# Year 2 Overview

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Phase 1** | **Number and Place Value** | | **Addition and Subtraction** | | | **Measures: Length and mass** | | **Statistics** | **Multiplication and Division** | | |
| **Phase 2** | **Measures: Money** | | **Geometry Properties of shape** | | | **Fractions** | | | | | |
| **Phase 3** | **Measures: Time** | | **Measures: Capacity, volume and temperature** | | **Post SATs Project Work** | | | | | | |
| **Phase 4 (EoY)** | **Four Operations Consolidation** | | | **Fractions consolidation** | | | | | | | |

| **Ongoing throughout the year:** | **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>• know the number of minutes in an hour and the number of hours in a day<br>• compare and sequence intervals of time<br>**Multiplication Facts**<br>• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers<br>**Counting**<br>• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward |
|---|---|

# Year 2 Phase 2 Objectives

| | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 |
|---|---|---|---|---|---|---|---|---|
| **Main Sessions** | Measurement: Money<br>Recognise and use symbols of pounds (£) and pence (p); combine amounts to make a particular value.<br><br>Find different combinations of coins that equal the same amounts of money.<br><br>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. | | Geometry: Properties of Shape<br>Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.<br><br>Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].<br><br>Compare and sort common 2D and 3D shapes and everyday objects.<br><br>Order and arrange combinations of mathematical objects in patterns and sequences. | | | Fractions:<br><br>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.<br><br>Write simple fractions for example, ½ of 6 = 3<br><br>Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. | | |

| | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** |
|---|---|---|---|---|---|---|---|---|
| **S & D Sessions** | Number and place value | | Addition and subtraction | | | Multiplication and division | | |

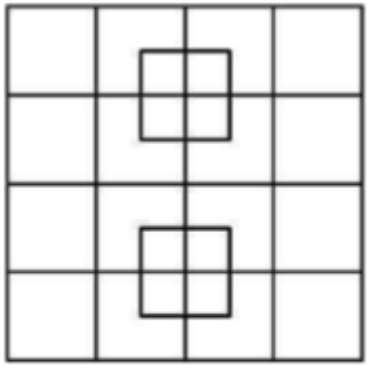
# Year 2 MTP – Phase 2

<table>
<tr><th>Domain</th><th>NC Objectives</th><th>Example tasks fluency</th><th>Example tasks reasoning</th><th>Example tasks problem solving</th></tr>
<tr>
<td>Measures: Money</td>
<td>Recognise and use symbols of pounds (£) and pence (p); combine amounts to make a particular value.</td>
<td>
<ul>
<li>Here is a table of money that three people have in pounds and pence. Can you fill in the blank boxes?
<table>
<tr><th>Name</th><th>£</th><th>p</th><th>Total</th></tr>
<tr><td>Phil</td><td>4</td><td></td><td>£4.65</td></tr>
<tr><td>Sue</td><td>3</td><td>95</td><td></td></tr>
<tr><td>Gary</td><td></td><td>115</td><td>£6.15</td></tr>
</table>
</li>
<li>Jackson went to the shop to buy milk and bread.<br> 

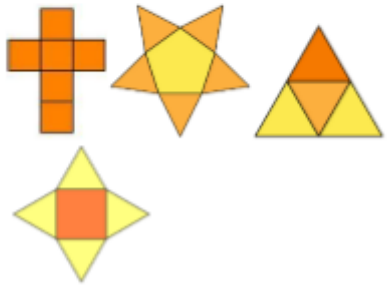
<br>How much money does he need to pay without receiving any change?</li>
<li>Tara has 2 ten pence coins, a five pence coin and a fifty pence coin. How much money does she have altogether?</li>
</ul>
</td>
<td>
<ul>
<li>Anna has 3 silver coins in her hand. Larry says, “I have more than you because I have a £1 coin.” Is he correct? Explain why.</li>
<li>Always, sometimes, never.<br>You can make £1 using an odd number of coins. Convince me!</li>
<li>True or false<br><br>5 copper coins can be worth more than 1 silver coin.</li>
</ul>
</td>
<td>
<ul>
<li>Jamie has 5 silver coins in his hand. How many different ways can he make £1 or more?</li>
<li>Patrick visits an arcade. He has £5. He wants to go on at least 4 games.
<table>
<tr><th>Game</th><th>Price</th></tr>
<tr><td>Whack-a-rat</td><td>70p</td></tr>
<tr><td>Donkey Derby</td><td>90p</td></tr>
<tr><td>Bingo</td><td>£1</td></tr>
<tr><td>Grab-a-prize</td><td>50p</td></tr>
<tr><td>Dance mania</td><td>85p</td></tr>
<tr><td>Deal or no deal</td><td>£1.25</td></tr>
</table>
Which games can he go on? Will he have any change? Can you find more than one combination of games?</li>
<li>How many ways can you make £1 using an unlimited amount of coins?</li>
</ul>
</td>
</tr>
</table>

| Domain | NC Objectives | Example tasks fluency | Example tasks reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Measures: Money** | Find different combinations of coins that equal the same amounts of money. | • Make 50p three ways using the coins below. You can use the coins more than once.<br>  <br>• I have £1.45. Can you find or draw the coins I could have to make this?<br>• Paul has £2 and Tony has £1.20. Which coins could Tony add to his pile to make his and Paul's amounts equal? | • Charanjot tells her friend Sam she has only silver coins in her hand. She says she has 43p. Sam thinks that's impossible. Do you agree with Sam? Explain why.<br>• True or false: 4 five pence coins are worth more than 2 ten pence coins. Explain why.<br>  <br>• Emily finds a 20p coin and thinks she now has enough for a ride on the ghost train. She puts it with her other three 20p coins. The ghost train costs £1. Is she correct? Explain why. | • Hanna and Ste both claim to have 90p. Hanna has 3 coins and Ste has 4 coins. Are they correct? Which coins could they have?<br>• Emily has £3.40 and Katie has £2.20. How much does Emily need to give Katie so they have the same amount?<br>• Here is a price list. Jay has £2.20 What can he buy?<br><br>**Item** / **Price**<br>Chicken sandwich £1<br>Ham sandwich £1.50<br>Turkey sandwich £1.20<br>Salad 30p<br>Jacket potato £1<br>Panini £1.30<br>Soup £1.60<br>Sauce 10p<br>Can of pop 60p<br>Bun 60p<br>Chocolate bar 50p<br><br>Can you find a different set of items he can buy? |

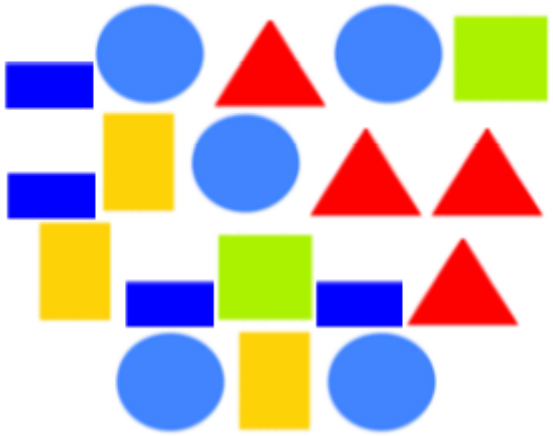
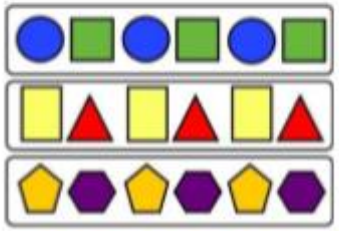
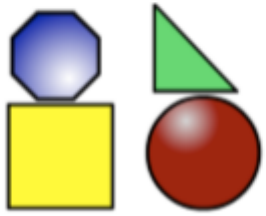
| Domain | NC Objectives | Example tasks fluency | Example tasks Reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Measures: Money** | Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. | • Benji spends £1.35 in the shop and pays with a £2 coin. How much change will he receive?<br>• Arun buys an ice lolly from the ice cream van. It costs 90p. He pays in 10 pence coins. How many 10 pence coins does he use?<br>• Fill in the missing box:<br>☐ + 40p = £1 – 30p<br>70p – 50p = 5p + ☐ | • True or false: you can make 51p using just 2 pence coins. Write an explanation with your answer.<br>• Alex has 90p. He bought a rubber for 30p and wants to buy a pencil.<br>  <br>The shopkeeper will not sell him the pencil. Can you explain why to Alex?<br>• Odd one out.<br>Look at the coins below. Which one is the odd one out and why?<br>  | • Marie went to the shop and spent 20p. She bought at least one of each sweet. Which item did she buy two of?<br>Munchy 2p<br>Sweetie 3p<br>Choccy bar 5p<br>Spotty eggs 7p<br>• Frankie bought candyfloss at a fayre. She paid with 6 coins. How much could the candyfloss have been? Which answer do you think is the most reasonable?<br>• Colin has 5 coins in his pocket. How much money might he have? |
| | | **Additional Guidance:**<br>**Concrete resources, bar model, number-lines.**<br>**Place coins into the bar model, partition coins into tens and ones, place coins onto the number-line to match the jumps.** | | |

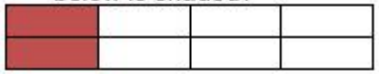
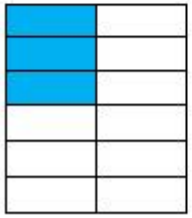
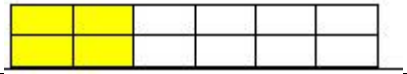
| Domain | NC Objectives | Example tasks fluency | Example tasks reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Geometry: Properties of Shape** | Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.<br><br>. | • How many sides does an octagon have?<br><br>• Count the sides of this shape and then name it.<br><br>  <br><br>• How many corners does a square have? | • Caroline is finding the properties of a shape. She thinks it is a square because it has four sides. Explain why she could be wrong.<br><br>• Look at the line of symmetry in the shape below. Do you agree it is a line of symmetry? Explain why.<br><br>  <br><br>• I am thinking of a shape with more than two lines of symmetry. Prove which shape I am thinking of by using a pictorial image. Is that the only shape it could be? | • How many squares can you see in this picture?<br><br>  <br><br>• Draw a shape for a friend. How many lines of symmetry can they find? Can you now draw a shape with more lines of symmetry? |

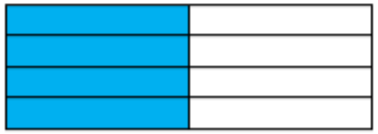
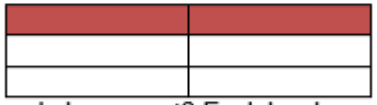
| Domain | NC Objectives | Example tasks fluency | Example tasks reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Geometry: Properties of Shape** | Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. | • How many faces does a cube have?<br>• What is my shape?<br>I have 5 faces, 8 edges and 5 vertices.<br>• What is the name given to 2 faces that meet? | • Katie is trying to build a tower with 3D shapes. When she uses one shape they keep rolling off each other. What shape do you think she is using and why?<br>• Class 2 are using straws to make 3D shapes. Each child is given 12 straws to make a cuboid. Is this the right amount? Explain how you know.<br>(Give children straws to use).<br>• Jack says, "All 3D shapes have at least 1 vertex." Do you agree? Convince me. | • Look at the shapes on your table. Can you create a table/diagram to organise these shapes? How many different ways could they be sorted?<br>• Put different shapes into a bag. In pairs, take turns to feel a shape, without looking, and describe it to your partner. Can they guess it? Record the clues you gave.<br>• Three children have a 3D shape each. They are all different. They each give a fact about their shape.<br>Aidan says, "My shape has 1 vertex."<br>Anthony says, "My shape has less than 9 faces."<br>Bevan says, "My shape has a triangle on one of their faces."<br>List all the shapes they could each possibly have. |

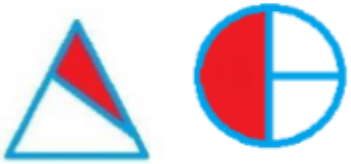
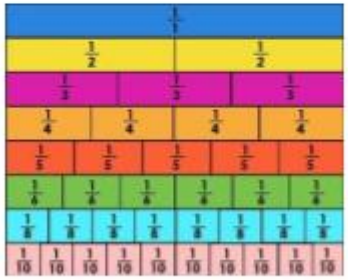
| Domain | NC Objectives | Example tasks fluency | Example tasks reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Geometry: Properties of Shape** | Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. | • Which 2D shape makes 2 of the faces on a cylinder?<br>• Fill in the missing number:<br>A square based pyramid has ▭ faces made from triangles.<br>• Name a 3D shape that has a rectangle as one of their faces? | • I am thinking of a 3D shape. The faces are made up of triangles. What shape am I thinking of?<br>• Saira is drawing all the 2D shapes she finds on 3D shapes. She draws 8 squares for a cube. Is she right? Prove it! | • Use the straws provided to create 3D shapes using the correct properties. What shapes do you notice on the faces?<br>• Abigail is folding paper to make a 3D shape. Work out the shapes she has made by looking at her folded papers.<br>  |

<table>
<tr><th>Domain</th><th>NC Objectives</th><th>Example tasks fluency</th><th>Example tasks reasoning</th><th>Example tasks problem solving</th></tr>
<tr>
<td>Geometry: Properties of Shape</td>
<td>Compare and sort common 2D and 3D shapes and everyday objects.</td>
<td>
<ul>
<li>Find 3 different 3D shapes in the classroom.</li>
<li>Sort the shapes on your tables into 2D and 3D.</li>
<li>What is my shape?<br>It is used in a game with two teams. It has only 1 face.</li>
</ul>
</td>
<td>
<ul>
<li>What's the same about a cube and cuboid? What's different?</li>
<li>Using the shapes on your table, sort them into different groups. Explain why you have organised them this way.</li>
<li>Find a 2D shape and a 3D shape in the classroom – could these objects have been designed better using a different shape e.g. would a clock look better as a square?</li>
</ul>
</td>
<td>
<ul>
<li>Shape hunt! Look around the school and playground. What shapes can you find?</li>
<li>Look at the diagram below.</li>
</ul>
<table>
<tr><th></th><th>3D</th><th>Not 3D</th></tr>
<tr><td>Has 1 or more curved sides/ faces</td><td></td><td></td></tr>
<tr><td>No curved sides/ faces</td><td></td><td></td></tr>
</table>
Sort the shapes on your table into this diagram.
</td>
</tr>
</table>

| Domain | NC Objectives | Example tasks fluency | Example tasks reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Geometry: Properties of Shape** | Order and arrange combinations of mathematical objects in patterns and sequences | • Draw a pattern to show the following: red triangle, yellow square, blue circle.<br>• Use the cubes to make a sequence. Can your partner continue it?<br>• Create a pattern using only these shapes.<br>  | • Jessie is making a pattern. It goes like this:<br>red square, blue circle, green triangle.<br>She thinks the 12th term will be a red square. Is she right? How do you know?<br>• Spot and correct the mistake.<br>  <br>• What's the same and what's different about these patterns?<br>  | • How many patterns can you see on this picture?<br>  <br>• How many different sequences can you make from the shapes below?<br>  <br>• Can you create a sequence for a partner? |

| Domain | NC Objectives | Example tasks fluency | Example tasks reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Fractions** | Number: Fractions 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. | • What fraction of the shape below is shaded?<br>  <br>• Pat is organising her teddy bears. She donates $\frac{1}{4}$ of them to charity. How many bears did she have left?<br>  <br>• Circle the shape showing $\frac{1}{4}$<br>  <br>  | • Circle the odd one out. Explain why you have chosen this fraction.<br>$\frac{1}{4}$ $\frac{1}{3}$ $\frac{2}{4}$ $\frac{1}{2}$<br>• Four children want an equal share of this paper signed by a famous singer.<br>  <br>Explain how they can do it.<br>• Amy is picturing two fractions. She says, "I think $\frac{1}{4}$ will be bigger than $\frac{1}{2}$ because 4 is bigger than 2." Draw these fractions to prove her wrong. | • Find fractions all around you. Write and illustrate them in your journal e.g.<br>  <br>The food filled $\frac{1}{2}$ of the plate.<br>• Look at 20 toy cars. Is it possible to find $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ of them without breaking any of them?<br>• Use 3 circles, colour them in so they show $\frac{1}{4}$ $\frac{2}{4}$ and $\frac{3}{4}$. Write a sentence to explain what you notice.<br>Now colour 3 circles and colour them in so they show $\frac{1}{2}$ $\frac{1}{3}$ and $\frac{1}{4}$<br>Write a sentence to explain what you notice.<br>What is the difference between the first set of circles and the second set of circles? |

| Domain | NC Objectives | Example tasks fluency | Example tasks reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Fractions** | Write simple fractions for example, ½ of 6 = 3 | • Find $\frac{1}{3}$ of 30.<br>• Fill in the boxes:<br>$\frac{1}{2}$ of 6 = ☐<br>$\frac{1}{\square}$ of 12 = 3<br>$\frac{2}{4}$ of ☐ = 4<br>• Write a simple fraction sentence for the space shaded below.<br>  | • Here is what is left of a pizza that Byron ate.<br>  <br>If he had another equal piece to this left, he would have $\frac{1}{2}$ of the original pizza.<br>How much did he eat?<br>Explain how you know.<br>• Bill is asked to shade a half of his shape.<br>This is what he shades.<br>  <br>Is he correct? Explain why.<br>• Jessie is writing simple fraction sentences. She says, "I know $\frac{1}{2}$ of 8 is 4 so $\frac{1}{4}$ of 8 is 8."<br>Explain the mistake Jessie has made. | • Look at the toy cars. Write as many different fraction sentences as you can e.g.<br>$\frac{1}{2}$ of 20 = 10.<br>• Look at the picture below.<br>How many fraction sentences can you write?<br>e.g. 1/3 of the stars are blue.<br>  |

| Domain | NC Objectives | Example tasks fluency | Example tasks reasoning | Example tasks problem solving |
|---|---|---|---|---|
| **Fractions** | Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. | • $\frac{2}{4}$ of this tower is blue. How else can we describe this?<br>  <br>• What fraction of these shapes are shaded orange?<br>  <br>• What is $\frac{2}{4}$ equivalent to? | • Mihal receives $\frac{1}{2}$ of £10. Violet gets $\frac{2}{4}$ of it.<br>How much money is left? Explain why.<br>• Tick the shapes that are showing $\frac{1}{2}$ or $\frac{2}{4}$ are shaded. Explain how you know.<br>  <br>• Gareth and Stacey both have the same sized chocolate bar. Gareth eats 1 piece of his. Stacey eats 2 equal pieces of hers. They eat the same amount of chocolate.<br>Can you explain how you know this is true? | • Take different shaped paper e.g.<br>  <br>Ask the children to fold them and colour them in different colours to show $\frac{1}{2}$ and $\frac{2}{4}$<br>• Look at the fraction wall.<br>  <br>How many times can you find $\frac{1}{2}$ or $\frac{2}{4}$? |