

# Inspire Maths 2 Long-term Plan

Unit title	Key concepts
<b>1 Numbers to 1000</b>	
Counting	<ul style="list-style-type: none"> <li>Counting numbers up to 1000 by using concrete representations</li> <li>Strategies for counting in ones, tens and hundreds</li> </ul>
Place value	<ul style="list-style-type: none"> <li>Each digit of a number has its own value</li> </ul>
Comparing numbers within 1000	<ul style="list-style-type: none"> <li>Identify the place and value of the digits of corresponding numbers and then compare</li> </ul>
Order and pattern	<ul style="list-style-type: none"> <li>Numbers are said to form a pattern when they are arranged in a systematic order. To find the next number in a pattern, we add or subtract a certain fixed number</li> </ul>
<b>2 Addition and Subtraction within 1000</b>	
Simple addition within 1000	<ul style="list-style-type: none"> <li>The 'adding on' concept is related to calculation in addition</li> <li>The digit at each place has its own value</li> </ul>
Simple subtraction within 1000	<ul style="list-style-type: none"> <li>The 'taking away' concept is related to calculation in subtraction</li> <li>The digit at each place has its own value</li> </ul>
Addition with regrouping the ones	<ul style="list-style-type: none"> <li>The regrouping concept in addition</li> </ul>
Addition with regrouping the tens	
Addition with regrouping the tens and ones	
Subtraction with regrouping the tens and ones	<ul style="list-style-type: none"> <li>The regrouping concept in subtraction</li> </ul>
Subtraction with regrouping the hundreds and tens	<ul style="list-style-type: none"> <li>Regrouping in hundreds and tens in subtraction</li> </ul>
Subtraction with regrouping the hundreds, tens and ones	<ul style="list-style-type: none"> <li>Regrouping in hundreds, tens and ones in subtraction</li> </ul>
Subtraction with numbers that have zeros	<ul style="list-style-type: none"> <li>Regrouping involving zeros in hundreds to tens and tens to ones</li> </ul>
<b>Practice Book – Review 1</b>	
<b>Assessment Book – Test 1</b>	
<b>3 Using Models: Addition and Subtraction</b>	
Simple word problems (1)	<ul style="list-style-type: none"> <li>Using models to find the whole from two or more parts</li> <li>Using models to find a part of a whole</li> </ul>
Simple word problems (2)	<ul style="list-style-type: none"> <li>Using models to make a whole by joining one or more parts to another</li> <li>Using models to show when one or more sets are taken away</li> </ul>
Simple word problems (3)	<ul style="list-style-type: none"> <li>The 'comparing' concept can be represented by models</li> </ul>

<b>Unit title</b>	<b>Key concepts</b>
Two-step word problems	<ul style="list-style-type: none"> <li>Using model drawings to represent various concepts in addition and subtraction when solving problems</li> </ul>
<b>4 Multiplication and Division</b>	
How to multiply	<ul style="list-style-type: none"> <li>Multiplication is conceptualised as multiplying a fixed number of objects by a certain number of times. The fixed number of objects refers to the number of objects in a group. The number of groups refers to the number of times it is multiplied</li> </ul>
How to divide	<ul style="list-style-type: none"> <li>Division is conceptualised as sharing or dividing a set of items into equal groups so that each group has the same number of items</li> </ul>
<b>Practice Book – Review 2</b>	
<b>Assessment Book – Test 2, Challenging Problems 1, Check-up 1</b>	
<b>5 Multiplying by 2 and 3</b>	
Multiplying by 2: skip-counting	<ul style="list-style-type: none"> <li>Multiplication is interpreted as repeated addition and as groups of items</li> </ul>
Multiplying by 2: using dot paper	<ul style="list-style-type: none"> <li>The ‘relating facts’ concept can be used to find a more difficult multiplication fact using dot paper</li> </ul>
Multiplying by 3: skip-counting	<ul style="list-style-type: none"> <li>Multiplication is interpreted as repeated addition and as groups of items</li> </ul>
Multiplying by 3: using dot paper	<ul style="list-style-type: none"> <li>The ‘relating facts’ concept can be used to find a more difficult multiplication fact using dot paper</li> </ul>
Division	<ul style="list-style-type: none"> <li>Division is the inverse of multiplication</li> </ul>
<b>6 Multiplying by 4, 5 and 10</b>	
Multiplying by 4: skip-counting	<ul style="list-style-type: none"> <li>Multiplication is conceptualised as repeated addition, groups of items, or multiplying</li> </ul>
Multiplying by 4: using dot paper	<ul style="list-style-type: none"> <li>The ‘group and number of items in each group’ concept is applied</li> </ul>
Multiplying by 5: skip-counting	<ul style="list-style-type: none"> <li>Multiplication is conceptualised as groups of items and as sequential numbers in the ‘skip-counting’ strategy</li> </ul>
Multiplying by 5: using dot paper	<ul style="list-style-type: none"> <li>The ‘group and number of items in each group’ concept is applied</li> </ul>
Multiplying by 10: skip-counting and using dot paper	<ul style="list-style-type: none"> <li>Multiplication is interpreted as groups of items and as sequential numbers in the ‘skip-counting’ strategy</li> </ul>
Division	<ul style="list-style-type: none"> <li>Division is conceptualised as the inverse of multiplication and as the equal sharing of items</li> </ul>
<b>Practice Book – Review 3</b>	
<b>Assessment Book – Test 3</b>	

<b>7 Using Models: Multiplication and Division</b>	
Multiplication	<ul style="list-style-type: none"> <li>• Multiplication is conceptualised as the total number of items, given groups of items</li> </ul>
Division	<ul style="list-style-type: none"> <li>• Division is conceptualised as sharing or dividing a set of items into equal groups so that each group has the same number of items</li> </ul>
<b>8 Length</b>	
Measuring in metres	<ul style="list-style-type: none"> <li>• Length is a concept of measurement to determine how long or short an object is</li> <li>• The metre (m) is a unit of measurement for length</li> </ul>
Comparing lengths in metres	<ul style="list-style-type: none"> <li>• The metre is a medium for measuring and comparing</li> </ul>
Measuring in centimetres	<ul style="list-style-type: none"> <li>• Length is a concept of measurement to determine how long or short an object is</li> <li>• The centimetre (cm) is a unit of measurement for length</li> </ul>
Comparing lengths in centimetres	<ul style="list-style-type: none"> <li>• The centimetre is used to measure and compare the lengths of two or more objects</li> </ul>
Addition and subtraction of length	<ul style="list-style-type: none"> <li>• The 'addition' and 'subtraction of numbers' concepts and techniques are applied in this section</li> </ul>
Multiplication and division of length	<ul style="list-style-type: none"> <li>• The 'multiplication' and 'division' concepts in numbers are applied in this section</li> </ul>
<b>9 Mass</b>	
Measuring in kilograms	<ul style="list-style-type: none"> <li>• The kilogram (kg) is a unit of measurement for mass</li> </ul>
Comparing masses in kilograms	<ul style="list-style-type: none"> <li>• The kilogram (kg) is used as a medium to find the masses of objects and compare masses</li> </ul>
Measuring in grams	<ul style="list-style-type: none"> <li>• The gram (g) is a unit of measurement for mass</li> </ul>
Comparing masses in grams	<ul style="list-style-type: none"> <li>• An object can be heavier or lighter than another based on the masses of the two objects</li> </ul>
Addition and subtraction of mass	<ul style="list-style-type: none"> <li>• The process of addition and subtraction of mass is similar to addition and subtraction of whole numbers</li> </ul>
Multiplication and division of mass	<ul style="list-style-type: none"> <li>• Pupils can use concepts in multiplication and division to solve multiplication and division problems</li> </ul>
<b>Practice Book – Revision 1</b>	
<b>Assessment Book – Test 4, Challenging Problems 2, Check-up 2</b>	
<b>10 Mental Calculations</b>	
Mental addition	<ul style="list-style-type: none"> <li>• Using number bonds in mental addition</li> </ul>
Mental subtraction	<ul style="list-style-type: none"> <li>• Using number bonds in mental subtraction</li> </ul>

<b>11 Money</b>	
Counting pounds and pence	<ul style="list-style-type: none"> <li>The dot separates the pounds from the pence</li> </ul>
Changing pounds and pence	<ul style="list-style-type: none"> <li>£1 = 100p</li> <li>When changing pence to pounds, use the dot to separate the pounds from the pence</li> <li>When changing pounds to pence, remove the dot from the pounds</li> </ul>
Comparing amounts of money	<ul style="list-style-type: none"> <li>Comparing amounts of money by comparing the pounds followed by the pence</li> </ul>
Word problems	<ul style="list-style-type: none"> <li>Solving one-step or two-step word problems involving money using addition and subtraction</li> <li>Solving one-step or two-step word problems involving money using multiplication and division</li> </ul>
<b>Practice Book – Review 4</b>	
<b>Assessment Book – Test 5</b>	
<b>12 Fractions</b>	
Understanding fractions	<ul style="list-style-type: none"> <li>Fractions make up equal parts of a whole. Conversely, unequal parts are not fractions of a whole</li> <li>The symbol <math>\frac{1}{2}</math> represents 1 out of 2 parts</li> <li><math>\frac{2}{2}</math> is a whole</li> </ul>
More fractions	<ul style="list-style-type: none"> <li>Using modelling as a concept to represent fraction contexts</li> </ul>
Comparing and ordering fractions	<ul style="list-style-type: none"> <li>Quantifying and comparing fractions</li> </ul>
Adding and subtracting like fractions	<ul style="list-style-type: none"> <li>Quantifying, adding and subtracting fractions</li> </ul>
Solving word problems	<ul style="list-style-type: none"> <li>Applying the 'adding on', 'taking away', 'part-whole' and comparing concepts in solving word problems involving fractions</li> </ul>
<b>13 Time</b>	
The minute hand	<ul style="list-style-type: none"> <li>The minute is a measure of time</li> <li>The minute hand of the clock is used to indicate the time in minutes</li> </ul>
Reading and writing the time	<ul style="list-style-type: none"> <li>Hours and minutes are measures of time</li> </ul>
Learning a.m. and p.m.	<ul style="list-style-type: none"> <li>Time is told in a.m. and p.m.</li> <li>'a.m.' is used for time after 12 midnight to just before 12 noon</li> <li>'p.m.' is used for time after 12 noon to just before 12 midnight</li> </ul>
Time taken in hours and minutes	<ul style="list-style-type: none"> <li>'Hour' is written as h and 'minutes' is written as mins</li> <li>Time taken between two given times is measured in h and mins</li> </ul>
<b>Practice Book – Review 5</b>	
<b>Assessment Book – Test 6, Challenging Problems 3, Check-up 3</b>	

<b>14 Volume</b>	
Getting to know volume	<ul style="list-style-type: none"> <li>• The capacity of a container is the amount of space it can hold</li> <li>• The volume of a container is the amount of space it contains</li> </ul>
Measuring in litres	<ul style="list-style-type: none"> <li>• The litre (ℓ) is a unit of measurement for volume</li> </ul>
Addition and subtraction of volumes	<ul style="list-style-type: none"> <li>• Volume in litres can be added and subtracted like whole numbers</li> </ul>
Multiplication and division of volumes	<ul style="list-style-type: none"> <li>• Volume in litres can be multiplied and divided like whole numbers</li> </ul>
<b>15 Graphs</b>	
Reading picture graphs	<ul style="list-style-type: none"> <li>• Picture graphs represented by symbols can be compared and interpreted</li> </ul>
Making picture graphs	<ul style="list-style-type: none"> <li>• Picture graphs can be made using different symbols and scales</li> </ul>
More graphs	<ul style="list-style-type: none"> <li>• Interpreting picture graphs to solve problems</li> </ul>
<b>Practice Book – Review 6</b>	
<b>Assessment Book – Test 7</b>	
<b>16 Lines and Surfaces</b>	
Straight lines and curves	<ul style="list-style-type: none"> <li>• Represent lengths with straight lines</li> <li>• Interpret straight lines with given lengths</li> </ul>
Flat surfaces	<ul style="list-style-type: none"> <li>• Identifying flat surfaces and curved surfaces</li> </ul>
<b>17 Shapes and Patterns</b>	
2D shapes	<ul style="list-style-type: none"> <li>• Identifying semicircles and quarter circles</li> </ul>
3D shapes	<ul style="list-style-type: none"> <li>• Shapes can be visualised as 3D shapes</li> </ul>
Making patterns	<ul style="list-style-type: none"> <li>• Patterns are made by repeating sequences</li> </ul>
<b>Practice Book – Revision 2</b>	
<b>Assessment Book – Test 8, Challenging Problems 4, Check-up 4</b>	