


Driver: Science

Main learning Challenge: Why would a meerkat not live in the North Pole?

	Week 1 & 2 (Week 1 Pause week)	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8 Autumn Watch Week
Maths Learning Challenge	Place value	Addition	Subtraction	Multiplication	Division	Position and Direction	2D and 3D shape
Basic Skills Focus	Yr 1 Counting in 2s Doubles 1 more, 1 less Yr 2 Counting in 2s Doubles 1 more, 1 less Odds and even < > =	Yr 1 Number bonds to 10 Read and write numbers to 10 Yr 2 Number bonds to 20 Odds and even Read and write numbers to 20	Yr1 Counting in 2s Counting to 100 and across 100 from a given number. Yr2 Counting in 2s Read and write numbers to 100	Yr 1 Read and write numbers to 1-10 Yr 2 Multiplication and division facts for 2x table. Odd and even numbers	Yr 1 Number bonds to 10 and related subtraction. Yr 2 Counting in 5s Odd and even numbers	Yr 1 Read and write numbers to 1-10 Doubles Yr 2 Counting in 5s Odd and even numbers	Yr 1 Counting to 100 and across 100 from a given number. Yr 2 Counting in 2s Counting in 5s Read and write numbers to 100
Number	Place value YR 1 Represent numbers using objects and pictures. One more/one less to 10 Read and write numbers to 10. YR 2 Recognise the place value of each digit in a two digit number. Read and write numbers to at least 100 Identify, represent and	Addition YR 1 Add 1 digit numbers to 10 Read, write and interpret mathematical statements involving + = within 10. Solve addition problems using concrete objects. YR 2 Add concrete objects and pictorial representations 2digit	Subtraction YR1 Subtract 1 digit numbers to 10 Read, write and interpret mathematical statements involving - = within 10. Solve subtraction problems with concrete objects. YR2 Subtract with concrete objects and pictorial representations 2digit numbers and ones.	YR1 Counting in 2s. Doubles 1 - 10. Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Solve one-step problems involving multiplication by calculating the answer using concrete objects (linked to counting in 2s)	YR1 Counting in 2s. Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Solve one-step problems involving multiplication by calculating the answer using concrete objects (linked to counting in 2s)		

	<p>estimate numbers using different representations, including the number line. Recognise odd and even numbers. Use place value and number facts to solve problems. Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs from 0,</p>	<p>numbers and ones. Solve problems using addition and subtraction using concrete objects.</p>	<p>Solve problems using subtraction using concrete objects.</p>	<p>YR2 Recall and use multiplication and division facts for the x2 multiplication tables, including recognising odd and even numbers</p> <p>Solve problems involving multiplications using materials and arrays.</p> <p>Calculate mathematical statements for multiplication within the 2 times tables and write them using the multiplication (\times), and equals ($=$) signs.</p>	<p>YR2 Recall and use multiplication and division facts for the x2 multiplication tables, including recognising odd and even numbers</p> <p>Solve problems involving multiplications using materials and arrays.</p> <p>Calculate mathematical statements for division within the 2 times tables and write them using the division (\div) and equals ($=$) signs</p>		
Calculation		<p>Yr 1: Addition and subtracting tortoise weights -1 digit numbers to 10</p> <p>Yr 2: Add and subtract concrete objects and pictorial representations</p>	<p>Yr 1: Solve one step problems that involve addition and subtraction, using concrete objects.</p> <p>Yr 2: Add and subtract mentally 2 digits and ones. Adding 3 1 digit numbers.</p>	<p>Yr 1: Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects (linked to counting in 2s)</p> <p>Yr 2: Calculate mathematical statements for multiplication and division within the 2 times tables and write them using the</p>	<p>Yr 1: Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects (linked to counting in 2s)</p> <p>Yr 2: Calculate mathematical statements for multiplication and division within the 2 times tables and</p>	<p>Outdoor area calculation activities (adding/subtracting pine cones, pebbles etc.)</p>	<p>Outdoor area calculation activities (adding/subtracting pine cones, pebbles etc.)</p>

				<p>multiplication (×), division (÷) and equals (=) signs</p>	<p>write them using the multiplication (×), division</p>		
<p>Shape and Measure</p>		<p>(Outdoor area – chalk scale) Measure how far your car can go</p>	<p>(Outdoor area Coathanger weighing scales) Measure out food for owls (bird seed)</p>	<p>(Outdoor area – Hula Hoop clock, stick hands) Can you make the clock show the time of...</p>	<p>(Outdoor area) Identify and name the 2d and 3d shapes in the outdoor area</p>	<p>YR1 Describe position, direction and movement, including whole, half, quarter and three-quarter turns.</p> <p>YR2 Order and arrange combinations of mathematical objects in patterns and sequences</p> <p>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 anti-clockwise).</p>	<p>YR1 Recognise and name common 2-D shapes including: rectangles (including squares), circles and triangles Recognise and name common 3-D shapes including: cuboids (including cubes), pyramids and spheres.</p> <p>YR2 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.</p>

<p>Problem solving: Generalising and Reasoning</p> <p>(See also Rising Stars Problem Solving & Reasoning/ Focus Maths planning / NRich for further problem solving)</p>	<p>Yr 1 Spot the mistake. What is the wrong with this sequence of numbers? 5,6,8,9</p> <p>True or False? I start at 2 and count in twos. I will say 9</p> <p>Yr 2 Spot the mistake. What's wrong with this sequence of numbers? 45,40,35,25</p> <p>What comes next? 41+5=46 46+5=51 51+5=56</p>	<p>Yr 1 What do you notice? 11-1=10 11-10=1 Can you make up some other number sentences like this involving 3 different numbers?</p> <p>Missing numbers</p> <p>17 ? 3 ? 20 18 ? 20 ? 2</p> <p>Yr 2 Hard and Easy questions. Which are hard, which are easy, explain why? 23=10 93+10 54+9 54+1 True or false Are these number sentences true or false?</p>	<p>Yr 1 Fact families Which four sentences link these 4 numbers 12,15 and 3?</p> <p>Convince me In my head I have 2 odd numbers with a difference of 2. What could they be?</p> <p>Yr 2 Continue the pattern 90=100-10 80=100-20</p> <p>Can you make similar patterns starting with the numbers 74, 26 and 100?</p> <p>Missing numbers</p> <p>91+ ? = 100 100- ?=89</p>	<p>Yr 1 If 1 owl has 2 mice, how many mice will 3 have?</p> <p>Here are 10 baby owls. If 2 baby owls can be carried by 1 adult, how many adult owls do we need?</p> <p>Yr 2 Prove it Which 4 number sentences link these numbers? 2, 10, 20. Prove it</p>	<p>Yr 1 What do you notice?</p> <p>Choose a number of counters, place them on 2 plates so there is the same on each half, when can you do this and when can't you? What do you notice? True or False Sharing 8 apples between 4 children means that each child has 1 apple</p> <p>Yr 2 What do you notice? $\frac{1}{2}$ of 4 =2 $\frac{1}{2}$ pf 8=4 $\frac{1}{2}$ of 12= 6 Continue the pattern, what do you notice?</p> <p>True or false? Half of 20cm=5cm Half of 12cm= 7cm</p>	<p>Yr 1 What's the same. what's different?</p> <p>Find a rectangle and a triangle in this set of shapes. Tell me 1 thing that is the same, tell me 1 thing that is different.</p> <p>True or false? All 2d shapes have at least 2 sides</p> <p>Yr 2 What's the same, what's different? Pick up these 3d shapes, cylinder, cuboid, cube. Do they have straight edges and flat faces. What's' the same, what's different?</p> <p>Can you find shapes that go with these labels? Have straight sides</p>	<p>Yr 1 Working backwards The shape below was turned $\frac{3}{4}$ of a full turn and looks like this. What did it look like when it started?</p>  <p>Yr 2 Working backwards If I face forward and turn $\frac{3}{4}$ turns clockwise then a $\frac{1}{4}$ turn clockwise describe my finishing position .</p>
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Key Vocabulary	Units Tens	Subtraction: less, how many less, fewer than, Addition: how many altogether → More, more than, Add, plus, make, sum, total,	Multiplication: Multiple of, times, multiply, multiply by			Turn, one/two/three quarter turns, half turn, left/right	2D/3D, faces, sides, edges, corners.
Wider curriculum opportunities/links			The owl who was afraid of the dark		The owl who was afraid of the dark		Autumn watch week
Pre teaching	Addition and subtraction	Addition and subtraction problem solving	Doubling and halving/Multiplication	Fractions	2D/3D Shapes	Position movement and direction	Autumn 2 topics