

**Medium Term Plan for Primary Maths – Stage 2**

<b>Autumn 2- Under the sea</b>		<b>Time allocation: 6 weeks</b>
<b>Coverage:</b> <ul style="list-style-type: none"> <li>• <b>Presentation of Data</b></li> <li>• <b>Investigating angles (Stage 3)</b></li> <li>• <b>Fractions, decimals and Percentages (Exploring fractions)</b></li> </ul>	<b>Links to topic:</b> N/A	<b>Key Words:</b>  <u><b>Presentation of data</b></u> Data, Pictogram, Tally, Tally chart, Block diagram, Table, Category, Categorical data, Total, Compare,
		<u><b>Investigating angles</b></u> Half, Quarter, Three quarters, Angle, Turn, Right angle, Greater than, less than, degrees
<b>Skills</b> <ul style="list-style-type: none"> <li>• Read and write numbers</li> <li>• Order</li> <li>• Investigate</li> <li>• Explain</li> <li>• Question</li> <li>• Count</li> <li>• Reason</li> <li>• Problem Solve</li> </ul>	<b>Suggested support materials &amp; resources</b>	
	<b>Week 1-2:</b> pictogram frame, tally chart, number lines, cubes, number lines, question cards, post it notes  <b>Weeks 3-4:</b> post it notes, positional language cards, objects to turn, arrow cards, angle prompt cards, set square, protractor, 2D square  <b>Weeks 5-6:</b> fraction cards, fraction pizzas/cakes, cubes, counters, objects, shapes, fraction question cards, fraction grid	
<b>Content:</b>	<b>Learning objectives</b>	

**Weeks 1- 2**  
**Representing**  
**Data**

Pupils will be able to:

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- ask and answer questions about totalling and comparing categorical data

In stage 2, pictograms use a symbol for each individual unit and also many-to-one correspondence such as 2, 5 and 10 units.

NCETM: [Glossary](#)

**Common approaches**

*Pupils need to remember that tallies are blocks of five – make links that the word ‘TALLY’ has **five letters** and tallying involves making **blocks of five**.*

*Pupils always construct or identify the key for a pictogram before doing anything else.*

KM: Make a ‘Human’ Block Diagram by asking pupils to stand on a giant set of axes.

KM: [Stick on the Maths HD4: Recording results](#)

KM: [Stick on the Maths HD2: Representing work](#)

KM: [Stick on the Maths HD5: Communicating findings](#)

NRICH: [Sticky Data](#)

NRICH: [If the World Were a Village](#)

NRICH: [Ladybird Count](#)

NCETM: [Activity E](#)

**Learning review**

NCETM: [NC Assessment Materials \(Teaching and Assessing Mastery\)](#)

**Reasoning opportunities and probing questions.**

- Show me a tally. And another. And another.
- Kenny thinks that the correct tally for ‘8’ is IIII. Do you agree with Kenny? Explain your answer.
- Always/Sometimes/Never: A symbol in a pictogram represents one unit.

NCETM: [Statistics Reasoning](#)

- I can interpret a pictogram where the symbol represents a single item
- I can interpret a pictogram where the symbol represents a multiple of 2 items
- I can interpret a pictogram where the symbol represents a multiple of 5 items
- I can construct a pictogram where the symbol represents a single item
- I can construct a pictogram where the symbol represents a multiple of 2 items
- I can construct a pictogram where the symbol represents a multiple of 5 items
- I can interpret and construct a tally chart
- I can interpret and construct a block diagram
- I can interpret information in a simple table
- I can create a table to show information
- I can ask and answer simple questions by counting the number of objects in each category
- I can ask and answer questions about totalling and comparing categorical data

**Week 3- 4  
Investigating  
Angles**

Pupils will be able to:

- recognise angles as a property of shape or a description of a turn
- identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle

Understanding degrees as a way of measuring angles is not introduced until Stage 5.

It is thought that the origin of the name 'right angle' is the Latin word for 'upright'; as in perpendicular to the horizontal base in architectural contexts.

NCETM: [Glossary](#)

**Common approaches**

- *All pupils experience the 'feel' of a right angle by turning through quarter turns*

NRICH: [Square It](#)

NCETM: [Activity Set B](#)

NCETM: [Activity Set C](#)

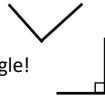
**Learning review**

NCETM: [NC Assessment Materials \(Teaching and Assessing Mastery\)](#)

**Reasoning opportunities and probing questions.**

- Show me a right angle in this classroom. And another. And another.
- Show me an angle in this classroom less (greater) than a right angle. And another. And another.
- Is this a right angle? Explain your answer.

- Convince me why this is not called a 'left' angle!



NCETM: [Geometry - Properties of Shapes Reasoning](#)

- I can understand that angle is a description of turn
- I can understand that angles are a feature of shapes
- I can identify a right angle as a quarter turn and when a shape has a right angle
- I can recognise that two right angles make a half-turn
- I can recognise that three right angles make three quarters of a turn
- I can recognise that four right angles make a complete turn
- I can identify angles that are less than right angle
- I can identify angles that are greater than a right angle

<p><b>Week 5 – 6</b> <b>(Assessment week)</b> <b>Fractions, decimals and percentages.</b></p>	<p>Pupils will be able to:</p> <ul style="list-style-type: none"> <li>recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</li> <li>write simple fractions for example, <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math></li> </ul> <p><a href="#">KM: To quarter or not quarter</a>  <a href="#">KM: Fraction flag</a>  <a href="#">NRICH: Early Fraction Development</a>  <a href="#">NCETM: Activity B</a>  <a href="#">NCETM: Activity C</a>  <a href="#">NCETM: Activity D</a></p> <p><b>Learning review</b>  KM: <a href="#">2M9 BAM Task</a>  NCETM: <a href="#">NC Assessment Materials (Teaching and Assessing Mastery)</a></p> <p><b>Reasoning opportunities and probing questions.</b></p> <ul style="list-style-type: none"> <li>Show me <math>\frac{1}{2}</math> of an amount. And another, and another ...</li> <li>True or false: <ul style="list-style-type: none"> <li><math>\frac{1}{4}</math> is greater than <math>\frac{1}{2}</math> because it has a 4 at the bottom and that is a bigger number</li> <li>You can only find one half of even numbers</li> <li>One quarter of 20 is smaller than <math>\frac{1}{2}</math> of 10</li> <li>Three quarters of an amount is larger than one half of an amount</li> </ul> </li> <li>Which is the odd one out and why: <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> ?</li> </ul> <p>NCETM: <a href="#">Fractions Reasoning</a></p> <p><i>Sometime within this week pupils to complete a half termly Rising Stars assessment based on the stage in which they are working within. (WEEK 5)</i></p>	<ul style="list-style-type: none"> <li>I can recognise one quarter as one of four equal parts of an object, shape or quantity and use fraction notation</li> <li>I can recognise two quarters as two of four equal parts, or two of one quarter, of an object, shape or quantity and use fraction notation</li> <li>I can recognise a three quarters as three of four equal parts, or three of one quarter of an object, shape or quantity and use fraction notation</li> <li>I can recognise one third as one of three equal parts of an object, shape or quantity and use fraction notation</li> <li>I can find one quarter of an object, shape or set of objects</li> <li>I can find two quarters of an object, shape or set of objects</li> <li>I can find three quarters of an object, shape or set of objects</li> <li>I can find one third of an object, shape or set of objects</li> <li>I can recognise that a half is equivalent to two quarters</li> <li>I can write simple fraction statements involving the fraction <math>\frac{1}{2}</math> such as <math>\frac{1}{2}</math> of 6 = 3</li> <li>I can write simple fraction statements involving the fractions <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> or <math>\frac{3}{4}</math>, such as <math>\frac{1}{4}</math> of 8 = 2</li> <li>I can write simple fraction statements involving the fractions <math>\frac{1}{3}</math> such as <math>\frac{1}{3}</math> of 6 = 2</li> </ul>
<p><b>Assessment</b></p>	<p>End of block assessments. End of half term assessment.</p>	
	<p><b>Notes:</b></p>	