

# Planning and Assessment

**'Working At'**

**Pack 3**

<b>Session 1</b>	<ul style="list-style-type: none"><li>• Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.</li></ul>
<b>Session 2</b>	<ul style="list-style-type: none"><li>• Solve multi-step problems in contexts, deciding which operations and methods to use and why.</li><li>• Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.</li><li>• Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.</li></ul>
<b>Session 3</b>	<ul style="list-style-type: none"><li>• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</li></ul>
<b>Session 4</b>	<ul style="list-style-type: none"><li>• Recognise, describe and build simple 3D shapes, including making nets.</li></ul>
<b>Session 5</b>	<ul style="list-style-type: none"><li>• Complete, read and interpret information in timetables.</li></ul>

<p><b>Objectives:</b> <b>Number and Place Value</b></p> <ul style="list-style-type: none"> <li>• Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>• Can you read Roman numerals to 1,000 (M)?</li> <li>• Can you recognise years written in Roman numerals?</li> </ul>
<p><b>Key Vocabulary:</b> Digit, place value, numeral, compare, order, symbols.</p>	<p><b>Preparation:</b> <a href="#">Activity Booklet 3</a> <a href="#">Superhero Roman Numeral Cards</a> <a href="#">Roman Numerals Poster</a></p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 1.1</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Practise reading the Roman numerals as figures. Encourage the children to talk about how we use addition when a smaller symbol is after a larger symbol, and we use subtraction when a smaller symbol is before a larger symbol. For example, VI = 6 because we read the symbols as 5 + 1. IX = 9 because we read the symbols as 10 - 1.</p> <p>Extend by challenging the children to compare and order the Roman numerals, and to write their own number in Roman numerals.</p> <p><b>Can the children read Roman numerals to 1,000 (M)?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 1.2</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Play this fun, superhero game to practise reading Roman numerals. You will need the <a href="#">Superhero Roman Numeral Cards</a>.</p> <p>Use the <a href="#">Roman Numerals Poster</a> to support as required.</p> <p><b>Can the children read Roman numerals to 1,000 (M)?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the practice SATs questions shown in <a href="#">Activity 1.3</a> in <a href="#">Activity Booklet 3</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children read Roman numerals to 1,000 (M) and recognise years written in Roman numerals?</b></p>
<p><b>Assess and Review</b></p>	<p>Refer to the incorrectly completed SATs question shown in <a href="#">Activity 1.4</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Discuss the mistakes that have been made and advice they would give to the child who completed the question.</p> <p>Encourage the children to notice that the child answering the question has written the digit 9 in Roman numerals using VIII, which is incorrect as there should not be more than three of the same symbols together. The correct answer is CLXXIX.</p> <p><b>Complete the self-assessment activity based on the success criteria.</b></p>

<p><b>Objectives:</b></p> <p><b>Calculation</b></p> <ul style="list-style-type: none"> <li>• Solve multi-step problems in contexts, deciding which operations and methods to use and why.</li> <li>• Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.</li> <li>• Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>• Can you solve multi-step problems in contexts, deciding which operations and methods to use and why?</li> <li>• Can you multiply numbers up to 4 digits by a one- or two-digit number using a formal written method?</li> <li>• Can you use the formal written method of short division where appropriate?</li> </ul>
<p><b>Key Vocabulary:</b></p> <p>Operation, calculation, brackets, multi-step, short multiplication, short division.</p>	<p><b>Preparation:</b></p> <p><a href="#">Activity Booklet 3</a></p> <p><a href="#">Superhero Challenge Cards</a></p> <p><a href="#">Multiplication and Division Strategies Posters</a></p> <p>Dice</p> <p>Counters</p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 2.1</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Practise using the written method of short multiplication to find the amount of money each superhero has spent. Extend by challenging the children to see if they can create a multi-step problem, for example the total cost of four spy drones and three walkie-talkies.</p> <p><b>Can the children multiply numbers up to 4 digits by a one-digit number using a formal written method and solve multi-step problems in contexts, deciding which operations and methods to use and why?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 2.2</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Play this fun, superhero board game to practise answering multiplication and division questions. You will need the <a href="#">Superhero Challenge Cards</a>, dice and counters. Use the <a href="#">Multiplication and Division Strategies Posters</a> to support as required.</p> <p><b>Can the children multiply numbers up to 4 digits by a one-digit number using a formal written method and use the formal written method of short division where appropriate?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the superhero-themed word problems shown in <a href="#">Activity 2.3</a> in <a href="#">Activity Booklet 3</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children solve multi-step problems in contexts, deciding which operations and methods to use and why?</b></p>

<b>Assess and Review</b>	<p>Refer to the incorrectly completed SATs question shown in <b>Activity 2.4</b> in <b>Activity Booklet 3</b>.</p> <p>Discuss the mistakes that have been made and advice they would give to the child who completed the question.</p> <p>Encourage the children to notice that the child answering the question hasn't chosen the correct operation for the second calculation in the problem; they have done <math>48 - 9 = 39</math> instead of <math>48 \div 9 = 5 \text{ r}3</math>. The correct answer is 5 complete pages.</p> <p><b>Complete the self-assessment activity based on the success criteria.</b></p>
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<p><b>Objectives:</b></p> <p><b>Fractions</b></p> <ul style="list-style-type: none"> <li>Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>Can you recall and use equivalences between simple fractions, decimals and percentages?</li> </ul>
<p><b>Key Vocabulary:</b></p> <p>Numerator, denominator, compare, order, equivalent, fraction, decimal, percentage.</p>	<p><b>Preparation:</b></p> <p><a href="#">Activity Booklet 3</a></p> <p><a href="#">Superhero Fraction, Decimal and Percentage Cards</a></p> <p><a href="#">Fraction, Decimal and Percentage Equivalents Poster</a></p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 3.1</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Practise finding fractions, decimals and percentages that are equivalent. Extend by challenging the children to order the fractions, decimals and percentages they have found.</p> <p><b>Can the children recall and use equivalences between simple fractions, decimals and percentages?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 3.2</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Play this fun, superhero card game to practise identifying fraction, decimal and percentage equivalents. You will need the <a href="#">Superhero Fraction, Decimal and Percentage Cards</a>. Use the <a href="#">Fraction, Decimal and Percentage Equivalents Poster</a> to support as required.</p> <p><b>Can the children recall and use equivalences between simple fractions, decimals and percentages?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the practice SATs questions shown in <a href="#">Activity 3.3</a> in <a href="#">Activity Booklet 3</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children recall and use equivalences between simple fractions, decimals and percentages?</b></p>
<p><b>Assess and Review</b></p>	<p>Refer to the incorrectly completed SATs question shown in <a href="#">Activity 3.4</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Discuss the mistakes that have been made and advice they would give to the child who completed the question.</p> <p>Discuss that the first step in answering this question is to calculate the answers to the decimal additions, which are 0.6, 0.9 and 0.25.</p> <p>Encourage the children to notice that the child answering the question has correctly matched 0.9 and <math>\frac{9}{10}</math> but has incorrectly matched the two other calculations. 0.6 should match to 60% and 0.25 should match to <math>\frac{1}{4}</math>.</p> <p><b>Complete the self-assessment activity based on the success criteria.</b></p>

<p><b>Objectives:</b></p> <p><b>Measurement</b></p> <ul style="list-style-type: none"> <li>Recognise, describe and build simple 3D shapes, including making nets.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>Can you recognise and describe 3D shapes?</li> <li>Can you identify 3D shapes from their 2D shape net representations?</li> </ul>
<p><b>Key Vocabulary:</b></p> <p>Face, edge, vertices, vertex, apex, surface, polyhedra, platonic solid, prism.</p>	<p><b>Preparation:</b></p> <p><a href="#">Activity Booklet 3</a></p> <p><a href="#">Shape Net Cards</a></p> <p><a href="#">3D Shape Properties Poster</a></p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 4.1</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Practise describing 3D shapes using the vocabulary of faces, surfaces, edges and vertices. Use the <a href="#">3D Shape Properties Poster</a> to support as required.</p> <p>Encourage the children to talk about the definitions of polyhedra, platonic solids, prisms and pyramids. A key misconception to look out for is curved surfaces and curved edges on spheres, cylinders and cones, and a cone having an apex, not a vertex.</p> <p><b>Can the children recognise and describe 3D shapes?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 4.2</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Play this game to practise matching 2D nets to their 3D solid. You will need the <a href="#">Shape Net Cards</a>.</p> <p><b>Can the children identify 3D shapes from their 2D shape net representations?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the practice SATs questions shown in <a href="#">Activity 4.3</a> in <a href="#">Activity Booklet 3</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children recognise and describe 3D shapes and identify 3D shapes from their 2D shape net representations?</b></p>
<p><b>Assess and Review</b></p>	<p>Refer to the incorrectly completed SATs questions shown in <a href="#">Activity 4.4</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Discuss the mistakes that have been made and advice they would give to the child who completed the question. Encourage the children to notice that the child answering the question incorrectly counted 8 vertices for an octahedron; an octahedron has 6 vertices. Therefore, an octahedron has 10 fewer vertices than an octagonal prism.</p> <p><b>Complete the self-assessment activity based on the success criteria.</b></p>

<p><b>Objectives:</b> <b>Statistics</b></p> <ul style="list-style-type: none"> <li>• Complete, read and interpret information in timetables.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>• Can you complete, read and interpret information in timetables?</li> <li>• Can you solve problems involving reading and writing digital 24-hour clocks?</li> </ul>
<p><b>Key Vocabulary:</b> Timetable, 24-hour clock, digital, duration.</p>	<p><b>Preparation:</b> <a href="#">Activity Booklet 3</a> <a href="#">Timetable Cards</a> <a href="#">12- and 24-Hour Poster</a> Dice</p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 5.1</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Play the fun, superhero game by calculating time durations between two 24-hour digital times. Encourage the children to explain how they calculated the time durations and address any misconceptions as they arise.</p> <p><b>Can the children read and interpret information in timetables and solve problems involving reading and writing digital 24-hour clocks?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 5.2</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Play this fun game to practise reading and interpreting information in a timetable. You will need the <a href="#">Timetable Cards</a>. Use the <a href="#">12- and 24-Hour Poster</a> to support as required.</p> <p><b>Can the children complete, read and interpret information in timetables?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the superhero problems shown in <a href="#">Activity 5.3</a> in <a href="#">Activity Booklet 3</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children read and interpret information in timetables and solve problems involving reading and writing digital 24-hour clocks?</b></p>
<p><b>Assess and Review</b></p>	<p>Refer to the incorrectly completed SATs question shown in <a href="#">Activity 5.4</a> in <a href="#">Activity Booklet 3</a>.</p> <p>Discuss the mistakes that have been made and advice they would give to the child who completed the question.</p> <p>Encourage the children to notice that the child answering the question has incorrectly calculated the time duration from 16:29 until 17:00 as 29 minutes. The correct answer is 31 minutes.</p> <p><b>Complete the self-assessment activity based on the success criteria.</b></p>



National Curriculum Objective	Children's Names					
Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.						
Solve multi-step problems in contexts, deciding which operations and methods to use and why.						
Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.						
Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.						
Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.						
Recognise, describe and build simple 3D shapes, including making nets.						
Complete, read and interpret information in timetables.						