

Hampshire Medium Term Plans for Mathematics: Curriculum Year 3

| Y3 Block A Term 1 (15 lessons) 3A1 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|--|--|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Solve one- and two-step problems involving whole numbers and unit fractions, money or measures, including time and temperature Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; finding 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Addition and subtraction</p> <ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> 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. <p>Measures</p> <ul style="list-style-type: none"> 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 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 <p>Geometry: properties of shape</p> <ul style="list-style-type: none"> 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 | <p>A/S PSR</p> <p>Measures</p> <p>Geometry</p> |

| Y3 Block B Term 1 (15 lessons) 3B1 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|---|--|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Solve one- and two-step problems involving whole numbers and unit fractions, money or measures, including time and temperature Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; finding 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Multiplication and division</p> <ul style="list-style-type: none"> 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 integer scaling problems and correspondence problems in which n objects are connected to m objects. <p>Fractions</p> <ul style="list-style-type: none"> 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 compare and order unit fractions with the same denominator solve problems that involve all of the above. <p>Statistics</p> <ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables solve one-step and two-step questions such as ‘How many more?’ and ‘How many fewer?’ using information presented in scaled bar charts and pictograms and tables. | <p>M&D PSR</p> <p>Fractions</p> <p>NPV Statistics</p> |

Hampshire Medium Term Plans for Mathematics: Curriculum Year 3

| Y3 Block C Term 1 (15 lessons) 3C1 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|---|--|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Solve one- and two-step problems involving whole numbers and unit fractions, money or measures, including time and temperature Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; finding 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Addition and subtraction</p> <ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> 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. <p>Measures</p> <ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) 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, hours and o'clock; use vocabulary such as 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. <p>Statistics</p> <ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables. | <p>A&S PSR</p> <p>Measure</p> <p>NPV</p> <p>Statistics</p> |

Hampshire Medium Term Plans for Mathematics: Curriculum Year 3

| Y3 Block D Term 1 (15 lessons) 3D1 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|---|---|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Multiplication and division</p> <ul style="list-style-type: none"> 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 integer scaling problems and correspondence problems in which n objects are connected to m objects. <p>Fractions</p> <ul style="list-style-type: none"> add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$) 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 and show, using diagrams, equivalent fractions with small denominators compare and order unit fractions with the same denominator <p>Geometry: properties of shape</p> <ul style="list-style-type: none"> 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, identify whether angles are greater than or less than a right angle identify horizontal, vertical, perpendicular and parallel lines in relation to other lines | <p>M&D PSR</p> <p>Fractions</p> <p>NPV Geometry</p> |

| Y3 Block A Term 2 (15 lessons) 3A2 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|--|--|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Solve one- and two-step problems involving whole numbers and unit fractions, money or measures, including time and temperature Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; finding 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Addition and subtraction</p> <ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> 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. <p>Measures</p> <ul style="list-style-type: none"> 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 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 <p>Geometry: properties of shape</p> <ul style="list-style-type: none"> 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 | <p>A/S PSR</p> <p>Measures</p> <p>Geometry</p> |

| Y3 Block D Term 2 (15 lessons) 3D2 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|---|---|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Multiplication and division</p> <ul style="list-style-type: none"> 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 integer scaling problems and correspondence problems in which n objects are connected to m objects. <p>Fractions</p> <ul style="list-style-type: none"> add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$) 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 and show, using diagrams, equivalent fractions with small denominators compare and order unit fractions with the same denominator <p>Geometry: properties of shape</p> <ul style="list-style-type: none"> 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, identify whether angles are greater than or less than a right angle identify horizontal, vertical, perpendicular and parallel lines in relation to other lines | <p>M&D PSR</p> <p>Fractions</p> <p>NPV Geometry</p> |

| Y3 Block A Term 3 (15 lessons) 3A3 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|--|--|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Solve one- and two-step problems involving whole numbers and unit fractions, money or measures, including time and temperature Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; finding 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Addition and subtraction</p> <ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> 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. <p>Measures</p> <ul style="list-style-type: none"> 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 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 <p>Geometry: properties of shape</p> <ul style="list-style-type: none"> 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 | <p>A/S PSR</p> <p>Measures</p> <p>Geometry</p> |

| <p>Y3 Block B Term 3 (15 lessons) 3B3</p> | <p>Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i></p> | <p>Domain</p> |
|--|---|--|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Solve one- and two-step problems involving whole numbers and unit fractions, money or measures, including time and temperature Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; finding 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Multiplication and division</p> <ul style="list-style-type: none"> 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 integer scaling problems and correspondence problems in which n objects are connected to m objects. <p>Fractions</p> <ul style="list-style-type: none"> 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 compare and order unit fractions with the same denominator solve problems that involve all of the above. <p>Statistics</p> <ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables solve one-step and two-step questions such as ‘How many more?’ and ‘How many fewer?’ using information presented in scaled bar charts and pictograms and tables. | <p><u>M&D</u> PSR</p> <p>Fractions</p> <p>NPV Statistics</p> |

Hampshire Medium Term Plans for Mathematics: Curriculum Year 3

| Y3 Block C Term 3 (15 lessons) 3C3 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|---|--|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Solve one- and two-step problems involving whole numbers and unit fractions, money or measures, including time and temperature Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; finding 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Addition and subtraction</p> <ul style="list-style-type: none"> add and subtract numbers mentally, including: <ul style="list-style-type: none"> 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. <p>Measures</p> <ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) 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, hours and o'clock; use vocabulary such as 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. <p>Statistics</p> <ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables solve one-step and two-step questions such as 'How many more?' and 'How many fewer?' using information presented in scaled bar charts and pictograms and tables. | <p>A&S PSR</p> <p>Measure</p> <p>NPV</p> <p>Statistics</p> |

Hampshire Medium Term Plans for Mathematics: Curriculum Year 3

| Y3 Block D Term 3 (15 lessons) 3D3 | Learning Objectives : <i>By the end of this sequence of lessons all pupils will be able to.....</i> | Domain |
|--|---|---|
| <p>Problem solving and reasoning</p> <ul style="list-style-type: none"> Identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem Present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols Use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make inferences from given information and frame an hypothesis to test further <p>Number and Place Value</p> <ul style="list-style-type: none"> 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 to at least 1000 in numerals and in words solve number problems and practical problems involving these ideas. | <p>Multiplication and division</p> <ul style="list-style-type: none"> 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 integer scaling problems and correspondence problems in which n objects are connected to m objects. <p>Fractions</p> <ul style="list-style-type: none"> add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$) 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 and show, using diagrams, equivalent fractions with small denominators compare and order unit fractions with the same denominator <p>Geometry: properties of shape</p> <ul style="list-style-type: none"> 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, identify whether angles are greater than or less than a right angle identify horizontal, vertical, perpendicular and parallel lines in relation to other lines | <p>M&D PSR</p> <p>Fractions</p> <p>NPV Geometry</p> |

Key:

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|-----|-------------------------------|---|-------------|
| PSR | Problem solving and reasoning | M | Measurement |
| NPV | Number and Place Value | S | Statistics |
| A&S | Addition and Subtraction | | |
| M&D | Multiplication and Division | | |
| A | Algebra | | |