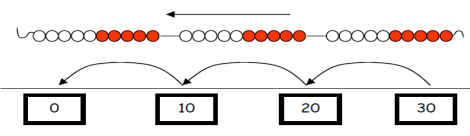
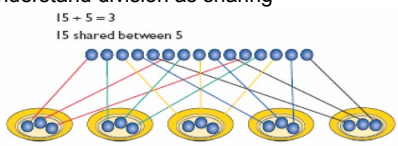
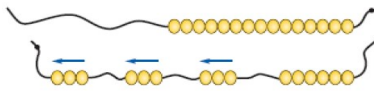
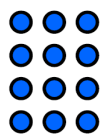

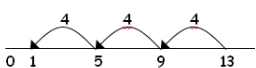
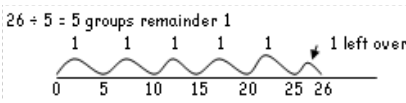
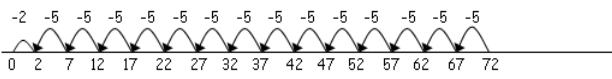
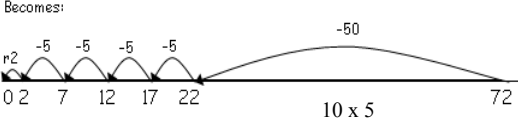
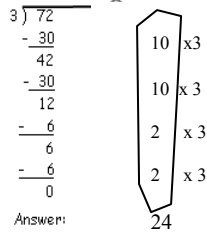
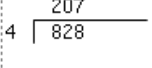
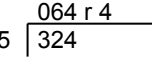
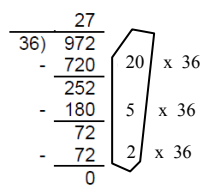
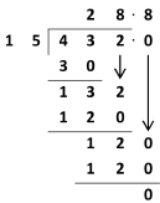


Resources	<p>R Read and understand</p> <p>I Important words and numbers</p> <p>C Choose a method</p> <p>H Have you checked your answer?</p> <p>Make regular links to Fractions.</p>	Progression
<p>Counters</p> <p>Multilink</p> <p>Number lines</p> <p>Bead strings</p> <p>Dienes</p> <p>Arrays</p> <p>Bar model</p> <p>Arrow cards</p>	<p>1. Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately</p> <p>2. Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language</p> <p>3. Can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions</p>	<p>2, 5 & 10 tables</p> <p>3, 4 & 8 tables</p> <p>2 digit ÷ 1 digit</p> <p>Tables up to 12 x 12</p> <p>÷ 10 & 100</p> <p>Multiples, factors, prime</p> <p>Up to 4 digit ÷ 1 digit</p> <p>Up to 4 digit ÷ 1 digit</p>
<p>Stage 1</p> <p>Counters</p> <p>Multilink</p> <p>Number lines</p> <p>Bead strings</p>	<ul style="list-style-type: none"> Count back in twos from 20, and tens and fives from 100. Share out concrete objects in twos, fives and tens. Share out items in play and problem solving. Know doubles and halves to 20. <p>Counting back in steps on a number line or bead string.</p>  <ul style="list-style-type: none"> Start to understand the terms 'grouping' and 'sharing'. 	<p>I've got 12 shells. How could I share them between 2 children?</p> <p>Copy and continue this pattern: 20, 18, 16.....</p>
<p>Stage 2</p> <p>Counters</p> <p>Multilink</p> <p>Number lines</p> <p>Bead strings</p> <p>Arrays</p>	<ul style="list-style-type: none"> Use multiplication facts to work out corresponding division facts for 2, 5, and 10s. Understand division as sharing  <p>AND</p> <ul style="list-style-type: none"> Understand division as grouping <p>$15 \div 3 = 5$</p>  <ul style="list-style-type: none"> Reinforce division as group using arrays. <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>12 divided into groups of 3 gives 4 groups</p> <p>$12 \div 3 = 4$</p> </div>  <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>12 divided into groups of 4 gives 3 groups</p> <p>$12 \div 4 = 3$</p> </div> </div>	<p>Sophie has 10 apples, Sophie wants to share half of the apples with her brother. How many do they each get?</p> <p>I have 15p. How many 5p sweets can I buy?</p> <p>Chocolate eggs are put in boxes of 2. How many boxes would I need for 6 eggs? How many boxes would I need for 9 eggs?</p> <p>How many 5cm pieces of string can I cut out of a piece of string 27cm long?</p> <p>I find a pile of 17 wheels. How many bikes can I make?</p>
<p>Stage 3</p> <p>Number lines</p> <p>Bead strings</p>	<ul style="list-style-type: none"> Use a numberline for repeated subtraction. <p>$25 \div 5 = 5$</p>  <ul style="list-style-type: none"> Children need to learn that you can solve division by counting up or counting down. 	<p>How many 3p lollies can you buy with 45p? Show me how you worked this out.</p> <p>What multiplication fact can you use to find the answer to $28 \div 4$?</p> <p>Find some division calculations that have the answer 6. How did you do this?</p>
<p>Stage 4</p> <p>Number lines</p> <p>Bead strings</p>	<ul style="list-style-type: none"> Include remainders <p>Count back</p> <p>$13 \div 4 = 3 \text{ r } 1$</p>  <p>OR</p> <p>Count on</p> <p>$26 \div 5 = 5 \text{ groups remainder } 1$</p> 	<p>36 children need to sit on benches. 5 children can sit on a bench. How many benches are needed?</p> <p>Harry saves 20p coins. He has saved £3.20. How many coins has he saved?</p> <p>What is the biggest remainder you can have when you divide a number by 3? How did you collect information to answer this question?</p>

<p>Stage 5</p> <p>Number lines Bead strings Dienes Arrays</p> <p>Short Division Chunking Method</p>	<ul style="list-style-type: none"> Use number lines for chunking. $TU \div U$ Start to make decisions about size of jump to make calculating more efficient. <p>$72 \div 5$</p>  <p>Becomes:</p>  <p>Then onto the vertical method:</p> <p>Short division $TU \div U$</p> <p>$72 \div 3$</p>  <p>Answer: 24</p> <ul style="list-style-type: none"> Understand and describe the effect of dividing a number by 10, 100 <table border="1"> <thead> <tr> <th>Th</th> <th>H</th> <th>T</th> <th>U</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>7</td> <td>0</td> <td>0</td> </tr> <tr> <td></td> <td></td> <td>2</td> <td>7</td> </tr> </tbody> </table> <table border="1"> <tr> <td> <p>$2700 \div 100$</p> <p>Each digit moves two columns to the right and zero is used as a place holder *</p> </td> </tr> </table> <ul style="list-style-type: none"> Derive quickly all division facts corresponding to 1-12 times tables 	Th	H	T	U	2	7	0	0			2	7	<p>$2700 \div 100$</p> <p>Each digit moves two columns to the right and zero is used as a place holder *</p>	<p>A piece of rope 204cm long is cut into 4 equal pieces. Which of these gives the length of each piece in centimetres?</p> <p>A $204 \div 4$ B 204×4 C $204 - 4$ D $204 + 4$</p> <p>Harry worked out the correct answer to $70 \div 5$. His answer was 14. Show how he could have worked out his answer.</p> <p>Make up some division questions that have a remainder of 3. How did you do it?</p> <p>$1/3$ of 75 is 25. Write this as a division statement.</p> <p>If you know $42 \div 6 = 7$, what else do you know?</p> <p>Divide 4.2 by 6.</p> <p>Would you use a mental, written or calculator method to solve each of these? Explain your choice. $23.5 \times = 176.25$</p> <p>How many cartons of juice costing 30p each can I buy with £2?</p> <p>If $7 \times 8 = 56$ what is 0.07×8? Give some other decimal facts that are linked to this multiplication fact. What number multiplied by 8 gives 4.8?</p> <p><i>Reinforce that moving to the right means the columns have less value.</i></p>
Th	H	T	U												
2	7	0	0												
		2	7												
<p>$2700 \div 100$</p> <p>Each digit moves two columns to the right and zero is used as a place holder *</p>															
<p>Stage 6</p> <p>Short Division</p> <p>Long Division Chunking Method</p>	<ul style="list-style-type: none"> Short Division Method  <ul style="list-style-type: none"> Including remainders  <ul style="list-style-type: none"> Use Chunking Method to solve $HTU \div TU$ <div style="border: 1px solid black; padding: 5px;"> <p>Chunking uses repeated subtraction. Taking away larger 'chunks' of the</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>e.g. $972 \div 36 = 27$</p>  </div> <ul style="list-style-type: none"> Be able to find remainders in whole number form, fraction form and decimal form. Know and use tests of divisibility Use known facts to solve similar division problems 	<p>How do you know that 234 is divisible by 3?</p> <p>Work out $261 \div 3$. Explain each step.</p> <p>Find a number between 350 and 360 that gives a remainder of 5 when divided by 8.</p> <p>A number that ends in the digits 52 is always divisible by 4. Give me an example where the statement is true. Can you find an example when it is false? Why not?</p> <p>Find different ways of completing this calculation: $240 \div ? = ?$</p> <p>John says: 'I think three eighths of a day is 10 hours.' Is he right?</p> <p>Work out which is larger: $3/5$ of 480kg or $7/8$ of 320kg.</p> <p>Explain how you can use the fact $7 \times 8 = 56$ to find the answer to $5.6 \div 0.8$.</p> <p>How many 250 ml cups of tea can you pour from a tea urn that holds 8.5 litres?</p>													
<p>Stage 7</p> <p>Long Division Method</p>	<ul style="list-style-type: none"> Long division <p>$432 \div 15$ becomes</p>  <p>Answer: 28.8</p>	<p>A packet contains 1.5kg of rabbit food. Rennie feeds her rabbit 30g of food each day. For how many days does the packet of food last?</p> <p>Lynne wants to raise £200. She is sponsored for £6.50 for each lap. What is the least number of laps she must do?</p>													