Hampton Infant School and Nursery Termly Knowledge and Skills for Maths - Year 2
Autumn Term

|  |  | Number: Place Value (Approx 3 weeks) | Number: Addition and Subtraction (Approx 4 Weeks) | Measurement: Money (Approx 1 week) | Number: Multiplication and Division (Approx 2 weeks) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Knowledge and Skills |  | - Count objects to 100 and read and write numbers in numerals and words. <br> - Represent numbers to 100. <br> - Tens and ones with a part whole model. <br> - Tens and ones using addition. <br> - Use a place value chart. <br> - Compare objects. <br> - Compare numbers. <br> - Order objects and numbers. <br> - Count in $2 \mathrm{~s}, 5 \mathrm{~s}$ and 10 s . <br> - Count in 3s. | - Fact families - Addition and subtraction bonds to 20. <br> - Check calculations. <br> - Compare number sentences. <br> - Related facts. <br> - Bonds to 100 (tens). <br> - Add and subtract 1s. <br> - 10 more and 10 less. <br> - Add and subtract 10s. <br> - Add a 2-digit and 1-digit number - crossing ten. <br> - Subtract a 1-digit number from a 2-digit number - crossing 10. <br> - Add two 2-digit numbers - not crossing ten - add ones and add tens. <br> - Add two 2-digit numbers - crossing ten - add ones and add tens. <br> - Subtract a 2-digit number from a 2-digit number - not crossing ten. <br> - Subtract a 2-digit number from a 2-digit number - crossing ten subtract ones and tens. <br> - Bonds to 100 (tens and ones). <br> - Add three 1-digit numbers. | - Count money - pence. <br> - Count money - pounds (notes and coins). <br> - Count money - notes and coins. <br> - Select money. <br> - Use different coins to make the same amount. <br> - Compare money. <br> - Find the total. <br> - Find the difference. <br> - Find change. <br> - Two-step problems. | - Recognise equal groups. <br> - Make equal groups. <br> - Add equal groups. <br> - Multiplication sentences using the x symbol. <br> - Multiplication sentences from pictures. <br> - Use arrays. <br> - 2 times-table. <br> - 5 times-table. <br> - 10 times-table. |
| National Curriculum Links |  | - Read and write numbers to at least 100 in numerals and in words. <br> - Recognise the place value of each digit in a two-digit number (tens, ones) Identify, represent and estimate numbers using different representations including the number line. <br> - Compare and order numbers from 0 up to 100 ; use <, $>$ and $=$ signs. <br> - Use place value and number facts to solve problems. <br> - Count in steps of 2,3 and 5 from 0 , and in tens from any number, forward and backward. | - Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 . <br> - Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers. <br> - Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. <br> - Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods. <br> - Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. | - Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. <br> - Find different combinations of coins that equal the same amounts of money. <br> - Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change | - Recall and use multiplication and division facts for the 2,5 and 10 times tables, including recognising odd and even numbers. <br> - Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division ( $\div$ ) and equals (=) sign. <br> - Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. <br> - Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. |
|  | WTS | - Read and write numbers in numerals up to 100 . <br> - Partition a two-digit number into tens and ones and demonstrate and understanding of place value, though they may use structured resources to support them. | - Add and subtract (one digit numbers) explaining their method verbally in pictures or using apparatus. <br> - Recall at least four of the six number bonds for 10 and reason about associated facts. | - Know the value of different coins. | N/A |
|  | EXS | - Read scales in divisions of ones, twos, fives and tens. <br> - Partition two-digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus. | - Recall all the number bonds to and within 10 . and use these to reason with and calculate bonds to and within 20 , recognising other associated additive relationships. | - Use different coins to make the same amount. | - Recall multiplication and division facts for 2,5 and 10 and use them to solve simple problems, demonstrating and understanding of commutativity as necessary. |
|  | GDS | - Read scales where not all numbers on the scale are given and estimate points in between. <br> - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Recall and use multiplication and division facts for 2, 5 and 10 and make deductions outside known multiplication facts. <br> - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. |

Hampton Infant School and Nursery Termly Knowledge and Skills for Maths - Year 2
Spring Term

|  |  | Number: Multiplication and Division (Approx 2 weeks) | Geometry: Properties of Shape (Approx 2 weeks) | Number: Fractions (Approx 3 weeks) | Measurement: Time (Approx 2 weeks) | Measurement: Length and Height (Approx 1 week) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Knowledge and Skills |  | - Make equal groups - sharing. <br> - Make equal groups - grouping. <br> - Divide by 2. <br> - Odd and even numbers. <br> - Divide by 5 . <br> - Divide by 10 . | - Recognise 2D and 3D shapes. <br> - Count sides on 2D shapes. <br> - Count vertices on 2D shapes. <br> - Draw 2D shapes. <br> - Lines of symmetry. <br> - Sort 2D shapes. <br> - Make patterns with 2D shapes. <br> - Count faces on 3D shapes. <br> - Count edges on 3D shapes. <br> - Count vertices on 3D shapes. <br> - Sort 3D shapes. <br> - Make patterns with 3D shapes. | - Make equal parts. <br> - Recognise half. <br> - Find half. <br> - Recognise quarter. <br> - Find a quarter. <br> - Recognise a third. <br> - Find a third. <br> - Unit fractions. <br> - NonOunit fractions. <br> - Equivalence of $1 / 2$ and $2 / 4$. <br> - Find three quarters. <br> - Count in fractions. | - O'clock and half past. <br> - Quarter past and quarter to. <br> - Telling time to 5 minutes. <br> - Minutes in an hour, hours in a day. <br> - Find durations of time. <br> - Compare durations of time. | - Measure length (cm). <br> - Measure length (m). <br> - Compare lengths. <br> - Order lengths. <br> - Four operations with lengths. |
| National Curriculum Links |  | - Recall and use multiplication and division facts for the 2,5 and 10 times tables, including recognising odd and even numbers. <br> - Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs. <br> - Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts. <br> - Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. | - Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line. <br> - Identify and describe the properties of 3 D shapes, including the number of edges, vertices and faces. <br> - Identify 2-D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. <br> - Compare and sort common 2-D and 3-D shapes and everyday objects. | - Recognise, find, name and write fractions $1 / 3,1 / 4,2 / 4$ and $3 / 4$ of a length, shape, set of objects or quantity. <br> - Write simple fractions for example, $1 / 2$ of $6=$ 3 and recognise the equivalence of $2 / 4$ and $1 / 2$. | - 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. <br> - Know the number of minutes in an hour and the number of hours in a day. <br> - Compare and sequence intervals of time. | - Choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); temperature $\left({ }^{\circ} \mathrm{C}\right)$; capacity (litres $/ \mathrm{ml}$ ) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. <br> - Compare and order lengths, mass, volume/capacity and record the results using $>,<$ and $=$. |
|  | WTS | N/A | - Name some common 2D and 3D shapes from a group of shapes or from pictures of the shapes and describe some of their properties. | N/A | - Read the time on a clock to the nearest half an hour. | N/A |
|  | EXS | - Recall multiplication and division facts for 2,5 and 10 and use them to solve simple problems, demonstrating and understanding of commutativity as necessary. | - Name and describe properties of 2D and 3D shapes, including number of sides, vertices, edges, faces and lines of symmetry. | - Identify $1 / 4,1 / 3,1 / 2,2 / 4,3 / 4$ of a number or shape and know that all the parts must be equal parts of the whole. | - Read the time on a clock to the nearest 15 minutes. | - Read scales in divisions of ones, twos, fives and tens. |
|  | GDS | - Recall and use multiplication and division facts for 2,5 and 10 and make deductions outside known multiplication facts. <br> - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Describe the similarities and differences of 2 D and 3 D shapes, using their properties. <br> - Solve unfamiliar word problems that involves more than one step. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Read the time on a clock to the nearest 5 minutes. <br> - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Read scales where not all numbers on the scale are given and estimate points in between. <br> - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. |

Hampton Infant School and Nursery Termly Knowledge and Skills for Maths - Year 2
Summer Term

|  |  | Measurement: Mass, Capacity and temperature (Approx 2 weeks) | Consolidation | Statistics (Approx 2 weeks) | Geometry: Position and Direction (Approx 3 weeks) | Investigations/Problem Solving |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Knowledge and Skills |  | - Compare mass. <br> - Measure mass in grams. <br> - Measure mass in kilograms. <br> - Compare capacity. <br> - Millilitres. <br> - Litres. <br> - Temperature. | All | - Make tally charts. <br> - Draw pictograms (1-1). <br> - Interpret pictograms (1-1). <br> - Draw pictograms (2, 5 and 10). <br> - Interpret pictograms (2, 5 and 10). <br> - Block diagrams. | - Describing movement. <br> - Describing turns. <br> - Describing movement and turns. <br> - Making patterns with shapes | All |
| National Curriculum Links |  | - Choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass (kg/g); temperature ( ${ }^{\circ} \mathrm{C}$ ); capacity (litres $/ \mathrm{ml}$ ) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels. <br> - Compare and order lengths, mass, volume/capacity and record the results using $>,<$ and $=$. | All | - Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. <br> - Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. <br> - Ask and answer questions about totalling and comparingcategorical data. | - 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 anticlockwise). <br> - Order and arrange combinations of mathematical objects in patterns and sequences. | All |
|  | WTS | N/A | All | N/A | N/A | All |
|  | EXS | - Read scales in divisions of ones, twos, fives and tens. | All | - Read scales in divisions of ones, twos, fives and tens. | N/A | All |
|  | GDS | - Read scales where not all numbers on the scale are given and estimate points in between. <br> - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | All | - Read scales where not all numbers on the scale are given and estimate points in between. <br> - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | - Use reasoning about numbers and relationships to solve more complex problems and explain their thinking. <br> - Solve unfamiliar word problems that involves more than one step. | All |

