 | **2D Shape**<br>Recognise positions and directions: for example, describe and find the position of a point on a grid of squares where the lines are numbered.<br>Recognise simple examples of horizontal and vertical lines.<br>Use the eight compass directions N, S, E, W, NE, NW, SE, SW.<br>Begin to know that angles are measured in degrees<br>Start to order a set of angles less than 180°. | Symmetrical designs, Consolidating line symmetry<br>Textbook pp.110-111<br>Making symmetrical patterns, pupil sheet 87<br><br>Extending grid references<br>Introducing co-ordinats, textbook p.113<br>Introducing the 8-point compass, pp.114-115<br>Clockwise and anti-clockwise turns<br>Comparing and ordering angles, pupil sheet 89<br>Comparing/ordering angles<br>Ask pupils to draw ten angles on a sheet of paper. Swap with a partner who must order them from smallest to largest. |
| 9 | **Fractions**<br>Recognise simple fractions that are several parts of a whole, such as 2/3 or 5/8, and mixed numbers, such as 53/4; recognise the equivalence of simple fractions<br>Identify two simple fractions with a total of 1 (e.g. 3/10 and 7/10).<br>Order simple fractions<br>Begin to relate fractions to division and find simple fractions of numbers or quantities.<br>Find fractions such as 2/3, 3/4, 3/5, 7/10 ... of shapes. | Revising halves, quarters, tenths, thirds and fifths; introducing sixth, eighths<br>Provide pupils with multilink of different colours. Ask them to construct shapes where, for example, 'one sixth is yellow'.<br>Introducing equivalence, textbook p.69<br>Provide pupils with multilink of different colours. Ask them to construct shapes where, for example, 'one sixth is yellow'.<br>Extension Textbook pp. E8- E10 |
| 10 | **Addition and Subtraction to 10000**<br>Find a small difference by counting up (e.g. 5003 - 4996).Count on or back in repeated steps of 1, 10 or 100.<br>Identify near doubles, using known doubles (e.g. 150 + 160).<br>Use known number facts and place value to add or subtract mentally, | Adding multiples of 100, bridging a multiple of 1000<br>Doubling multiples of 100 to 5000 + 5000; Adding to make the next multiple of 1000<br>Mental addition involving four digit numbers<br>Subtracting a single digit from a four-digit number<br>Finding small differences between four-digit numbers<br>Textbook pages 75-79 |

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| 11 | **Numbers to 10000. Number properties**<br>Recognise odd and even numbers up to 1000<br>Recognise multiples of 2, 3, 4, 5 and 10, up to the tenth multiple.<br>Recognise negative numbers in context.<br>Use all four operations to solve word problems | Market stall, Finding the total cost of items priced in multiples of 10p, with bridging<br>Finding the total cost of items priced in multiples of 5p, 1p<br>Change from £20, practical work<br>Using and applying with the four operations<br>Textbook pp.63-66 |

SUBJECT: English YEAR GROUP: 4 TEACHER: Monika Zabowka

| Week | Learning objectives | Activities (in brief) |
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| 1 | **Classic and modern poetry**<br>Read poem aloud showing the mood of the poem<br>Add adjectives to create similes | Read' The Magnificent Bull', complete RS1'Suggesting similes'<br>Read the poem 'Fireworks', extend similes using adjectives and clauses<br>Read 'The Invisible Beast', complete RS2, creating atmosphere, describing feelings; RS3-identify similes<br>Read 'Before the Hunt', practice reading with expression creating fear; perform to another pair |
| 2 | **Classic and modern poetry**<br>Write poem that includes rhyme, chorus, and a simile | Read' Before the hunt', complete RS4 'Before the storm'; explore rhythm and discuss structure of the poem<br>Write own poem based on 'Before the Hunt';<br>Discuss mood and atmosphere created from images about 'The Tide Rises, the Tide Falls'; group rhyming words<br>Discuss archaic words, list reading strategies used to help work out what archaic words mean |
| 3&4 | **Issues and dilemmas**<br>Work out the issue or dilemma the character in a story is facing<br>Suggest alternative endings for stories where characters face an issue or dilemma<br>Use punctuation marks<br>Present characters using role play | Read 'Bill's New Frock', identify different types of punctuation<br>Compare 'Bill's New Frock' and 'Diary of a Killer Cat', discuss the author's style<br>Read the end of 'The Tales of a Fourth Grade Nothing'; identify the issues/dilemmas explored<br>Predict how issues/dilemmas are resolved<br>Read the opening of a 'Cheat', identify a possible happy ending<br>Complete writing story with concluding paragraph that resolves issues |

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| 5&6 | **Poetry in different forms** | Read a poem, identify alliteration, RS1,2<br>Identify word clauses, investigate endings<br>Read/discuss a haiku poem, complete RS3<br>Demonstrate and write a haiku, based on food or drink<br>Role play a conversation in pairs, write a conversation poem based on the role play<br>Explore the structure of 'Slowly'; write own couplet<br>Demonstrate different ways of improving poems |
| 7 | **Green Camp** | Alternative lessons and activities |
| 8&9 | **Persuasive writing**<br>Use some persuasive techniques when creating advertisements<br>Use punctuation to clarify messages<br>Choose the most effective way to present different parts of advertisement | Evaluate images in magazine adverts, decide on audience and predict text<br>Analyse techniques used in advertising slogans<br>Recall range of punctuation<br>Rough out independent advert<br>As a group write a radio advert for an independent product<br>Practice performing the advert |
| 10&11 | **Discussion texts**<br>Read discussion texts and explain how they are structured<br>Write a discussion<br>Use connecting words and phrases to structure an argument | Read TV discussion in Big Book<br>Find and classify conjunctions and connectives<br>In pairs list ideas for argument<br>Write a heading and introductory paragraph for a discussion<br>Identify the use of a point and reason<br>Compare the presentation of two discussions<br>Examine the language, content and layout of a campaign poster<br>In pairs plan a persuasive poster to use in a debate |

SUBJECT: Science YEAR GROUP: 4 TEACHER: Monika Zabowka

| Week | Learning objectives | Activities (in brief) |
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| 1 | **Forces; pushes and pulls**<br>How to make a concept map<br>Learn how Newton metres measure force<br>Practise using them in the classroom | Use words on the page to create a forces concept map<br>Complete task sheets 1,2<br>Compare Newton metres on the page and use Newton metres around the classroom |
| 2 | **Feeling surfaces; slopes and surfaces**<br>Discuss ideas and listen to views of others<br>Express observations in writing<br>Plan and carry out fair tests and draw conclusions | Feel and describe different surfaces<br>Plan a fair test to investigate the effect of slope on moving objects<br>Complete task sheets 3, 4 |

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| 3 | **High and low friction; making friction**<br>Use and learn vocabulary linked to friction<br>Make observations and understand what is friction | Observe differences between surfaces<br>Practical activities |
| 4 | **Using and reducing friction**<br>Identify practical use of friction in everyday objects<br>Plan and carry out a fair test | Discuss where friction occurs in everyday situations<br>Children plan and carry out a fair test to find the best way of reducing friction<br>Task sheet 5 |
| 5 | **Water resistance**<br>Understand what water resistance is<br>Learn and use new vocabulary<br>Represent data as a bar chart | Answer questions related to water resistance<br>Investigate how different objects move through water<br>Compose written explanations |
| 6 | **Air resistance**<br>Understand what air resistance is<br>Solve problems as part of a group<br>Plan and carry out a fair test | Observe air resistance and write about own ideas<br>Children plan and carry out a fair test to investigate the effects of air resistance<br>Write conclusions using technical vocabulary |
| 7 | **Green Camp** | Alternative lessons and activities |
| 8 | **Electricity, making a circuit**<br>Understand that things use electricity to make them work<br>Know how to complete a circuit | Make a list of things that make electricity to make them work<br>Make a complete circuit to light a bulb and draw a labelled picture of the circuit |
| 9 | **Safety rules**<br>Understand issues relating to safety and electricity<br>Identify dangerous practices | Children make safety rules for mains electricity<br>Children spot dangers in a picture of a household |
| 10 | **Conductors and insulators**<br>Know what are conductors and insulators<br>Use a table to record results<br>Use a Venn diagram to record and compare results | Children gather objects and find out if they are conductors or insulators<br>Complete task sheets 6,7 to record results |
| 11 | **Assessment Tasks** | Complete assessment tasks A and B to assess knowledge, skills, and understanding of circuits and conductors |

SUBJECT: Geography/History YEAR GROUP: 4 TEACHER: Monika Zabowka

| Week | Learning objectives | Activities (in brief) |
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| 1-2 | **Water cycle**<br>Identify and sequence the components of the water cycle<br>Understand condensation and evaporation | Use pictures, charts and video (The Magic School Bus-' All wet') to reinforce any previous work on water, and identify and discuss with the children the components of the water cycle. Draw and label a diagram of a water cycle; discuss condensation and evaporation |
| 3-4 | **Where does water go to?**<br>Describe what happens to rain water when it reaches the ground<br>Identify forms in which water occurs in the environment | Visit school field and ask children to note run-off - water collection areas - after rainfall. Other activities that children could carry out include: identifying areas of poor drainage; measuring how puddles change over time; photographing and tracing changes; and carrying out controlled experiments in the classroom. |
| 5-6 | **Investigating rivers**<br>Draw sketch maps of a river and label the main features<br>Identify parts of the river system<br>Express personal likes and dislikes about the river | Visit the river and ask the children to sketch the river and its banks and to photograph features<br><br>Do field sketches, noting flow of current and bank side features ; Note human use along the river, *eg farming, fishing, industrial water supply, tourism, sewage*; Ask the children to write imaginatively about the river |
| 7 | **Green Camp** | Alternative lessons and activities |
| 8 | **The Second World War**<br>To place events, people and changes into correct periods of time<br>To identify and describe reasons for, and results of, historical events, situations and changes | Briefly tell the story of the Second World war using page 59<br>Give out a set of cards from sheet on p.59 and place them on the timeline<br>Children create a timeline of the 20th century and another one for the Second World War |
| 9-10 | **Evacuees**<br>To know about characteristic features of the period studied<br>To communicate knowledge and understanding of history in a variety of ways<br>To find out about the events, people and changes | Children learn about evacuation<br>They create name labels to wear as evacuees during role play<br>Read fictional and first hand accounts of evacuation leads; children consider differences between sources |

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| 11 | **Life for children in the war**<br>Find out about the events, people and changes studied<br>To ask and answer questions | Read the photocopiable sheet and ask children to try to find out the answer to their questions<br>Create a 'question and answer' chart, with headings What we asked and What we learned |

SUBJECT: RE YEAR GROUP: 4 TEACHER: Monika Zabowka

| Week | Learning objectives | Activities (in brief) |
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| 1-3 | **What is faith and what difference does it make?**<br>Can describe the key points of Abraham's life as expressions of his faith<br>Can describe faith as a religious activity<br>Can identify some of the characteristics of faithfulness | Tell the story of Abraham, the epitome of faithfulness, focusing on his response to God's promise on his great journey and his readiness to sacrifice his son Isaac. Discuss what made Abraham respond as he did. Invite children to work with the story in small groups, changing the storyteller in each group on a prearranged signal, retelling it orally to each other, in turns. Go on to explore the emotional implications through a 'hot-seating' activity.<br>• Tell Sarah's story. *How did Abraham depend on her to be able to carry out his faithfulness?*<br>• Invite children to talk about what they think 'faith' is and to make their own calligrams of the word. |
| 4-6 | **What is faith and what difference does it make?**<br>Can prioritise the aspects of investigation and organise their own work in pairs<br>Can ask questions about the experiences of others and draw conclusions about the impact of faith<br>Can compare their own ideas about faith with those of others | Begin by drawing up a collective list of questions to be used by children to support their investigations. This could be done by a class brainstorming activity or in stages, giving children time to generate questions first in pairs. Order the questions into categories covering biographical details, actions, the impact of faith on the person and the difference he or she made to the world.<br>• Give children a choice of subjects from a suggested list; supported by an appropriate range of source material. Pair children in either ability-matched or mixed ability partnerships depending on their needs and the support available.<br>• Invite children who wish to do so to share their findings with the class. Display all the reports. Use them to refocus the discussion about faith and the difference it makes.<br>• Talk about the things that may not have happened if it had not been for the faith of the selected individuals. |

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| 8-11 | **Hindu stories; The festival of Holi**<br>List main features of festival of Holi<br>Read Hindu stories, discuss the moral of each and compare them to similar stories read before | Examine poster 4 and discuss questions<br>Write acrostic poem<br>Visit the exhibit of Hindu art and participate in a workshop<br>Read/discuss Hindu stories<br>Write own story about how different people can view the same thing differently |

SUBJECT: DT YEAR GROUP: 4 TEACHER: Monika Zabowka

| Week | Learning objectives | Activities (in brief) |
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| 1-6 | **Making storybooks**<br>Can identify the audience and purpose for their book<br>Can illustrate alternative ideas for their books using drawings and models, and make choices between them<br>Canproduce an outline plan that identifies the main stages in making their books, and list the tools, materials and processes needed<br>Canidentify what is and what is not working well in their books and what makes a quality finish | Explain to the children that their task is to design and make a storybook with moving parts. The pages of the book are to incorporate mechanisms *eg pop-up, sliding parts and linkages.*<br>• Ask the children to think carefully about the type of book they might make. *Who will use it? What will be the storyline? Why will moving parts be useful in the story? What type of mechanisms may be included?*<br>• The children should make an outline plan with drawing or writing to show who will do each task and the order in which they intend to make the book.<br>• Encourage the children to keep their designs as simple as possible but encourage a high-quality finish.<br>• Evaluate the books in use, highlighting strengths and discussing improvements that could be made. Ask them to compare their products with commercially made ones. |
| 8-11 | **Making torches**<br>Can make a bulb light up in a simple electric circuit<br>• make their own switch and know how to place it in a circuit to control the bulb<br>• name the simple electrical components being used<br>• understand what the safety implications are for bulbs and batteries | Show the children how to make a simple electrical circuit using a battery, bulb, switch and connecting wires.<br>• Teach the children that a variety of metal components can be used as part of the circuit.<br>• Ask the children to make a variety of hand-made switches by using simple classroom materials *eg card, plastic, aluminium foil, paper fasteners, paper clips.*<br>• Ask the children to make switches that work in different ways *eg when you press them, when you slide them.*<br>• The children could investigate the reflective qualities of some materials which might be used as a torch reflector.<br>• The children could explore a variety of 'casings' for a torch and ways in which the batteries, switch and bulb might be fixed inside. Include reclaimed card boxes, tubes, |

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| | | plastic bottles, 3D geometric shapes made from nets of card, etc. |