

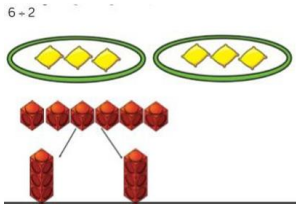
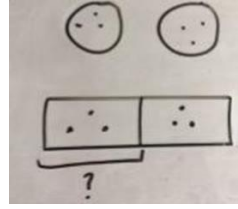

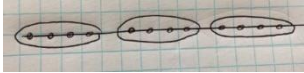
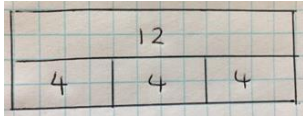
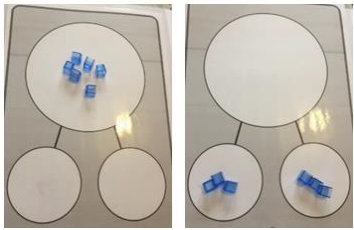
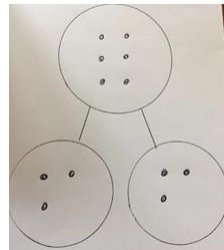
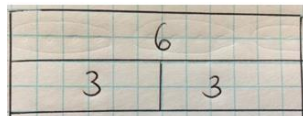
St Nicholas C.E Primary School



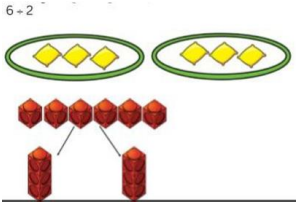
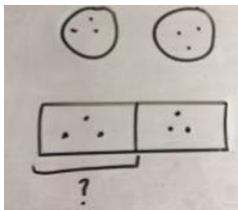


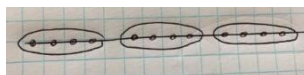
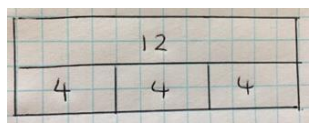
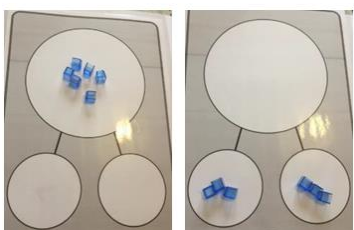
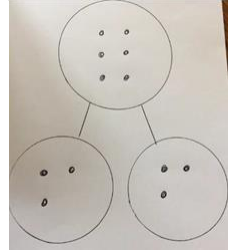
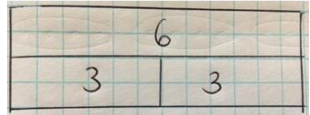
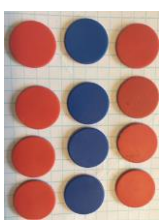

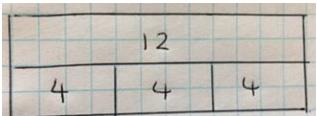

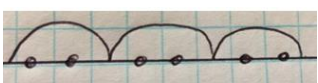
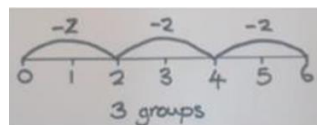
Calculation Progression Policy



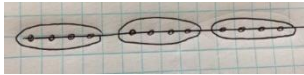
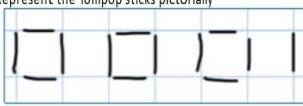
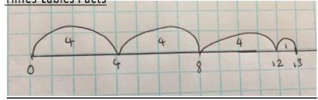
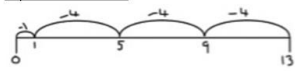
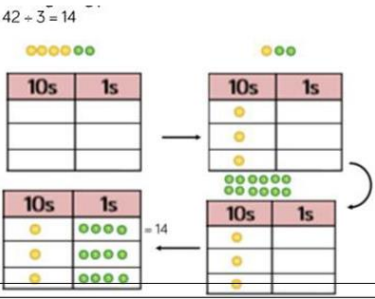
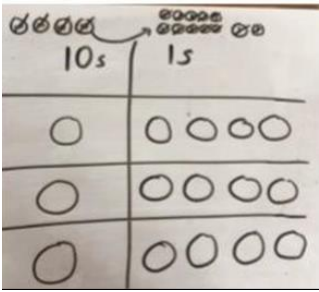
Division

ST NICHOLAS C.E. PRIMARY SCHOOL
DIVISION → YEAR ONE

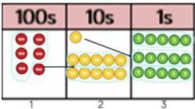
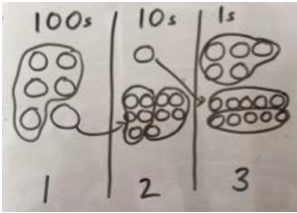
Objective	Concrete	Pictorial	Abstract		
Sharing	<p>Using a range of objects</p> 	<p>Children to represent the practical resources</p> 	<p>Use a bar model</p> <p>$6 \div 2 = 3$</p> <table border="1" data-bbox="1085 362 1342 404"> <tr> <td>3</td> <td>3</td> </tr> </table> <p>Children should also be encouraged to use their 2 times tables facts.</p>	3	3
3	3				
Grouping	<p>Using a beadstring</p> 	<p>Represent this pictorially alongside a number line</p> 	<p>Use a bar model</p> 		
Halving even numbers	<p>Using cubes</p> 	<p>Representing pictorially</p> 	<p>Using a bar model</p> 		
Vocabulary		Stem Sentences			
Sharing halving divide grouping half		<p>The whole is ____.</p> <p>The whole is shared into ____ equal parts.</p> <p>Each part is worth ____.</p>			

ST NICHOLAS C.E. PRIMARY SCHOOL
DIVISION → YEAR TWO

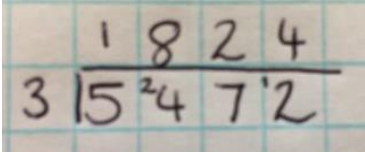
Objective	Concrete	Pictorial	Abstract
Sharing	Using a range of objects 	Children to represent the practical resources 	Use a bar model $6 \div 2 = 3$  Children should also be encouraged to use their 2 times tables facts.
Grouping	Using a beadstring 	Represent this pictorially alongside a number line 	Use a bar model 
Halving even numbers	Using cubes 	Representing pictorially 	Using a bar model 
Arrays	Using cubes/counters 	Represent pictorially 	Using a bar model 
Repeated subtraction	Use concrete resources 	Represent pictorially 	Abstract number line to represent the equal groups that have been subtracted 
Vocabulary		Stem Sentences	
Sharing halving divide grouping half arrays repeated subtraction		The whole is ____. The whole is shared into ____ equal parts. Each part is worth _____.	

Objective	Concrete	Pictorial	Abstract
<p>TO ÷) with remainders</p>	<p>Using resources</p>  <p>$13 \div 4$</p> <p>Use of lollipop sticks to form wholes- squares are made because we are dividing by 4.</p>  <p>There are 3 whole squares, with 1 left over.</p>	<p>Represent this pictorially alongside a number line</p>  <p>Represent the lollipop sticks pictorially</p> 	<p>$13 \div 4 = 3$ remainder 1</p> <p>Children should be encouraged to use their times table facts; they could also represent repeated addition on a number line.</p> <p>'3 groups of 4, with 1 left over'</p> <p>Times tables Facts</p>  <p>Repeated Subtraction</p> 
<p>Sharing</p>	<p>Using counters</p> <p>$42 \div 3 = 14$</p> 	<p>Represented pictorially</p> 	<p>Calculations to show steps</p> <p>$42 \div 3$</p> <p>$42 = 30 + 12$</p> <p>$30 \div 3 = 10$</p> <p>$12 \div 3 = 4$</p> <p>$10 + 4 = 14$</p>
<p>Vocabulary</p>		<p>Stem Sentences</p>	
<p>repeated addition grouping equal groups of double multiply times lots of array partitioning grid method product remainders</p>		<p>The whole is ____.</p> <p>The whole is shared into ____ equal parts.</p> <p>There are ____ equal parts of ____ and ____ remainders</p>	

ST NICHOLAS C.E. PRIMARY SCHOOL
DIVISION → YEAR FOUR

Objective	Concrete	Pictorial	Abstract
Short division	<p>With place value</p> <p>$C(615 \div 5)$</p>  <ol style="list-style-type: none"> 1. Make 615 with place value counters. 2. How many groups of 5 hundreds can you make with 6 hundred counters? 3. Exchange 1 hundred for 10 tens. 4. How many groups of 5 tens can you make with 11 ten counters? 5. Exchange 1 ten for 10 ones. 6. How many groups of 5 ones can you make with 15 ones? 	<p>Represent the counters pictorially</p> 	<p>Short division scaffold to calculate</p> $\begin{array}{r} 123 \\ 5 \overline{)615} \\ \underline{5} \\ 11 \\ \underline{10} \\ 15 \\ \underline{15} \\ 0 \end{array}$
Vocabulary		Stem Sentences	
<p>repeated addition grouping equal groups of double multiply times lots of array partitioning grid method product remainders short division bus shelter</p>		<p>The whole is ____.</p> <p>The whole is shared into ____ equal parts.</p> <p>There are ____ equal parts of ____ and ____ remainders</p>	

ST NICHOLAS C.E. PRIMARY SCHOOL
DIVISION YEAR FIVE

Objective	Concrete	Pictorial	Abstract
Short division $\text{ThHTO} \div \text{O}$			Formal method 
Vocabulary		Stem Sentences	
repeated addition grouping equal groups of double multiply times lots of array partitioning grid method product remainders short division bus shelter quotient		The whole is ____. The whole is shared into ____ equal parts. There are ____ equal parts of ____ and ____ remainders The quotient of ____ and ____ is ____ (the quotient of 24 and 6 is 4)	

ST NICHOLAS C.E. PRIMARY SCHOOL
DIVISION YEAR SIX

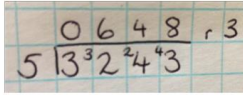
Objective	Concrete	Pictorial	Abstract
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Short division
Interpret remainders as whole numbers, fractions or decimals

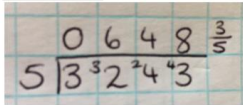
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Formal method

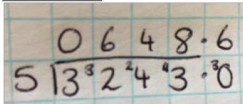
Whole Number Remainder



Fraction Remainder



Decimal Remainder



Long division
Interpret remainders as whole numbers, fractions or decimals

2544 ÷ 12

1000s	100s	10s	1s
2	5	4	4

We can't group 2 thousands into groups of 12 so will exchange them.

1000s	100s	10s	1s
	14	4	4

We can group 24 hundreds into groups of 12 which leaves with 1 hundred.

1000s	100s	10s	1s
	1	14	4

After exchanging the hundred, we have 14 tens. We can group 12 tens into a group of 12, which leaves 2 tens.

1000s	100s	10s	1s
		2	14

After exchanging the 2 tens, we have 24 ones. We can group 24 ones into 2 group of 12, which leaves no remainder.

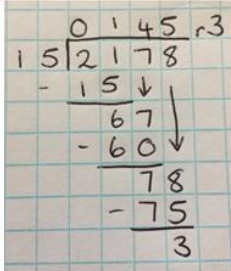
1000s	100s	10s	1s
			24

Handwritten long division:

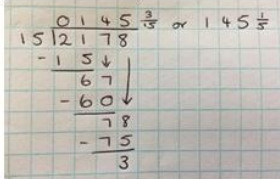
$$\begin{array}{r} 02 \\ 12 \overline{) 2544} \\ \underline{24} \\ 14 \\ \underline{12} \\ 24 \\ \underline{24} \\ 0 \end{array}$$

Formal written methods

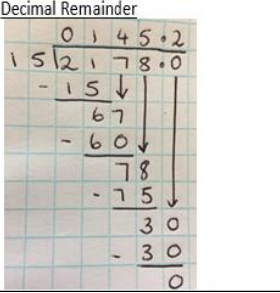
Whole Number Remainder



Fraction Remainder



Decimal Remainder



Vocabulary

Stem Sentences

repeated addition grouping equal groups of double multiply times lots of array partitioning grid method product remainders short division bus shelter quotient **long division**

The whole is ____.

The whole is shared into ____ equal parts.

There are ____ equal parts of ____ and ____ remainders

The quotient of ____ and ____ is ____ (the quotient of 24 and 6 is 4)