## Pashley maths overview

Year 1
Pashley school uses the Whiterose scheme. This document alongside the calculation policy and NCTEM resources supplements the resources provided by Whiterose.

Pashley uses a spiral curriculum approach. Concepts are spread out so assessments can be carried out and children can be assessed on what knowledge they have retained and built on in the second and third units of work.
Pink-concept title, what is being covered for the week/s.
Green-national curriculum statements, broken down to progress from term to term.
Red-assessment blocks (planned in at the end of each concept). There are typically 2 per concept. The first to plan and plug gaps and the second to judge where a child is.
Blue-additional detail and guidance e.g. what shapes to cover within that concept or further detail of how to break down teaching.


|  | Term 3, Mastering for number sessions continues 3 sessions a week NSPCC NUMERDAY | Term 4 Mastering for number sessions continues 3 sessions a week |
| :---: | :---: | :---: |
| 1 | Shape <br> - recognise and name common 3-D shapes, including: 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]. <br> Cubes, cuboids, sphere, square based pyramid, triangular based pyramid, cone <br> - END OF WEEK ASSESSMENT ON SHAPE (3D) | Time <br> - tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. <br> Write times for clocks first then draw hands on clock faces <br> - END OF WEEK ASSESSMENT ON TIME |
| 2 | Place value within 50 <br> - read and write numbers from 1 to 50 in numerals and words. <br> - count, read and write numbers to 50 in numerals; <br> - count to and across 50, forwards and backwards, beginning with 0 or 1 , or from any given number <br> - END OF WEEK ASSESSMENT ON PLACE VAUE WITHIN 50 | Place value within 50 <br> - given a number, identify one more and one less <br> - identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least <br> END OF WEEK ASSESSMENT ON PLACE VAUE WITHIN 50 |
| 3 | Addition within 20 <br> - add one-digit numbers to 20 , including zero <br> - solve one-step problems that involve addition , using concrete objects and pictorial representations <br> - END OF WEEK ASSESSMENT ON ADDITION WITHIN 20 | Multiplication <br> - solve one-step problems involving multiplication, by calculating the answer using concrete objects, pictorial representations with the support of the teacher. <br> $2 s$, language of multiplication <br> end of week assessment on multiplication |
| 4 | Money <br> - Know the value of different denominations of coins and notes <br> - END OF WEEK ASSESSMENT ON MONEY | Division <br> - solve one-step problems involving division, by calculating the answer using concrete objects, pictorial representations <br> $2 s$, sharing by 2 <br> - END OF WEEK ASSESSMENT ON DIVISION |
| 5 | Addition within 20 <br> - add two-digit numbers to 20 , including zero <br> - solve one-step problems that involve addition , using concrete objects and pictorial representations <br> - END OF WEEK ASSESSMENT ON ADDITION WITHIN 20 | Subtraction within 20 <br> - subtract one-digit numbers to 20 , including zero <br> - solve one-step problems that involve subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=-9$. <br> END OF WEEK ASSESSMENT ON ADDITION AND SUBTRACTION WITHIN 20 |
| 6 | Length and Height <br> - compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] <br> - END OF WEEK ASSESSMENT ON ADDITION WITHIN 20 | Length and Height <br> - measure and begin to record the following for lengths and heights cm , practically measure and check their measuring <br> - END OF WEEK ASSESSMENT ON LENGTH AND HEIGHT |


|  | Term 5 Mastering for number sessions continues 3 sessions a week | Term 6 Mastering for number sessions continues 3 sessions a week |
| :---: | :---: | :---: |
| 1 | Fractions <br> - recognise, find and name a half as one of two equal parts of an object, shape or quantity <br> - END OF WEEK ASSESSMENT ON FRACTIONS | Subtraction within 20 <br> - subtract two-digit numbers to 20 , including zero <br> - solve one-step problems that involve subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=-9$. <br> - END OF WEEK ASSESSMENT ON ADDITION AND SUBTRACTION WITHIN 20 |
| 2 | Position and direction <br> - Pupils should be taught to: describe position, direction and movement, including whole and half turns <br> - END OF WEEK ASSESSMENT ON POSITION AND DIRECTION | Fractions <br> - recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. <br> - END OF WEEK ASSESSMENT ON FRACTIONS |
| 3 | Place value within 100 <br> - read and write numbers from 1 to 100 in numerals and words. <br> - count, read and write numbers to 100 in numerals; <br> - count to and across 100 , forwards and backwards, beginning with 0 or 1 , or from any given number <br> - END OF WEEK ASSESSMENT ON PLACE VALUE WITHIN 100 | Place value within 100 <br> - given a number, identify one more and one less <br> - identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least <br> - END OF WEEK ASSESSMENT ON PLACE VALUE WITHIN 100 |
| 4 | Weight <br> - compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than] <br> - measure and begin to record the following: mass/weight <br> - end of week assessment on weight | Multiplication <br> - solve one-step problems involving multiplication, by calculating arrays with the support of the teacher. <br> 5s and 10 s <br> - END OF WEEK ASSESSMENT ON MULTIPLICATION |
| 5 | Division <br> - solve one-step problems involving division, by calculating arrays with the support of the teacher. <br> 5s and 10 s, group by 5 s and 10 s <br> - END OF WEEK ASSESSMENT ON DIVISION | Position and direction <br> - Pupils should be taught to: describe position, direction and movement, quarter and three quarter turns. <br> - END OF WEEK ASSESSMENT ON POSItion AND DIRECTION |
| 6 | Consolidation | Volume <br> - compare, describe and solve practical problems for: capacity and volume [for example, full/empty, more than, less than, half, half full, quarter] <br> - measure and begin to record the following: capacity and volume <br> - END OF WEEK ASSESSMENT ON VOLUME |

Year 2 Pashley maths overview

|  | Term 1 | Term 2 |
| :---: | :---: | :---: |
| 1 | Shape <br> identify and describe the properties of 2-D shapes <br> compare and sort common 2-D and 3-D shapes and everyday objects. <br> Square, circle, triangle, rectangle, pentagon, hexagon , octagon <br> END OF WEEK ASSESSMENT ON SHAPE (2D) | Money <br> - recognise and use symbols for pounds (£) and pence (p) <br> - combine amounts to make a particular value <br> - END OF WEEK ASSESSMENT ON MONEY |
| 2 | Place value within 50 <br> - count in steps of 2,3 , and 5 from 0 , and in tens from any number, forward and backward <br> - recognise the place value of each digit in a two-digit number (tens, ones) <br> - read and write numbers to at least 50 in numerals and in words | Multiplication (2 weeks) <br> - recall and use multiplication facts for the 2,5 and 10 multiplication tables <br> - recognising odd and even numbers <br> - calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication $(x)$ and equals (=) signs <br> Odd and even numbers are taught first followed by equal and unequal groups before multiplication. Multiplication is taught using grouping in 2 s and repeated addition (week 1) <br> $x$ calculations and language are introduced for 5 s and 10 s (week 2) <br> - END OF WEEK ASSESSMENT ON MULTIPLICATION |
| 3 | Place value within 100 <br> - recognise the place value of each digit in a two-digit number (tens, ones) <br> - identify, represent and estimate numbers using different representations <br> - read and write numbers to at least 100 in numerals and in words <br> Bonds to 100 related to bonds to 10 facts. <br> - END OF TWO WEEK ASSESSMENT ON PLACE VALUE |  |
| 4 | Addition, 1 digit numbers <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods <br> - solve problems with addition <br> - END OF WEEK ASSESSMENT ON AdDItion | Division (2 weeks) <br> - recall and use division facts for the 2,5 and 10 multiplication tables <br> - calculate mathematical statements for division within the multiplication tables and write them using the division $(\div)$ and equals $(=)$ signs <br> Sharing by 2 (week 1 ) introduce division symbol <br> Grouping by 5 s and 10 s (week 2), introduce division language <br> - END OF WEEK ASSESSMENT ON DIVISION |
| 5 | Subtraction 1 digit numbers <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods <br> - solve problems with subtraction <br> - END OF WEEK ASSESSMENT ON SUBTRACTION |  |
| 6 | Time <br> - compare and sequence intervals of time <br> - know the number of minutes in an hour and the number of hours in a day. <br> - tell and write the time to the hour and draw the hands on a clock face to show these times <br> - tell and write the time for half past and draw the hands on a clock face to show these times <br> - END OF WEEK ASSESSMENT ON TIME | Measure, temperature <br> - choose and use appropriate standard units to estimate <br> - measure temperature $\left({ }^{\circ} \mathrm{C}\right)$ to the nearest appropriate unit thermometers and measuring vessels <br> - END OF WEEK ASSESSMENT ON TEMPERATURE |
| 7 | Measurement, length/height <br> - choose and use appropriate standard units to estimate and measure length/height in any direction $\mathrm{m} / \mathrm{cm}$ <br> - END OF WEEK ASSESSMENT ON LENGTH AND HEIGHT | Consolidation |


|  | Term 3 <br> NSPCC NUMERDAY | Term 4 |
| :---: | :---: | :---: |
| 1 | Statistics <br> - interpret and construct simple pictograms and block diagrams <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 comparing categorical data. <br> - END OF WEEK ASSESSMENT ON STATISTICS | Subtraction, and addition 2 digit numbers (no exchange) <br> - recall and use subtraction facts to 20 fluently, <br> - Derive and use related facts up to 100 <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods <br> END OF WEEK ASSESSMENT ON SUBTRACTION |
| 2 | Fractions (2 weeks) <br> - recognise, find, name and write fractions for halves of a length, shape, set of objects or quantity <br> - write simple fractions for example, half of $6=3$ <br> - recognise, find, name and write fractions for quarters of a length, shape, set of objects or quantity <br> - END OF WEEK ASSESSMENT ON FRACTIONS | Money <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 <br> - END OF WEEK ASSESSMENT ON MONEY |
| 3 |  | Addition, 2 digit exchange <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods <br> - END OF WEEK ASSESSMENT ON ADDITION |
| 4 | Place value within 100 <br> - 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> - read and write numbers to at least 100 in numerals and in words <br> - use place value and number facts to solve problems. <br> - END OF WEEK ASSESSMENT ON PLACE VALUE | Subtraction, 2 digit exchange <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods <br> end of week assessment on subtraction |
| 5 | Addition, 2 digit numbers (no exchange) <br> - recall and use addition facts to 20 fluently, <br> - Derive and use related facts up to 100 <br> - solve problems with addition <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods <br> - END OF WEEK ASSESSMENT ON ADDITION | Addition and subtraction, consolidate, 2 digit, exchange <br> - show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot |
| 6 | Subtraction, 2 digit numbers (no exchange) <br> - recall and use subtraction facts to 20 fluently, <br> - Derive and use related facts up to 100 <br> - solve problems with subtraction <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures, applying their increasing knowledge of mental and written methods <br> - END OF WEEK ASSESSMENT ON SUBTRACTION | Shape <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 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] <br> - compare and sort common 3-D shapes and everyday objects. <br> Cubes, cuboids, sphere, square based pyramid, triangular based pyramid, cone <br> Face, vertices, sides, edges <br> END OF WEEK ASSESSMENT ON 3D SHAPE |


|  | Term 5 | Term 6 |
| :---: | :---: | :---: |
| 1 | Symmetry within 2D shape <br> - identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line <br> - END OF WEEK ASSESSMENT ON SYMMETRY | Position and direction <br> - order and arrange combinations of mathematical objects in patterns and sequences <br> - 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> - end of week assessment on position and direction |
| 2 | Multiplication <br> - $\quad$ show that multiplication of two numbers can be done in any order (commutative) <br> - solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. <br> Arrays are introduced. Recap the connections between division and multiplication. <br> - END OF WEEK ASSESSMENT ON MULTIPLICATION | Statistics <br> - interpret and construct tally charts 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 comparing categorical data <br> - END OF WEEK ASSESSMENT ON STATISTICS |
| 3 | Division <br> - show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot <br> - solve problems involving division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. <br> END OF WEEK ASSESSMENT ON DIVISION | Time <br> - 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> - end of Week assessment on time |
| 4 | Fractions <br> - recognise, find, name and write fractions for a third of a length, shape, set of objects or quantity <br> - recognise the equivalence of two quarters = one half <br> - END OF WEEK ASSESSMENT ON FRACTIONS | Weight <br> - choose and use appropriate standard units to estimate and measure mass ( $\mathrm{kg} / \mathrm{g}$ ) to the nearest appropriate unit using scales. <br> - compare and order mass and record the results using >, < and = <br> - END OF WEEK ASSESSMENT ON WEIGHT |
| 5 | Addition and subtraction, consolidate, 2 digit, exchange <br> - recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. <br> solve problems with addition <br> - solve problems with subtraction | Volume/capacity <br> - choose and use appropriate standard units to estimate and measure capacity (litres $/ \mathrm{ml}$ ) to the nearest appropriate unit measuring vessels <br> - compare and order volume/capacity and record the results using >, < and = <br> - end of week assessment on volume |
| 6 | sATS WEEK, <br> revision of 4 operations in PM lessons | Length and height <br> - compare and order lengths and record the results using >, < and = <br> - end of week assessment on length and height |
| 7 |  | Consolidation |

