

# Planning and Assessment

**'Working At'**  
**Pack 2**

<b>Session 1</b>	<ul style="list-style-type: none"><li>• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.</li><li>• Round any whole number to a required degree of accuracy.</li><li>• Round decimals with two decimal places to the nearest whole number and to one decimal place.</li><li>• Read, write, order and compare numbers with up to three decimal places.</li></ul>
<b>Session 2</b>	<ul style="list-style-type: none"><li>• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).</li><li>• Add and subtract numbers mentally with increasingly large numbers.</li><li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li></ul>
<b>Session 3</b>	<ul style="list-style-type: none"><li>• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</li></ul>
<b>Session 4</b>	<ul style="list-style-type: none"><li>• Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</li><li>• Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</li></ul>
<b>Session 5</b>	<ul style="list-style-type: none"><li>• Describe positions on the full coordinate grid (all four quadrants).</li><li>• Draw and translate simple shapes on the coordinate plane and reflect them in the axes.</li></ul>

<p><b>Objectives:</b></p> <p><b>Number and Place Value</b></p> <ul style="list-style-type: none"> <li>• Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.</li> <li>• Round any whole number to a required degree of accuracy.</li> <li>• Round decimals with two decimal places to the nearest whole number and to one decimal place.</li> <li>• Read, write, order and compare numbers with up to three decimal places.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>• Can you read and write numbers?</li> <li>• Can you order and compare numbers?</li> <li>• Can you round numbers to different powers of 10?</li> </ul>
<p><b>Key Vocabulary:</b></p> <p>Digit, place value, order, compare</p>	<p><b>Preparation:</b></p> <p><a href="#">Activity Booklet 2</a></p> <p><a href="#">Superhero Place Value Chart</a></p> <p>Two dice</p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 1.1</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Practise saying numbers of varying place value and written in different representations.</p> <p>Encourage the children to identify the values of the digits in the different numbers and to order and compare the numbers.</p> <p>Extend by challenging the children to create their numbers and then challenge a friend to give the value of one of the digits.</p> <p><b>Can the children read, write, order and compare numbers?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 1.2</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Play the fun, superhero rounding game to practise rounding decimal numbers to the nearest whole number. You will need two dice. Use the <a href="#">Superhero Place Value Chart</a> to support as required.</p> <p><b>Can the children round decimals to the nearest whole number?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the superhero activities shown in <a href="#">Activity 1.3</a> in <a href="#">Activity Booklet 2</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children round numbers to different powers of 10?</b></p>

<b>Assess and Review</b>	<p>Refer to the incorrectly completed SATs question shown in <b>Activity 1.4</b> in <b>Activity Booklet 2</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 has got the place value of the digits mixed up. The correct answer is seventy-three thousand and twenty-nine.</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>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>• Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).</li> <li>• Add and subtract numbers mentally with increasingly large numbers.</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>• Can you solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why?</li> <li>• Can you add and subtract numbers mentally with increasingly large numbers?</li> <li>• Can you add and subtract whole numbers with more than 4 digits, including using formal written methods?</li> </ul>
<p><b>Key Vocabulary:</b></p> <p>Total, difference, digit, place value.</p>	<p><b>Preparation:</b></p> <p><a href="#">Activity Booklet 2</a></p> <p><a href="#">Superhero Challenge Cards</a></p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 2.1</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Practise adding and subtracting numbers using a range of mental and written methods. Encourage the children to talk about the methods they are using. Extend by challenging the children to see if they can add together three or more numbers of different place values.</p> <p><b>Can the children add and subtract numbers deciding which 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 2</a>.</p> <p>Play the fun, superhero board game to practise answering addition and subtraction word problems. You will need the <a href="#">Superhero Challenge Cards</a>.</p> <p><b>Can the children solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the word problems shown in <a href="#">Activity 2.3</a> in <a href="#">Activity Booklet 2</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children solve addition and subtraction multi-step problems in context, 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 2</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 made each calculation equal; they have given numbers which give the answers 23 and 17. Encourage the children to give pairs of numbers that do give equal answers e.g. <math>4 + 1 = 5</math> and <math>11 - 6 = 5</math>.</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>• Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>• Can you add fractions with different denominators and mixed numbers?</li> <li>• Can you subtract fractions with different denominators and mixed numbers?</li> <li>• Can you find common denominators to help with adding and subtracting fractions?</li> </ul>
<p><b>Key Vocabulary:</b></p> <p>Numerator, denominator, compare, order, multiple, equivalent.</p>	<p><b>Preparation:</b></p> <p><a href="#">Activity Booklet 2</a></p> <p><a href="#">Fraction Dominoes</a></p> <p><a href="#">Fraction Wall</a></p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 3.1</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Practise finding the total of two fractions that have different denominators. Extend by challenging the children to identify if any of their answers are improper fractions or mixed numbers and converting them.</p> <p><b>Can the children add fractions with different denominators and mixed numbers?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 3.2</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Play the fun, superhero dominoes game to practise making fractions that total one whole. You will need the <a href="#">Fractions Dominoes</a>. Use the <a href="#">Fraction Wall</a> to support as required</p>
<p><b>Using and Applying</b></p>	<p>Children complete the reasoning problems shown in <a href="#">Activity 3.3</a> in <a href="#">Activity Booklet 2</a> to apply and practise the skills from the previous two activities. Use the <a href="#">Fraction Wall</a> to support as required.</p> <p><b>Can the children add and subtract fractions with different denominators and mixed numbers?</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 2</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 hasn't correctly converted the mixed number to identify that the calculation to solve is <math>\frac{14}{12} - \frac{?}{12} = \frac{9}{12}</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>• Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.</li> <li>• Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>• Can you accurately read scales of different increments?</li> <li>• Can you convert between different units of measure?</li> <li>• Can you compare, order and describe measurements?</li> <li>• Can you solve problems involving converting measurements?</li> </ul>
<p><b>Key Vocabulary:</b></p> <p>Length, mass, capacity, temperature, compare, order, greater than, less than.</p>	<p><b>Preparation:</b></p> <p><a href="#">Activity Booklet 2</a></p> <p><a href="#">Superhero Measurement Top Cards</a></p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 4.1</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Practise reading partially labelled scales that have varying increments.</p> <p>Encourage the children to talk about how they are identifying the increments the scales are increasing by, linking to work on division.</p> <p>Extend by challenging the children to identify different positions on the scales.</p> <p><b>Can the children accurately read scales of different increments?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 4.2</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Play the fun, superhero top card game to practise comparing measurements. You will need the <a href="#">Superhero Measurement Top Cards</a>.</p> <p><b>Can the children convert between different units of measure?</b></p> <p><b>Can the children compare measurements?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the reasoning activities shown in <a href="#">Activity 4.3</a> in <a href="#">Activity Booklet 2</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children solve problems involving converting measurements?</b></p>



<b>Assess and Review</b>	<p>Refer to the incorrectly completed SATs questions shown in <b>Activity 4.4</b> in <b>Activity Booklet 2</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 converted 2.6km into metres correctly. The correct answer should be Callum because <math>2,600\text{m} &gt; 2,080</math>.</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>Position and Direction</b></p> <ul style="list-style-type: none"> <li>Describe positions on the full coordinate grid (all four quadrants).</li> <li>Draw and translate simple shapes on the coordinate plane and reflect them in the axes.</li> </ul>	<p><b>Success Criteria:</b></p> <ul style="list-style-type: none"> <li>Can you identify, describe and represent the position of a shape following a reflection or translation?</li> <li>Can you describe positions on a four-quadrant coordinate grid?</li> </ul>
<p><b>Key Vocabulary:</b></p> <p>Coordinate, quadrant, axis, translation, reflection.</p>	<p><b>Preparation:</b></p> <p><a href="#">Activity Booklet 2</a></p> <p><a href="#">Reflection Matching Cards</a></p>
<p><b>Talk Maths</b></p>	<p>Refer to <a href="#">Activity 5.1</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Practise reading coordinates in all four quadrants. Ensure children read coordinates in the correct order of x-axis then y-axis.</p> <p>Challenge the children to choose one of the coordinate objects and to describe a translation, giving its new coordinates.</p> <p><b>Can the children describe positions on a four-quadrant coordinate grid?</b></p>
<p><b>Key Skills</b></p>	<p>Refer to <a href="#">Activity 5.2</a> in <a href="#">Activity Booklet 2</a>.</p> <p>Play the fun pairs game to practise describing and representing the position of a shape following a reflection. You will need the <a href="#">Reflection Matching Cards</a>.</p> <p><b>Can the children identify, describe and represent the position of a shape following a reflection?</b></p>
<p><b>Using and Applying</b></p>	<p>Children complete the reasoning activities shown in <a href="#">Activity 5.3</a> in <a href="#">Activity Booklet 2</a> to apply and practise the skills from the previous two activities.</p> <p><b>Can the children describe positions on a four-quadrant coordinate grid?</b></p> <p><b>Can the children identify, describe and represent the position of a shape following a translation?</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 2</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 translated the shape instead of reflecting it.</p> <p><b>Complete the self-assessment activity based on the success criteria.</b></p>

National Curriculum Objective	Children's Names					
Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.						
Round any whole number to a required degree of accuracy.						
Round decimals with two decimal places to the nearest whole number and to one decimal place.						
Read, write, order and compare numbers with up to three decimal places.						
Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).						
Add and subtract numbers mentally with increasingly large numbers.						
Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.						
Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.						
Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.						

Children's Names						
Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.						
Describe positions on the full coordinate grid (all four quadrants).						
Draw and translate simple shapes on the coordinate plane and reflect them in the axes.						