

Class: Year 3	Year:	Term: Spring 1	Weeks (Dates)	Teacher:
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<p>Prior learning – check that children can already:</p> <ul style="list-style-type: none"> Solve one-step problems in the context of numbers, measures or money check solutions make sense in the context of the problem recognise patterns in numbers or shapes and predict and test with examples recall addition and subtraction facts for each number to at least 10, all pairs with totals to 20 and all pairs of multiples of 10 with totals up to 100 recall multiplication facts for the 2, 5 and 10 times-tables and the related division facts recognise multiples of 2, 5 and 10 up to 100 describe the properties of and sort common 2-D and 3-D shapes and recognise them in pictures identify and draw lines of symmetry identify right angles in shapes and as quarter turns 	<p>Learning objectives:</p> <ul style="list-style-type: none"> Solve one-step and two-step problems involving numbers, money or measures, including time, choosing and carrying out appropriate calculations Represent the information in a puzzle or problem using numbers, images or diagrams; use these to find a solution and present it in context, where appropriate using £.p notation or units of measure (covered in first weeks word problems and fractions work) Identify patterns and relationships involving numbers or shapes, and use these to solve problems (covered in equivalence of fractions) Read and write proper fractions (e.g. $\frac{3}{7}, \frac{9}{10}$), interpreting the denominator as the parts of a whole and the numerator as the number of parts; identify and estimate fractions of shapes; use diagrams to compare fractions and establish equivalents Derive and recall all addition and subtraction facts for each number to 20, sums and differences of multiples of 10 and number pairs that total 100 (covered in weekly homework and tests) Derive and recall multiplication facts for the 2, 3, 4, 5, 6 and 10 times-tables and the corresponding division facts (covered in weekly homework and tests); recognise multiples of 2, 5 or 10 up to 1000 Relate 2-D shapes and 3-D solids to drawings of them; describe, visualise, classify, draw and make the shapes (moved to C2) Draw and complete shapes with reflective symmetry; draw the reflection of a shape in a mirror line along one side Sustain conversation, explaining or giving reasons for their views or choices (covered in several plenaries) Read the time on a 12-hour digital clock and to the nearest 5 minutes on an analogue clock; calculate time intervals and find start or end times for a given time interval (LO from Unit C2 but fits better here so can work on it before working on time problems) 	<p>Vocabulary:</p> <p>problem, solution, calculate, calculation, operation, inverse, answer, method, explain reasoning, pattern, predict, estimate, approximate</p> <p>add, subtract, multiply, divide, group, sum, total, difference, plus, minus, double, halve multiple, product</p> <p>pound (£), penny/pence (p), note, coin, uni of measurement and their abbreviations</p> <p>triangle, square, rectangle, quadrilateral, pentagon, hexagon, octagon, circle, semicircle, cube, cuboid, pyramid, cone, cylinder, prism, sphere, hemisphere, face, edge, vertex/vertices, surface, solid, side, straight, curved, diagram, right-angled</p> <p>line of symmetry, mirror line, reflection, symmetrical, reflective symmetry</p>
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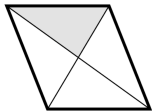
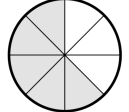
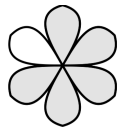
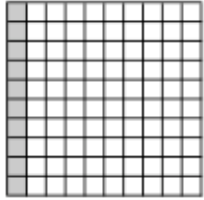
Weekly homework includes children learning their times-tables and number bonds (differentiated to the numbers they are up to), which they are then tested on once a week

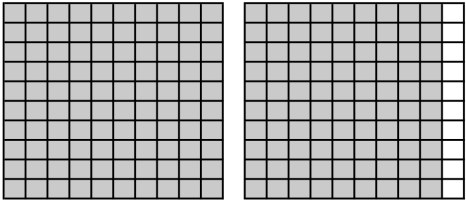
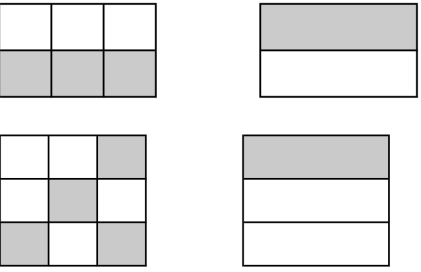
When HA are working on MA work without listening to my model a TA will check they understand it and are doing it correctly

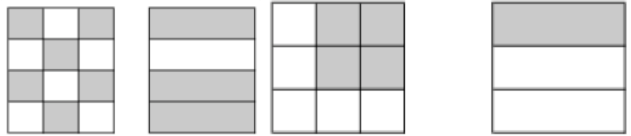

Class: Year 3	Year:	Term: Spring 1	Week (to)	Teacher:
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	OBJECTIVES	TEACHING ACTIVITIES (20 mins)	INDEPENDENT WORK (20 mins)	Plenary / HOMEWORK (10 mins)	Success Criteria Must/should/could <i>I can:</i>	Evaluation
M	<p>Mental: Relate 2-D shapes to drawings of them; describe, visualise, classify, draw and make the shapes</p> <p>Main: Represent the information in a puzzle or problem using numbers, images or diagrams; use these to find a solution and present it in context</p> <p>Sustain conversation, explaining or giving reasons for their views or choices</p> <p>B2001</p>	<p>Mental: Show the class some 2D shapes. Ask them to write on their WBs as much as they can about each shape. Display vocab on WB to help them e.g. sides, vertices, right angles</p> <p>Main: Explain to class that we are going to be working on problem solving today. Explain what it means to work systematically when solving problems and how sometimes we can use pictures and diagrams to help us For independent work each pair works on one problem for 10 mins. Then each pair explains how they approached the problem, and the table discuss differences in methods and which method was best</p>	<p>LA – first 3 problems from 'Maths problems and investigations for G + T Years 1 and 2'</p> <p>MA – problems 10 to 12 from 'Maths problems and investigations for G + T Years 1 and 2'</p> <p>HA – first 3 problems from 'Maths problems and investigations for G + T Years 3 and 4'</p>	<p>Go through answers to the problem that each group found most difficult and how the answer might best have been worked out</p>	<p>M: attempt to solve problems</p> <p>S: explain how they attempted to solve problems</p> <p>C: compare methods with other pairs and evaluate their choice of method</p>	
Tu	<p>Starter: Relate 2-D shapes to drawings of them; describe, visualise, classify, draw and make the shapes</p> <p>Main: Solve one-step and two-step problems involving length, choosing and carrying out appropriate calculations</p> <p>B2002</p>	<p>Mental: Show the class some different 2D shapes from previous day. Ask them to write on their WBs as much as they can about that shape. Display vocab on WB to help them e.g. sides, vertices, right angles</p> <p>Main: Revise conversion of cm to m / m to cm Model how to solve length word problems using RUCSAC:</p> <ul style="list-style-type: none"> • Read the question • Underline numbers and key words • Calculation (write it out) • Solve by using working out • Answer (write 'Answer is x cm', to make it clear what the child wants to give as their answer, otherwise this is not clear from the working out) • Check (check you have included the units e.g. 12cm, 4m) 	<p>LA – one-step and two-step problems (+&-)</p> <p>MA – one and two-step problems (+, -, X and ÷)</p> <p>HA – one and two-step problems (+,-,X and ÷) with decimal places</p> <p>Ext – make up their own questions</p>	<p>In pair children make up a question each, swap, answer them and discuss whether they were right or wrong, and why?</p>	<p>M: solve one-step problems involving addition and subtraction</p> <p>S: solve two-step problems involving addition and subtraction</p> <p>C: solve two-step problems involving all four operations</p>	

W	<p>Mental: Relate 3-D solids to drawings of them; describe, visualise, classify, draw and make the shapes</p> <p>Main: Solve one-step and two-step problems involving weight, choosing and carrying out appropriate calculations</p> <p>B2003</p>	<p>Mental: Show the class some 3D solids. Ask them to write on their WBs as much as they can about that shape. Display vocab on WB to help them e.g. edges, vertices, faces</p> <p>Main: Revise conversion of g to kg / kg to g. Model how to solve weight word problems using RUCSAC Emphasise the need to remember the units e.g. 12g, 4Kg</p>	<p>LA – one-step and two-step problems (+&-)</p> <p>MA – one and two-step problems (+, -, X and ÷)</p> <p>HA – one and two-step problems (+,-,X and ÷) with decimal places</p> <p>Ext – make up their own questions</p>	<p>In pairs children make up a question each, swap, answer them and discuss whether they were right or wrong, and why?</p>	<p>M: solve one-step problems involving addition and subtraction</p> <p>S: solve two-step problems involving addition and subtraction</p> <p>C: solve two-step problems involving all four operations</p>
TH	<p>Mental: Relate 3-D solids to drawings of them; describe, visualise, classify, draw and make the shapes</p> <p>Main: Solve one-step and two-step problems involving capacity, choosing and carrying out appropriate calculations</p> <p>B2004</p>	<p>Mental: Show the class some different 3D solids from previous day. Ask them to write on their WBs as much as they can about that shape. Display vocab on WB to help them e.g. edges, vertices, faces</p> <p>Main: Revise conversion of l to ml / ml to l. Model how to solve capacity word problems using RUCSAC Emphasise the need to remember the units e.g. 12ml, 4 litres</p>	<p>LA – one-step and two-step problems (+&-)</p> <p>MA – one and two-step problems (+, -, X and ÷)</p> <p>HA – one and two-step problems (+,-,X and ÷) with decimal places</p> <p>Ext – make up their own questions</p>	<p>In pairs children make up a question each, swap, answer them and discuss whether they were right or wrong, and why?</p>	<p>M: solve one-step problems involving addition and subtraction</p> <p>S: solve two-step problems involving addition and subtraction</p> <p>C: solve two-step problems involving all four operations</p>
F	<p>Mental: Same as main</p> <p>Main: Solve one-step and two-step problems involving money, choosing and carrying out appropriate calculations</p> <p>B2005</p>	<p>Mental: Revise what denominations coins come in. Give children an amount and see how many different ways they can come up with of making that amount with coins.</p> <p>Main: Revise conversion of £ to p / £ to p. Revise what change is and how to work it out (by taking away). Model how to solve money word problems using RUCSAC Emphasise the need to remember the units e.g. 12p, £4</p>	<p>LA – one-step and two-step problems (+&-)</p> <p>MA – one and two-step problems (+, -, X and ÷)</p> <p>HA – one and two-step problems (+,-,X and ÷) with decimal places</p> <p>Ext – make up their own questions</p>	<p>In pairs children make up a question each, swap, answer them and discuss whether they were right or wrong, and why?</p>	<p>M: solve one-step problems involving addition and subtraction</p> <p>S: solve two-step problems involving addition and subtraction</p> <p>C: solve two-step problems involving all four operations</p>

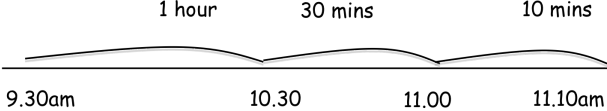
	OBJECTIVES	TEACHING ACTIVITIES (20 mins)	INDEPENDENT WORK (20 mins)	Plenary / HOMEWORK (10 mins)	Success Criteria Must/should/could <i>I can:</i>	Evaluation
M	<p>Mental: Read the time on a 12-hour digital clock and to the nearest 5 minutes on an analogue clock</p> <p>Main: Read and write proper fractions (e.g. 3/7, 9/10), interpreting the denominator as the parts of a whole and the numerator as the number of parts</p> <p>B2006</p>	<p>Mental: Give children clocks. Write a time in 12-hour clock on WB for LA and MA to show e.g. 1.45. Write a time in 24-hour clock on WB for HA to show e.g. 13.45</p> <p>Main: Ask children to write what fraction of the following shapes is shaded on their WBs:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">1) </div> <div style="text-align: center;">2) </div> <div style="text-align: center;">3) </div> </div> <p>For children who get all the answers right, ask them to start the HA work by deriving fractions over 100 from the diagrams (see below for exemplar diagram).</p> <p>For those still on the carpet: Explain how the term whole means all of a shape. Explain how the denominator (bottom number) relates to how many equal parts a shape contains. Draw some examples of shapes divided into unequal parts to show that this would not show fractions in the same way. Explain how the numerator (top number) tells you how many of these equal parts are shaded / not shaded. Explain how if the whole is shaded / not shaded this can be shown as a fraction e.g. 2/2, 3/3, 4/4 and so on or just a whole 1 Model how to shade fractions of shapes. Check HA were OK with what they have done so far, and if so, get them to sit on carpet. Show HA how they need to derive 3 things from each diagram: a) fraction (b) a percentage (c) a decimal e.g. a) $\frac{10}{100}$ (b) 10% (c) 0.1</p> <div style="text-align: center; margin: 10px 0;">  </div> <p>Explain how 'percent' means 'out of 100'. Once you have a fraction over 100 you can get the percentage by taking the top number e.g. $\frac{10}{100}$ gives you 10%. Once you have a percentage you can get a decimal by</p>	<p>LA –identify the fraction of a shape that is shaded and shade a given fraction of a shape (with 1/2s, 1/3s and 1/4s)</p> <p>MA – as for LA, but also 1/5s, 1/6s, 1/7 and 1/8s</p> <p>HA – derive fractions, percentages and decimals (less than 100%) from the number of squares shaded out of 100</p> <p>G + T – derive mixed numbers, improper fractions, percentages (more than 100%) and decimals from the number of squares shaded out of 100</p>	<p>In partners children compare their answers and discuss the reasons for any differences <i>without being allowed to change their answers so I can see their misunderstandings</i></p>	<p>M: be able to tell what fraction of a shape is shaded and shade a given fraction of a shape</p> <p>S: derive percentages and decimals from diagrams</p> <p>C: derive improper fractions, mixed numbers, percentages greater than 100% and decimals greater than 1 from diagrams</p>	

		<p>placing a decimal point before the tens column in the percentage e.g. 10% gives you 0.1 See how children get on with doing this; if they understand it move on to revising how to do mixed numbers and improper fractions, and convert them to percentages and decimals. Explain how 100/100, one whole, 100% and 1 are all equivalent. Show children worksheet and how they need to derive 4 things from each diagram: a) an improper fraction (b) a mixed number (c) a percentage and (d) a decimal e.g.</p>  <p>a) $\frac{190}{100}$ (b) $1\frac{90}{100}$ (c) 190% and (d) 1.9</p>				
Tu	<p>Mental: Derive and recall all addition facts for each number to 20</p> <p>Main: Identify and estimate fractions of shapes</p> <p>Use diagrams to compare fractions and establish equivalent fractions of shapes</p> <p>B2007</p>	<p>Mental: Display addition number bonds to 20 on IWB. For HA explain how you can use these to help with decimals e.g. $1.7 + 0.3 = 2$. In partners children practice questioning each other. I choose one pupil to stand up, look away and answer 3 questions. House point if they get them all right.</p> <p>Main: Ask children to complete the following sentence on these two diagrams: ___ is equivalent / not equivalent to ___.</p>  <p>Children who get both sentences right go with TA and work on creating equivalent fractions, decimals and percentages. For those still on carpet: Explain with example shapes how: 1) $\frac{1}{2}$ is bigger than $\frac{1}{3}$, $\frac{1}{3}$ is bigger than $\frac{1}{4}$ and so on 2) shapes must be divided into equal sections to show fractions Revise what a 'whole' is. Revise how to identify the fraction of a shape that is shaded by: 1) counting the number of sections to get the denominator 2) counting the number of shaded sections to get the numerator Sometimes can tell bigger / smaller shape just by looking at shapes Otherwise need to identify fraction and if denominator is not the same, change fractions so it is Explain the term 'equivalent'. ___ is equivalent / not equivalent to ___.</p>	<p>Identify whether shaded fractions of 2 same shapes divided in different ways are equivalent:</p> <p>LA – shaded fraction given to them and can tell by looking at shapes if equivalent or not</p> <p>MA – as LA but need to identify shaded fraction</p> <p>HA – as MA but need to change both fractions to have same denominator to compare them</p> <p>G + T – create equivalent fractions, decimals and percentages</p>	<p>Children draw their own 2 shapes that are the same but split up differently, and shade them so that they show equivalent fractions <i>or</i> give each other a decimal, fraction and percentage to convert</p>	<p>M: realise that different fractions can mean the same thing</p> <p>S: identify fractions as equivalent or not</p> <p>C: create equivalent fractions, decimals and percentages</p>	

<p>W</p>	<p>Mental: Read the time on a 12-hour digital clock and to the nearest 5 minutes on an analogue clock</p> <p>Main: Identify and estimate fractions of shapes</p> <p>Use diagrams to compare fractions of shapes</p> <p>B2008</p>	<p>Mental: Revise how the hour comes after the minutes e.g. two is the hour in ten past two. Revise how to means 'before', so ten to four means ten minutes before four and is 3.50. Verbally give children times to write on their WB.</p> <p>Main: Ask children to complete the blanks in these 2 sentences on their WBs, based on the diagrams below: 1) _____ is bigger than _____. 2) _____ is smaller than _____.</p>  <p>Children who get the 4 sentences right go with TA to order decimals, fractions and percentages, by changing the decimals, fractions and percentages into fractions over 100. Revise model from yesterday. Sometimes can tell bigger / smaller shape just by looking at shapes Otherwise need to identify fraction and if denominator is not the same, change fractions so it is</p>	<p>Compare whether fractions are bigger or smaller than each other by looking at 2 identical shapes divided in the same way:</p> <p>LA – shaded fraction given to them</p> <p>MA – need to work out shaded fraction</p> <p>HA – as MA but shape divided in different ways so need to change both fractions to have same denominator to be able to compare them</p> <p>G+T – order fractions, decimals and percentages</p>	<p>Display fractions wall on the board. In partners children use it to come up with sentences comparing fractions e.g. 1/2 is bigger than 1/3</p>	<p>M: realise fractions can be bigger or smaller than each other</p> <p>S: identify which fraction is bigger from two</p> <p>C: order fractions, decimals and percentages</p>	
<p>Th</p>	<p>Mental: Solve one-step and two-step problems involving weight</p> <p>Main: Read the time on a 12-hour digital clock and to the nearest 5 minutes on an analogue clock</p> <p>B2009</p>	<p>Mental: PP with weight of 4 different objects. In partners children use these to make problems for each other to solve. (search for code D1003 to find this)</p> <p>Main: Model how to: Ask children to write the time shown on these clocks in figures:</p>  <p>1a ____ : ____ 1b ____ : ____ 1c ____ : ____</p> <p>Children who get all times correct go with a TA and learn 24-hour clock and how to draw angles with a protractor. For children still on the carpet model how to:</p> <ul style="list-style-type: none"> • Read the time with the numbers before the colon being the hours and the numbers after the colon being the minutes • Draw time on clock face <i>with short and long hands</i> (encourage children to draw the long hand an appropriate distance after the hour e.g. it will be closer to the next hour when the minutes are 59 than when the minutes are 10) • Write the time in figures <p>With children who finish telling time and drawing hands, check their work and if OK move on to 24-hour clock. (search for code D1005 to find the worksheet generator)</p>	<p>Need to draw the hands on a clock face and write the time in figures</p> <p>LA – 5 min intervals</p> <p>MA – 1 min intervals</p> <p>HA – write the time in the 24 hour clock</p> <p>G + T – draw angles with a protractor (up to 180°)</p>	<p>In partners children compare answers and discuss any differences, <i>without changing answer so that I can see misunderstandings</i></p>	<p>M: tell the time and draw the time on a clock face</p> <p>S: know the 24-hour clock</p> <p>C: draw angles using a protractor</p>	

<p>F</p>	<p>Mental: Derive and recall multiplication facts for the 2, 3, 4, 5, 6 and 10 times-tables and the corresponding division facts</p> <p>Read the time on a 12-hour digital clock and to the nearest 5 minutes on an analogue clock</p> <p>B2010</p>	<p>Mental: Display times tables on IWB. In partners children take it in turns to question each other on the times tables. Encourage more able to use them to work out division calculations. Emphasise need for quick-fire answers.</p> <p>Ask children to write time in words shown by these clocks:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>1a __ : __</p> </div> <div style="text-align: center;">  <p>1b __ : __</p> </div> <div style="text-align: center;">  <p>1c __ : __</p> </div> </div> <p>Children who get the time in words correct go with a TA and learn how to use a protractor to measure angles (up to 180°). For children who are still on the carpet: Model how to convert the time in words into a digital time and vice versa Explain how anything between 1 and 30 is 'past' and 31-59 is 'to'. Explain 'past' means 'minutes after' and 'to' means 'minutes before'. Revise how 0 minutes is o'clock 30 minutes is half-past, 15 mins is quarter-past and 45 mins is quarter-to (search for code D1005 to find the worksheet generator)</p>	<p>Need to write the time shown on clock faces in words:</p> <p>LA – 15 min intervals</p> <p>MA – 5 min intervals</p> <p>HA – 1 min intervals</p> <p>G + T – measure angles with a protractor (up to 180°) (search for code B1010 to find the worksheet generator)</p>	<p>In partners children compare answers and discuss any differences, <i>without changing answer so that I can see misunderstandings</i></p>	<p>M: tell the time in words that are past the hour</p> <p>S: tell the time in words that are to the hour</p> <p>C: measure angles using a protractor</p>	
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	OBJECTIVES	TEACHING ACTIVITIES (20 mins)	INDEPENDENT WORK (20 mins)	Plenary / HOMEWORK (10 mins)	Success Criteria Must/should/could <i>I can:</i>	Evaluation																					
M	<p>Mental: Recognise multiples of 2, 5 or 10 up to 1000</p> <p>Main: Know units of time and how they relate to each other</p> <p>B2011</p>	<p>Mental: Ask children to draw a Venn diagram on their WBs with the sections labelled multiples of 2 and multiples of 5. Ask children to place numbers in the Venn diagram.</p> <p>Main: Ask children on their WBs to answer:</p> <p>1) Write these units of time from shortest to longest:</p> <p style="padding-left: 40px;">180 minutes 600 seconds $\frac{1}{2}$ an hour</p> <p>2) Write these units of time from longest to shortest:</p> <p style="padding-left: 40px;">$\frac{1}{4}$ of a year 4 months 60 days</p> <p>3) How many fortnights in 3 months?</p> <p>Children who get them all right time go with a TA and learn how to decide if lines are: Parallel – no matter how much you extended the lines (make them longer), they would still never touch each other. Perpendicular – at a right angle to each other. Oblique – neither parallel nor perpendicular to each other.</p> <p>For children who are still on carpet: Explain what we mean by a unit of time – a word we give to a certain amount of time e.g. a week is 7 days. In pairs children come up with all the units of time that they can think of and how long they are. Read through list of units of time on the board, explaining how they relate to each other:</p> <table style="width:100%; border-collapse: collapse; margin-left: 20px;"> <tr> <td style="text-align:center;">Second</td> <td style="text-align:center;">Minute</td> <td style="text-align:center;">Hour</td> <td style="text-align:center;">Day</td> <td style="text-align:center;">Week</td> <td style="text-align:center;">Month</td> <td style="text-align:center;">Year</td> </tr> <tr> <td colspan="3" style="border-top: 1px solid black;"></td> <td colspan="4"></td> </tr> <tr> <td colspan="3" style="text-align:left;">Shortest</td> <td colspan="4" style="text-align:right;">Longest</td> </tr> </table> <p>1 minute = 60 seconds 1 hour = 60 minutes 1 day = 24 hours 1 week = 7 days Fortnight = 14 days 1 year = 365 days 1 year = 12 months 1 year = 52 weeks 1 month = 4 weeks</p>	Second	Minute	Hour	Day	Week	Month	Year								Shortest			Longest				<p>LA – look up how long a unit of time is from top of page e.g. how long is 1 minute?</p> <p>MA – calculate how long units of time are e.g. how many weeks in 6 months?</p> <p>HA – name pairs of lines as parallel, perpendicular or oblique.</p>	<p>In partners, children come up with their own questions for each other using the question sheet I gave them</p>	<p>M: know that there are different units of time</p> <p>S: know how long each of those units of time is</p> <p>C: name pairs of lines as parallel, perpendicular or oblique.</p>	
Second	Minute	Hour	Day	Week	Month	Year																					
Shortest			Longest																								
Tu	<p>Mental: Read the time on a 12-hour digital clock</p>	<p>Mental: Play gladiators: some digital times on the board, I say a time, children point to it</p>	<p>Using 12-hour clock times, go forward and back in:</p> <p>LA – minutes OR hours</p>	<p>In partners children compare answers and discuss any differences, <i>without</i></p>	<p>M: go forward or back in minutes or hours separately, without crossing</p>																						

	<p>Main: Find start or end times for a given time interval</p> <p>B2012</p>	<p>Main: Ask children to answer these questions on their whiteboards: The time is 9.30am. What time will it be in 1 hour and 40 mins? The time is 3.50pm. What time will it be in 4 hours and 20 mins? If children are able to calculate these time intervals, they can do the independent work mentally without doing working out. Revise how:</p> <ul style="list-style-type: none"> • in a time the hours come before the colon / dot and the minutes come after the colon / dot e.g. in 8.40am the 8 is the hours and the 40 is the minutes • there are 60 minutes in an hour so minutes don't go past 59, they go back to 0 e.g. 60 minutes after 7 wouldn't be 7.60, you would write 8.00 • hours don't go past 12 e.g. 4 hours after 10am, wouldn't be 14am, it would be 2pm. <p>LA – to go with TA to work with small clock faces Model for those still on the carpet how to:</p> <ul style="list-style-type: none"> • To add the hours, then the minutes, by bridging through hours if needed e.g. 1hr 40mins after 9.30am:  <p>9.30am 10.30 11.00 11.10am</p> <p>1 hour 30 mins 10 mins</p> <p>Explain words used in time:</p> <ul style="list-style-type: none"> • Forward / clockwise – later, after • Back / anticlockwise – earlier, before <p>MA – to work on number lines HA – work mentally without number lines</p>	<p>separately without crossing hour barriers using a small clock</p> <p>MA – minutes AND hours together crossing hour barriers using number lines</p> <p>HA – minutes AND hours together crossing hour barriers mentally</p> <p>Ext – write answers in 24-hour clock</p>	<p><i>changing answer so that I can see misunderstandings</i></p>	<p>hour barriers</p> <p>S: go forward or back in minutes and hours together, and cross hour barriers</p> <p>C: answer questions in both the 12 and 24-hour clock</p>	
W	<p>Mental: Solve one-step and two-step problems involving capacity</p> <p>Main: Calculate time intervals</p> <p>Sustain conversation, explaining or giving reasons for their views or choices</p> <p>B2013</p>	<p>Mental: PP with capacity of 4 different objects. Use these to make problems for children to solve. (search for code D1002)</p> <p>Main: Ask children to answer these questions on their whiteboards: How much time is there between 9.45am and 11.10am? How long is there between 1.30pm and 6.25pm? How much time is there between 8pm and 6am? How much time would pass between 09.00 and 15.00? Children who get all the answer right go with TA to work on labelling parallel lines in 2D shapes. For children still on the carpet: Revise bullet points from yesterdays model. LA – to go with TA to work with small clock faces Model how to bridge through hours on a number line to calculate intervals that cross hour barriers e.g.</p>	<p>Calculate time intervals:</p> <p>LA – not crossing hour barriers MA – crossing hour barriers (not including) crossing am / pm and 24 hour clock) HA – crossing hour barriers (including) crossing am / pm and 24 hour clock)</p> <p>(worksheets same as for lesson D1007 so search for this code)</p>	<p>Give children questions on IWB to match their ability; they do them in pairs on 1 pupil WB and explain what they are doing as they do it</p>	<p>M: calculate time intervals that do not cross hour barriers</p> <p>S: calculate time intervals that do cross hour barriers</p> <p>C: calculate time intervals that do cross hour barriers and am / pm and 24-hour clock</p>	

		<p>12.45am to 2.15am 1 hr and 30 mins</p> <p>12.45 1.00 2.00 2.15</p> <p>15 mins 1 hour 15 mins</p> <p>Emphasise the need to jump to the next hour, not just jump by the hours e.g. if you go from 12 to 2 in the example above you will think there are 2 hours between the times. Model how when going from am to pm it is best to do a jump of 12 hours. Revise 24-hour clock</p>			
Th	<p>Mental: Solve one-step and two-step problems involving time</p> <p>Main: Solve one-step and two-step problems involving time, choosing and carrying out appropriate calculations</p> <p>B2014</p>	<p>Mental: PP with price of 4 different objects. Use these to make problems for children to solve. (search for code D1004)</p> <p>Main: Remind children of key teaching points and strategies taught in previous lessons. Explain how some questions ask for how long something takes and others ask what time something began or finished. LA – to use small clock faces MA – to work on number lines HA – work mentally without number lines</p>	<p>Solve time word problems:</p> <p>LA – not crossing hour barriers MA – crossing hour barriers (not including crossing am / pm and 24 hour clock) HA – crossing hour barriers (including crossing am / pm and 24 hour clock)</p>	<p>In partners, children come up with their own questions for each other to answer on their WBs</p>	<p>Solve time word problems:</p> <p>M: not crossing hour barriers</p> <p>S: crossing hour barriers (not including crossing am / pm and 24 hour clock)</p> <p>C: crossing hour barriers (including crossing am / pm and 24 hour clock)</p>
F	<p>Mental: Subtraction by counting on / finding the difference</p> <p>Main: Draw and complete shapes with reflective symmetry; draw the reflection of a shape in a mirror line along one side</p> <p>B2015</p>	<p>Mental: Revise subtraction by adding on e.g. 11-9 (count up 2 from 9) or 403 – 297 (add on 3 to get to 300, add on 100 to get to 400 and add on 3 to get to 403, so 106)</p> <p>Main: Model how to draw the other half of a shape, using a mirror to see the reflection first. Explain importance of using the squares as a guide so that drawings are accurate. Model how to draw the reflection of entire shapes across a mirror line. Explain importance of counting how many squares are between the shape and the mirror line in order to be accurate. Give each child a mirror to use in independent work</p>	<p>Examples to match success criteria:</p> <p>M: </p> <p>S: </p> <p>C: </p>	<p>In partners children compare answers and discuss any differences, <i>without changing answer so that I can see misunderstandings</i></p>	<p>M: complete regular shapes with reflective symmetry</p> <p>S: complete irregular shapes with reflective symmetry</p> <p>C: draw reflections of entire shapes across a given mirror line</p>