

## Long Term Mapping KEY STAGE TWO

		WEEKLY CURRICULUM COVERAGE					
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Autumn	1	NUMBER <i>Place Value</i>			NUMBER <i>Addition</i>		
	2	NUMBER <i>Subtraction</i>		MEASUREMENT <i>Money</i>		NUMBER <i>Multiplication</i>	
Spring	1	NUMBER <i>Division</i>		STATISTICS	GEOMETRY <i>Properties of Shapes</i>		
	2	NUMBER <i>Fractions</i>			MEASUREMENT <i>Length &amp; Height</i>		
Summer	1	GEOMETRY <i>Position &amp; Direction</i>			PROBLEM SOLVING <i>Efficient methods</i>		MEASUREMENT <i>Time</i>
	2	MEASUREMENT <i>Time</i>		MEASUREMENT <i>Mass, Capacity &amp; Temperature</i>			

# AUTUMN 1 MEDIUM-TERM PLANNING

**Aspiration for Life**

Differentiated, aspirational targets dependent on pupil needs.

**Language for Life**

Explicit teaching/ exposure to new and know vocabulary.

**Learning for Life**

Opportunities to develop cross curricular skills e.g. drama

## NUMBER

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

### Place Value

### Addition

Counting objects to 100.

Represent numbers to 100.

Tens and Ones

Place Value Charts

Adding 1s

10 More

### ORAL/MENTAL STARTERS (Topic from the previous week is repeated!)

Number songs or BBC Supermovers for counting. *Topmarks* counting games.  
**How can we count these numbers?**  
What is one more/one less?  
**What is the largest number?**  
Which numbers sound similar?  
**How can we check that they are different?**

Number songs or BBC Supermovers for counting. *Topmarks* counting games.  
How can we count these numbers?  
**What is one more/one less?**  
What is the largest number?  
**Which numbers sound similar?**  
How can we check that they are different?

Numbers songs of BBC Supermovers for counting.  
How have these beads been grouped? How does it help you count?  
**Can you show me the tens/ones in the number?**  
Which resource is the quickest for counting numbers? Which would take a long time.

**How can we show 2-digit number as tens and ones?**  
How can we show which number is larger than the other?  
**Which image does not show this number?**  
Can you finish this model, using what we already know?

How many tens are in this number?  
**How many ones are there?**  
Can you create some number sentences using the place value chart?  
**Which place value chart shows more?**  
Adding song BBC Supermovers for Number Bonds (End of starter)

**Adding song or BBC Supermovers for Number Bonds. True or False? Totals.**  
How can we work out this number problem?  
**How can we read this number problem?**

### VOCABULARY

Back, backwards, compare, forward, more, less, count, smallest, largest, numeral

Represent, total, match, numeral, count, largest, larger, smaller, smallest, tens, ones.

Partition, concrete, models, part-whole models, ten frame, digit.

Tens, ones, place value, number, digit, same, different, equal

Add, adding, more, total, addition, number, pattern, bigger

Add, adding, 10 more, total, addition, number, pattern, bigger

### IMPLEMENTATION: CONCRETE | PICTORIAL | ABSTRACT REPRESENTATION

Counters / Bricks | Number lines  
Play-Doh | Objects e.g. Toy Cards | Photographs | Digital images

Counters/ Bricks  
Bead strings  
Straws | Base 10  
Digit cards

Ten frames  
Counters / Bricks  
Numicon  
Base 10

Ten frames  
Counters/Bricks  
Numicon | Bead Strings  
Number Cards

Bead strings  
Counters/Cubes  
Numicon  
Cartoons/Pictures

10 frames  
Counters/bricks/cubes  
100 squares | Number tracks  
100 Splat Square (IWB Resource)

### IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES

**How many are there in total?**  
What numbers are represented?  
**Write in numerals and words.**  
Match the numerals to the word.  
**Can you find the missing number?**

Using various concrete resources to represent amounts.  
**Matching numbers to correct visual representations.**  
Representing numbers in different ways.  
**Finding tens and ones in number using bead strings, base 10 and straws.**  
Representing numbers and placing them on a number line. Creating two-digit numbers with digit cards – show largest and smallest you can make.

**Which part do we know? How can we use the whole part to work out the missing part?**  
Can you use concrete resources/draw something to help you partition?  
**How can you rearrange the counters to help you count the objects?**  
Partitioning numbers in different ways – *not just 58 as 5 tens and 8 ones, can also be 4 tens and 18 ones etc.*  
**Investigate and explore mistakes e.g. Tom thinks that  $10 + 2 = 102$ . How is this wrong? Can you show this using concrete resources?**

Representing numbers in a place value chart – use base ten, counters, number cards etc.  
**Build number sentences for represented numbers.**  
Compare place value charts – equal and different amounts.  
**Drawing number cards from pile, representing them with objects.**

**Using concrete objects to represent number problems. Counting on from first number with objects.**  
Complete number sentences to illustrate changes in an image e.g. There are four people playing on the park, one more joins. What will it look like? How can we show this?  
**Creating addition patterns – start at number and count on with strings.**  
Filling in number tracks.  
**True or false? Investigate number sentences and find out if they have same total.**  
How can we add  $2/3$  etc?

Use 100 square to explore what happens as numbers become bigger by 10.  
**Complete number tracks (start with 10, 20...)**  
Circle numbers on 100 square that are 10 more than...  
**Use concrete objects to complete number, ten more boxes.**  
Identifying cost of items being increased by 10p.  
**Discussion and questioning – How do we know that 10 more than 21 is 31? Because when you add ten, you aren't adding ones.**

KS2 MATHEMATICS AUTUMN 1

At Tor View School, we aim to instill in our students a fundamental understanding of how Mathematics links to the wider world. Mathematics equips students with a uniquely powerful set of tools to understand and change the world in which they live. Learning basic principles of maths is essential to functioning independently within the world. In everyday life we are faced with numbers, from getting the right bus, counting money in a shop to employment. Students understand and make connections in different areas of maths so they can apply skills to solve problems in a range of contexts.

INTENT

# AUTUMN 2 MEDIUM-TERM PLANNING

**Aspiration for Life**

Differentiated, aspirational targets dependent on pupil needs.

**Language for Life**

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**Learning for Life**

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KS2 MATHEMATICS AUTUMN 2

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NUMBER		MEASUREMENT		NUMBER	
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Subtraction</b>		<b>Money</b>		<b>Multiplication</b>	
<b>Subtracting 1</b>	<b>10 Less</b>	<b>Recognising Coins</b>	<b>Counting Money (Pence)</b>	<b>Making Equal Groups</b>	<b>Adding Equal Groups (2, 5 and 10)</b>
<b>ORAL/MENTAL STARTERS (Topic from the previous week is repeated!)</b>					
<p><b>Can you find 10 more than?</b> Can you complete this number track? <b>How do we know that x is 10 more than x?</b> Song or BBC Supermovers about taking away.</p>	<p>Can you show me 1 less than...? <b>How can we work out 2, 3... less than?</b> How do we know that x is smaller than x? <b>Song or BBC Supermovers about taking away.</b></p>	<p><b>Can you find 10 less than?</b> Can we splat the numbers that are 10 less than?(IWB Splat Square) <b>How do we know that x is 10 less than x?</b> What happens if we take 10 objects away? <b>Song or BBC Supermovers about coins (at end of starter to introduce topic)</b></p>	<p>Song or BBC Supermovers about coins <b>Which coin is bigger?</b> Can you find all the x-coloured coins? <b>Which coin in the biggest/smallest?</b> What coins can we name?</p>	<p><b>Which group of coins has the highest total?</b> What coins can we use to make x (value)? <b>Are the silver coins worth more than the bronze coins? Do all silver coins have the same value?</b> Is the biggest coin always the most valuable?</p>	<p>Which group is equal/unequal? How do we know this? <b>Jack has 5 equal groups; how could we show them?</b> Jack has 4 unequal groups, how could we show them? <b>How many equal groups are shown?</b></p>
<b>VOCABULARY</b>					
Subtract, take away, less, less than, one, pattern, minus, smaller	Subtract, take away, less, 10 less, ten, minus, pattern, smaller	Coin, pence, pounds, value, total, 1p, 2p, 5p, 10p, 20p, 50p, £1, £2, money	Coin, pence, pounds, value, total, 1p, 2p, 5p, 10p, 20p, 50p, £1, £2, count, money	Equal, groups, amount, unequal, how many?, same, different	Add, total, equal, groups, how many, altogether
<b>IMPLEMENTATION: CONCRETE   PICTORIAL   ABSTRACT REPRESENTATION</b>					
Counters   Cubes Number Cards Interactive images/resources on IWB   Number lines	Counters   Cubes Number Cards   100 Splat Square (IWB)   Interactive images/resources on IWB   100 Squares   Number lines	Coins – plastic, real, cards, represented on IWB.	Coins – plastic, real, cards, represented on IWB.	Cards IWB Interactive Resources Cubes, Counters.	Cards IWB Interactive Resources Cubes, Counters   Ten Frames   Numicon Number Lines
<b>IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES</b>					
<p><b>Using concrete objects to represent number problems.</b>  Counting back from first number with object/on number line.  <b>Complete number sentences to illustrate changes in an image e.g There are four people playing on the park, one leaves. What will it look like? How can we show this?</b>  Filling in number tracks.  <b>True or false? Investigate number sentences and find out if they have same total.</b> How can we take away 2, 3 etc?</p>	<p>Use 100 square to explore what happens as numbers become smaller by 10. <b>Complete number tracks, working backwards (Start with multiples of 10)</b> Circle numbers on 100 square that are 10 less than. <b>Use concrete objects to complete number.</b> Identifying cost of items being decreased by 10p. <b>Discussion and questioning – How do we know that 10 less than 21 is 11?</b>  Real world problems – <i>There are 10 pencils in a pack. Our class has 5 packs. We give away 3 packs. How many do we have left? How can we show this?</i></p>	<p><b>Naming coins.</b> Recognising and writing value of each coin. <b>Organising coins – colour, size, shape.</b> Using coins to make given value – 2p, 5p, 10p, 20p, 50p, £1 <b>Comparing features e.g. Are all coins round</b> Comparing values e.g. 'Is 50p worth more as it's bigger than £1?' <b>Odd ones out – find amount that doesn't have a coin to represent it.</b> Match cards to coins of equal value.  <b>Match coins to images.</b></p>	<p>Counting totals of coins of the same value.  <b>Counting totals of coins of different value.</b>  Comparing features e.g. Are silver coins always worth more than copper coins?, Is the group with the most coins always the biggest amount?  <b>Different ways of counting coins – can you find quickest way?</b>  Making different totals with groups of coins (same coin can be used more than once to combine)  <b>Comparing totals.</b></p>	<p><b>Are the groups equal or unequal? Labelling.</b>  Competing sentences - There are x groups of x pencils.  <b>Jack is drawing equal groups of x – complete his drawing.</b>  Compare images of equal/unequal groups – explain how you know which are which.  <b>Jack has 4 equal groups – show with concrete materials/pictures what they could look.</b> Jack has 3 unequal groups – show me with concrete materials/pictures what they could look like.</p>	<p>How many <i>wheels/animal legs/apples/fish/flowers in vases etc</i> are there?  <b>How many is in each bag/group?</b>  How can we represent each group using physical resources/on IWB?  <b>Completing number sentences, filling in blanks – 5+5+5+5 = _</b> <i>There are _ apples</i> <i>There are _ groups of _ apples which equals _.</i>  How many groups are there altogether?</p>



# SPRING 1 MEDIUM-TERM PLANNING

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**Language for Life**

Explicit teaching/ exposure to new and know vocabulary.

**Learning for Life**

Opportunities to develop cross curricular skills e.g. drama

**KS2 MATHEMATICS SPRING 1**

At Tor View School, we aim to instil in our students a fundamental understanding of how Mathematics links to the wider world. Mathematics equips students with a uniquely powerful set of tools to understand and change the world in which they live. Learning basic principles of maths is essential to functioning independently within the world. In everyday life we are faced with numbers, from getting the right bus, counting money in a shop to employment. Students understand and make connections in different areas of maths so they can apply skills to solve problems in a range of contexts.

NUMBER		STATISTICS		GEOMETRY	
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Division		Statistics		Properties of Shapes	
<b>Making Equal Groups - Sharing</b>	<b>Making Equal Groups - Grouping</b>	<b>Making Tally Charts and Pictograms</b>	<b>Recognising 2D and 3D Shapes</b>	<b>Counting Sides of 2D shapes.</b>	<b>Drawing 2D shapes.</b>
<b>ORAL/MENTAL STARTERS (Topic from the previous week is repeated!)</b>					
How many equal groups are there?  <b>What is the total of the equal groups? How can we represent this?</b>  Eve and Whitney are making equal groups of bread rolls. Eve thinks that they need one more group of 10. Whitney thinks that they need 10 more rolls. Who is correct or are they both correct?	<b>Alex has 20 sweets and shares them between 5 friends.</b>  Tommy has 20 sweets and shares them between 10 friends.  <b>Whose friends will receive the most sweets? How do you know?</b>  (Differentiate accordingly)	Amir has some counters. He makes 5 equal groups.  <b>The amount he started with is greater than 10 but less than 35. How many counters could he have started with?</b>  How many will be in each group?  (Differentiate accordingly)	<b>Which item is the most popular on the tally chart? How we do know this?</b> How can we count the data? <b>What symbols could we use to put this data onto a pictogram?</b> What is the same and what is different about these pictograms (horizontal and vertical)? Which is easier to read? Why? <b>BBC Supermovers or song about Shapes (To introduce new topic)</b>	BBC Supermovers or song about shapes.  <b>I'm thinking of a 2D shape with more than 3 sides. What could it be? Are the more than one that it could be?</b>  Are there any shapes that it couldn't be?  <b>Which shape is the odd one out?</b>	<b>BBC Supermovers or song about shapes.</b>  Do all four sided shapes look the same? How can we show this?  <b>Mo makes a rectangle using lolly sticks, how many identical rectangles can he makes from 18 sticks?</b>  Can you make a rectangle that's different to your friend's?
<b>VOCABULARY</b>					
Sharing, equally, groups, altogether, equal, how many? divided	Sharing, equally, groups, altogether, equal, how many? divided	Data, tally, picture, pictogram, statistic, amount, total, recording	Shapes, 2D Shape, 3D Shape, Square, Circle, Triangle, Rectangle, Heptagon, Hexagon, Pentagon, Octagon, Cube, Pyramid, Cuboid, Cone, Sphere	Shapes, 2D Shape, Sides, Square, Circle, Rectangle, Heptagon, Hexagon, Pentagon, Octagon, Vertices	Shapes, 2D Shape, Sides, Square, Circle, Rectangle, Heptagon, Hexagon, Pentagon, Octagon, Vertices
<b>IMPLEMENTATION: CONCRETE   PICTORIAL   ABSTRACT REPRESENTATION</b>					
Cubes   Counters IWB Interactive Resources Bar Models   Base 10	Cubes   Counters IWB Interactive Resources Bar Models   Base 10 Number lines   Number Cards	Different objects found around class   IWB Interactive Resources Means of collecting data Images to use for Pictograms	2D and 3D shape image cards. IWB Interactive Resources Plastic 2D and 3D Shapes	2D shape image cards. Plastic 2D shapes. IWB Interactive Resources	2D shape image cards. Plastic 2D shapes. IWB Interactive Resources Geo-Boards   Elastic Bands
<b>IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES</b>					
<b>Share the x cubes equally into two boxes –</b> <b>There are _ cubes altogether</b> <b>There are _ boxes</b> <b>There are _ cubes in each box.</b> <b>Can you share the 12 cubes equally 3 boxes?</b> 24 children are put into 4 equal teams. How many children are in each team? <b>Ron draws this bar model to divide 20 into 4 equal groups. How does his model show this?</b> Sharing amounts represented by concrete objects into equal groups. <b>Investigate how you know that you have shared them into equal groups.</b>	How many do you have to begin with? How many are in each group? How many groups can you make? <b>Grouping using number lines – count backwards to work out equal groups required.</b> Pencils come in packs of _, we need to put _ in each pot. How many pots will be need? There are _ pencils altogether. There are _ pencils in each pot. There are _ pots. <b>You have 30 counters, how many different ways can you put them into equal groups?</b>	<b>Build class tally chart/pictogram based on topics of interest and discuss – What do you notice? How many we count them?</b> Why do we use tallys? How does it make it easier? <b>Completing tally charts based on information given.</b> Collecting information from school to use on charts? <b>What was the most popular/least popular? How do we know?</b> Use data from tally charts to create pictograms. <b>How do we know how many images to draw? (Pictograms)</b>	Matching names of shapes to pictures. <b>Finding 3D shapes in feely bags. What do you notice about each shape? How did you know it was right? What were you feeling for?</b> Shape hunt around school – create tallies, find most common. <b>Discuss difference between 2D and 3D shapes.</b> Rotate shapes – are they still the same? <b>Create 2D shapes by drawing around 3D shapes – what can you create?</b> Odd one out – sides, whether 2D or 3D.	<b>Matching shapes to correct number of sides.</b> Colour shapes with x amount of sides. <b>Complete table – name, shape, number of sides.</b> What is a side? <b>How can we check that we have counted all the sides?</b> Do all shapes with same number of sides look the same? <b>Ordering shapes by sides.</b>	Using geo-boards to create different 2D shapes. <b>Choosing 2D shapes, building on geo-boards and transferring onto dotted paper.</b> Where will you start drawing your shape? Where is the best place to start? <b>Why is it important to use a ruler when drawing the shapes?</b> Comparing shapes drawn with a partner's. Are they the same position and size? <b>Create as many different rectangles as you can using geo-boards/dotted paper.</b> Hiding shapes on dotted paper – what could they be?

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**SPRING 2 MEDIUM-TERM PLANNING**

**Aspiration for Life**

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**Language for Life**

Explicit teaching/ exposure to new and know vocabulary.

**Learning for Life**

Opportunities to develop cross curricular skills e.g. drama

NUMBER			MEASUREMENT		
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Fractions			Length & Height		
Making Equal Parts	Recognising a Half	Finding a Half	Measure Length (cm)	Measure Length (m)	Compare Lengths
<b>ORAL/MENTAL STARTERS (Topic from the previous week is repeated<sup>1</sup>)</b>					
<p><b>Can you draw a rectangle on dotted paper? How many straight sides will you need? Can you draw other shapes in the same way?</b></p> <p>Fraction song or BBC Supermovers (Introduce new topic)</p>	<p>How many different ways can you put 12 bean bags into equal groups?</p> <p><b>Three children are splitting squares into equal parts – who has split the square into equal parts? Explain why.</b></p>	<p><b>Rosie says the shaded part of the shape does not show a half because there are four parts, not two equal parts.</b></p> <p>Do you agree with this? Explain why.</p> <p>(Differentiate with shape accordingly)</p>	<p>Annie has some gummy bears, she circles half of them. How many gummy bears did she have at the start?</p>	<p><b>How do numbers on a ruler help us?</b></p> <p>How do you know that you have drawn a line that is 5cm long? How can you check?</p> <p><b>Why is it so important to start measuring from 0 on the ruler?</b></p>	<p>Amir has a metre stick.</p> <p><b>He wants to measure the length of his classroom.</b></p> <p>How could he measure the length of his classroom?</p>
<b>VOCABULARY</b>					
Whole, Equal, Parts, Split, Shape, Equal Groups, Unequal Groups, Object, Quantity	Whole, Equal, Parts, Split, Shape, Equal Groups, Unequal Groups, Object, Quantity, Half	Whole, Equal, Parts, Split, Shape, Equal Groups, Unequal Groups, Object, Quantity, Half	Nearest, Centimetre, Ruler, Length, Long, Number, Measure, Height	Nearest, Centimetre, Ruler, Length, Long, Number, Measure, Metre	Compare, Measure, Length, Height, Longer than, Shorter than, The Same as.
<b>IMPLEMENTATION: CONCRETE   PICTORIAL   ABSTRACT REPRESENTATION</b>					
Cubes   Counters Shapes that are cut into equal parts.   Shapes Concrete objects IWB Interactive Resources	Cubes   Counters Shapes/Objects that are split into equal parts.   Shapes Concrete objects IWB Interactive Resources	Cubes   Counters Shapes/Objects that are split into equal parts. Shapes   Concrete objects IWB Interactive Resources	Rulers   Tape Measure Variety of objects to measure length and height in cm. IWB Interactive Resources	Metre Stick Trundle Wheel	Rulers   Tape Measures Objects of reference IWB Interactive Resources
<b>IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES</b>					
<p><b>What is the whole? What are the parts?</b></p> <p>How many parts is the object/quantity split into?</p> <p><b>How do we know that there are equal parts?</b></p> <p>Do equal parts always look the same?</p> <p><b>Colouring shapes to illustrate how they can be split into equal parts (different quantities within shapes)</b></p> <p>Finding and identifying shapes that are equal and unequal.</p> <p><b>Putting objects into equal groups.</b></p>	<p>The whole gummy bear is split into <u>  </u> equal parts. Each part is worth a <u>  </u>. This can be written as <u>  </u></p> <p><b>Which pictures show ½? (As shapes)</b></p> <p>Which pictures show ½ (As amounts of objects)</p> <p><b>In ½ - What does 1 represent? What does the 2 represent?</b></p> <p>How many equal parts has the shape/object/length been split into?</p> <p><b>Finding odd one out from combination of shapes, objects and written fraction.</b></p>	<p><b>Share <u>  </u> beanbags between two containers, then complete the sentences.</b></p> <p>The whole is <u>  </u>. Half of <u>  </u> is <u>  </u>.</p> <p>Circle half of groups of objects.</p> <p><b>Fill in blanks of amounts e.g. ½ of 4 – Use counters to help.</b></p> <p>Colouring shapes to create halves in different ways – e.g. colouring a 6 boxes of a rectangle with 12 boxes in.</p> <p><b>How do you halve amounts?</b></p>	<p>Find items that are long/short etc.</p> <p><b>Estimating and measuring items to nearest centimetre. (length and height)</b></p> <p>Measuring items to the nearest centimetre. (length and height)</p> <p><b>Draw lines to specific lengths, as well as in between measurements e.g. 'longer than 4 cm but shorter than 7 cm.</b></p> <p>Problem solving – identifying images of items that haven't been measured correctly, emphasis on always measuring from 0.</p>	<p><b>Why do we also have to use metres?</b></p> <p>Why is it more helpful to use metres instead of centimetres for longer distances/objects?</p> <p><b>Sorting of objects in classroom into two groups – longer than a metre and shorter than a metre.</b> Comparing measurements – what is the same as 100cm?</p> <p><b>Measure larger items around school – combine metre stick and ruler if necessary.</b> Identify and circle objects that you would measure in metres and those that you would measure in centimetres.</p> <p><b>Measuring outside distances – 50m upwards. Experiment with different equipment – trundle wheel, metre stick.</b></p>	<p>What is longer – 10 centimetres or 10 metres? How do we know this?</p> <p><b>Comparing lengths – writing longer than, shorter than and the same as in between measurements.</b></p> <p>Comparing lengths (written) using &lt;, &gt; and = symbols.</p> <p><b>Choose two objects from classroom at time, estimate and measure lengths of objects – compare using language or symbols.</b></p>

## SUMMER 1 MEDIUM-TERM PLANNING

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KS2 MATHEMATICS SUMMER 1

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GEOMETRY		PROBLEM SOLVING		MEASUREMENT	
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Position &amp; Direction</b>			<b>Efficient Methods</b>		<b>Time</b>
<b>Describing Movement</b>	<b>Describing Turns</b>	<b>Describing Movement &amp; Turns</b>	Various Problems <b>(Consolidate and revisit past learning)</b>	Various Problems <b>(Consolidate and revisit past learning)</b>	<b>O'Clock and Half Past</b>
<b>ORAL/MENTAL STARTERS</b> ( <i>Topic from the previous week is repeated<sup>1</sup></i> )					
<b>What symbols can we use to compare lengths?</b>  What is longer – 20 metres or 20 metres?	Amir believes that the sheep has moved 2 squares forward.  <b>Is Amir correct? Explain why.</b>  (Differentiate and change as appropriate)	<b>Look at the two numicon images – what direction could they have turned in?</b>  Think of as many as you can.	Using the words 'forwards', 'backwards', 'clockwise', 'anti-clockwise' and 'quarter turn' How many different routes can you find to get from start to finish?	<b>Select problem relevant to area of study.</b>	Use problem(s) that were revisited in prior week.
<b>VOCABULARY</b>					
Forwards, Backwards, Up, Down, Left, Right, Direction, Routes	Full Turn, Half Turn, Quarter Turn, Three-Quarter Turn, Clockwise, Anti-Clockwise	Forwards, Backwards, Up, Down, Left, Right, Direction, Route, Full Turn, Half Turn, Quarter Turn, Three-Quarter Turn, Clockwise, Anti-Clockwise	Choose as relevant to area of study	Choose as relevant to area of study	O'Clock, Half Past, Time, Hour, Half Hour, Minute, Hand
<b>IMPLEMENTATION: CONCRETE   PICTORIAL   ABSTRACT REPRESENTATION</b>					
IWB Interactive Resources Images of objects/animals on grids Bee-Bots	IWB Interactive Resources Image Cards 2D triangular shapes. Toy Figures   Numicon   Bee-Bots	IWB Interactive Resources Image Cards Images of objects/animals on grids   Bee-Bots	IWB Interactive Resources Counters   Cubes Shapes   Digit Cards   Numicon Anything that is relevant to area of study.	IWB Interactive Resources Counters   Cubes   Shapes Digit Cards   Numicon Anything that is relevant to area of study.	IWB Interactive Resources Large Clocks   Mini Clocks Time Cards (Written in words and shown on clock)
<b>IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES</b>					
<b>Use directional words to give a partner instructions when moving around classroom/playground.</b>  How can you describe the movements?  <b>How can we record them?</b>  Complete stem sentences to describe movements made by animals/insects on a grid.  <b>Record movements of animals/insects on a grid – following instructions.</b>  Form different routes (physical and written) to get from point A to point B.	Turning toy figures/a partner in small groups/pairs – describe movement.  <b>Match images of turns to written descriptions.</b>  Move triangles, describe how turn is made each time.  <b>Rotate numicon – match/write/explain description of turn.</b>	<b>Describe the route that has been taken on the grid e.g. Forward 1 square. Turn Left. Forward 1 square. Quarter turn clockwise.</b>  Draw route to follow directions.  <b>Write directions to get to each place on the grid map.</b>  Create course in playground/classroom, guide each other to objects in groups.  <b>Create course for Bee-Bot, give/follow directions.</b>  How can we record directions given?	Revisit learning over academic year. Go through problems from selected area(s) of study.  <b>Model and discuss methods of solving problems.</b>  Reinforce learning.	<b>Revisit learning over academic year. Go through problems from selected area(s) of study.</b>  Model and discuss methods of solving problems.  <b>Reinforce learning.</b>	Sequencing significant times of days.  <b>Matching events to approximate times they happen.</b>  Completing tables – times written with blank clock and vice versa.  <b>Where will the hour hand be at ____?</b>  Where will the minute hand be at? ____  <b>What do you notice about the minute hand at half past?</b>  Can you show me ____?



# SUMMER 2 MEDIUM-TERM PLANNING

**Aspiration for Life**

Differentiated, aspirational targets dependent on pupil needs.

**Language for Life**


Explicit teaching/ exposure to new and know vocabulary.

**Learning for Life**

Opportunities to develop cross curricular skills e.g. drama

KS2 MATHEMATICS SUMMER 2

At Tor View School, we aim to instil in our students a fundamental understanding of how Mathematics links to the wider world. Mathematics equips students with a uniquely powerful set of tools to understand and change the world in which they live. Learning basic principles of maths is essential to functioning independently within the world. In everyday life we are faced with numbers, from getting the right bus, counting money in a shop to employment. Students understand and make connections in different areas of maths so they can apply skills to solve problems in a range of contexts.

MEASUREMENT					
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Time</b>		<b>Mass, Capacity &amp; Temperature</b>			
<b>Quarter Past and Quarter To</b>	<b>Telling time to 5 Minutes</b>	<b>Compare Mass</b>	<b>Measure Mass (g)</b>	<b>Compare Volume</b>	<b>Temperature</b>
ORAL/MENTAL STARTERS <i>(Topic from the previous week is repeated!)</i>					
<p>Who is telling the time correctly?   <b>Tom says that it is half past 11 so the hour hand should be on the 11. Is he correct? Explain why.</b>   The minute hand has fallen off the classroom clock – it's lunchtime at 12:00. Have the children missed their lunchtime?</p>	<p>Teddy says that quarter past is always later than quarter to. Do you agree with him?</p> <p style="text-align: center;">Explain why?</p>	<p>Rosie says "Four lots of 5 minutes is the same as a quarter of an hour"</p> <p style="text-align: center;"><b>Do you agree with Rosie? Explain why.</b></p>	<p style="text-align: center;"><b>"The larger the box, the heavier it is".</b></p> <p style="text-align: center;">Is this statement true? Investigate using different boxes.</p>	<p style="text-align: center;">Which is heavier, the red or green beanbag?</p> <div style="text-align: center;">  </div>	<p>Choose a selection of different sized containers. Decide how you will measure how much liquid each container can hold. Order the containers from smallest to largest.</p>
VOCABULARY					
O'Clock, Half Past, Time, Hour, Half Hour, Minute, Hand, Quarter Past, Quarter To	O'Clock, Half Past, Time, Hour, Half Hour, Minute, Hand, Quarter Past, Quarter To, 5 past, 10 / 20 / 25 past etc.	More than, Less than, Heavier, Lighter, Predict, Objects, Weight, Same as	More than, Less than, Heavier, Lighter, Predict, Objects, Weight, Same as, Grams, Mass	Largest, Smallest, Capacity, Order, Liquid, Container, Fill, More, Less, Equal	Scale, Measure, Temperature, Increase, Decrease, Warmer, Colder, Difference, Degrees, Celsius
IMPLEMENTATION: CONCRETE			PICTORIAL   ABSTRACT REPRESENTATION		
IWB Interactive Resources Large Clocks Mini Clocks Time Cards (Written in words and shown on clock)	IWB Interactive Resources Large Clocks Mini Clocks Time Cards (Written in words and shown on clock)	IWB Interactive Resources Scales Objects for weighing. Image Cards	IWB Interactive Resources Scales Objects for weighing Image Cards   Gram Weights	IWB Interactive Resources Containers   Image Cards Rice   Water	IWB Interactive Resources Thermometers
IMPACT: SUGGESTED FUNCTIONAL / PROBLEM SOLVING ACTIVITIES					
<p><b>Match clocks to correct time. Sequencing significant times of days.</b>   Matching events to approximate times they happen.   <b>Completing tables – times written with blank clock and vice versa.</b> Where will the hour hand be at ____?   <b>Where will the minute hand be at?</b> ____</p> <p>What do you notice about the minute hand at half past? <b>Can you show me ____?</b> What are the hands pointing to?   <b>Can we divide the clock face into four parts? Can we link to fractions?</b> Show me quarter past/quarter to.   <b>Make a list of quarter past and quarter to time in between hours of an event.</b></p>	<p>Use demonstration clock to count round in minutes – model filling in a chart and pupils may complete.</p> <p style="text-align: center;"><b>Show times to 5 minute intervals on large clock – children to identify what time is being made.</b></p> <p>Children given clocks – give time and children to make and show.</p> <p style="text-align: center;"><b>Can you show ____ past/to ____?</b></p> <p>Match times to correct clock. <b>Sequence events through hours/days.</b></p> <p>Counting round clock in different ways. <b>Where will the minute hand be at ____? Where will the hour hand be at ____?</b></p>	<p style="text-align: center;"><b>Comparing weights of two different items – work in small groups/pairs/whole class.</b></p> <p>The lettuce weighs ____ than the pineapple.</p> <p style="text-align: center;"><b>Predict whether heavier/lighter prior to recording results.</b></p> <p>Can you hold the objects and predict which is heavier? Is the largest object always heavier? <b>What side is lower on the scales? What does this tell us?</b></p> <p>Using quantity to make level weights. 4 bananas weigh the same as ____ doughnuts.</p>	<p>Use gram weights to measure mass of objects using a balance scale.</p> <p style="text-align: center;"><b>Use scales to record the mass of objects in grams.</b></p> <p>Compare, predict and record different weights of objects in grams</p> <p style="text-align: center;"><b>Ordering items from heaviest to lightest.</b></p> <p>When balance scales are level, what does this tell us? <b>How can you tell if something is lighter or heavier than ____g?</b></p> <p>How much heavier is the ____ than the _____. How can we work it out?</p>	<p style="text-align: center;"><b>Show three different containers – which has the largest capacity? Make each container – one quarter full, half full, three-quarters full.</b></p> <p>Compare more, less, equal – Container A has ____ than container B</p> <p>Compare up different amounts of containers</p> <p style="text-align: center;"><b>Fill bottles with mugs and vice versa – use different objects. Investigate and predict.</b></p> <p>Use mugs of rice to see how many containers can be filled. <b>Which container has the most or least liquid in?</b></p> <p>Which container has the smallest/largest capacity? <b>Which container has the most of least liquid in?</b></p>	<p>How can we measure the temperature? <b>What happens when the scale goes up and goes down?</b></p> <p>If the temperature increases, what happens to the number on the scale? <b>If the temperature decreases, what happens to the number on the scale?</b></p> <p>Take temperatures around the school – record: The temperature in the classroom is ____</p> <p>The classroom is ____ than the playground. <b>Colour thermometers to show temperatures.</b></p> <p>Compare different temperatures. <b>Label temperatures in terms of hot/cold/warm/freezing/hotter/warmer</b></p>



# TOR VIEW

A SPECIALIST LEARNING COMMUNITY