

Band 2 Maths Skills and Knowledge Document

Working Towards	At	Above
<p>Count in steps of 2s, 5s and 10s from 0.</p> <p>Recognise the place value of each digit in a two-digit number (tens, ones)</p> <p>Read and write numbers to at least 100 in numerals</p> <p>Recall and use addition and subtraction facts to 20 fluently</p> <p>Add and subtract numbers where no regrouping is required, using concrete objects, pictorial representations, and mentally, including a two-digit number and ones</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and tens</p> <p>Recall doubles and halves to 20 e.g. knowing that double 2 is 4, double 5 is 10 and half of 18 is 9</p>	<p>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</p> <p>Identify, represent and estimate numbers using different representations, including the number line</p> <p>Compare and order numbers from 0 up to 100; use <, > and = signs</p> <p>Read and write numbers to at least 100 in words</p> <p>Use place value and number facts to solve problems</p> <p>Partition two-digit numbers into different combinations of tens and ones using apparatus if needed e.g. 23 is the same as 2 tens and 3 ones which is the same as 1 ten and 13 ones</p> <p>Recall the multiples of 10 below and above any given 2 digit number e.g. say that for 67 the multiples are 60 and 70</p> <p>Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures</p>	<p>Use reasoning about numbers and relationships to solve more complex problems and explain his/her thinking e.g. $29 + 17 = 15 + 4 + ?$; 'Together Jack and Sam have £14. Jack has £2 more than Sam. How much money does Sam have?' etc.</p> <p>Solve problems involving multiplication and division facts, including problems in contexts e.g. knowing that $2 \times 7 = 14$ and $2 \times 8 = 16$, explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left</p> <p>Work out mental calculations where regrouping is required.</p> <p>Solve complex missing number problems.</p> <p>Solve problems involving multiplication and division, involving remainders.</p> <p>Recognise the relationships between addition and subtraction and rewrite addition statements as simplified multiplication statements e.g. $10 + 10 + 10 + 5 + 5 = 3 \times 10 + 2 \times 5 = 4 \times 10$</p>

<p>Name some common 2-D and 3-D shapes from a group of shapes or from pictures of the shapes and describe some of their properties (e.g. triangles, rectangles, squares, circles, cuboids, cubes, pyramids and spheres)</p>	<p>Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures</p> <p>Recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships (e.g. If $7 + 3 = 10$, then $17 + 3 = 20$; if $7 - 3 = 4$, then $17 - 3 = 14$; leading to if $14 + 3 = 17$, then $3 + 14 = 17$, $17 - 14 = 3$ and $17 - 3 = 14$)</p> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including two two-digit numbers</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including adding three one-digit numbers</p> <p>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</p>	<p>Solve word problems involving multiplication and division with more than one step e.g. which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet</p> <p>Find and compare fractions of amounts.</p> <p>Read the time on a clock to the nearest 5 minutes</p> <p>Read scales in divisions of ones, twos, fives and tens</p> <p>Compare and sort common 2-D and 3-D shapes and everyday objects describing similarities and differences e.g. find 2 different 2-D shapes that only have one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices and describe what is different about them</p>
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	<p>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</p> <p>Use estimation to check that his/her answers to a calculation are reasonable e.g. knowing that $48 + 35$ will be less than 100</p> <p>Solve missing number problems using addition and subtraction</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p> <p>Solve problems involving multiplication and division, using concrete materials and mental methods</p> <p>Solve problems involving multiplication and division, using arrays, repeated addition including problems in contexts e.g. knowing</p>	
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that $2 \times 7 = 14$ and $2 \times 8 = 16$, explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left

Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity and demonstrate understanding that all parts must be equal parts of the whole

Write simple fractions for example, $\frac{1}{2}$ of $6 = 3$ and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$

Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}\text{C}$); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels

Compare and order lengths, mass, volume/capacity and record the results using $>$, $<$ and $=$

Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value

Find different combinations of coins that equal the same amounts of money#

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change

Compare and sequence intervals of time

Remember the number of minutes in an hour and the number of hours in a day

Read scales where not all numbers on the scale are given and estimate points in between

Read the time on a clock to the nearest 15 minutes

Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line

Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces

Identify 2-D shapes on the surface of 3-D shapes e.g. a circle on a cylinder and a triangle on a pyramid

Order and arrange combinations of

mathematical objects
in patterns and
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Interpret and construct simple pictograms,
tally charts, block diagrams and simple tables

Ask and answer simple questions by counting
the number of objects in each category and
sorting the categories by quantity

Ask and answer questions about totalling and
comparing categorical data



Number and place value

Addition and subtraction

Multiplication and division

Fractions

Measurement

Properties of shape

Position and direction

Statistics