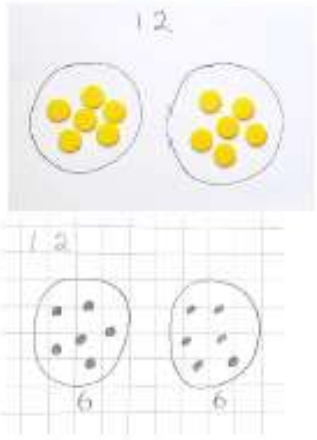
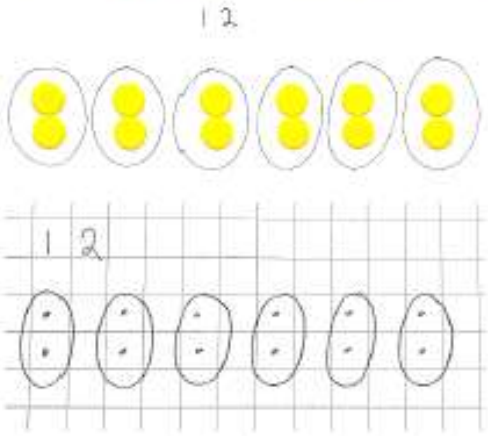
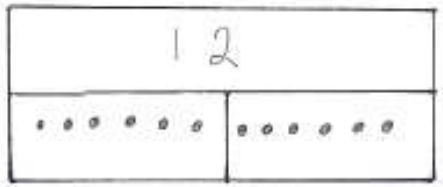
Division

Division – Year 1

Selected National Curriculum Programme of Study Statements	The Big Ideas (NCETM)
Pupils should be taught to: • count in multiples of twos, fives and tens. • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	Counting in steps of equal sizes is based on the big idea of 'unitising'; treating a group of, say, five objects as one unit of five. Working with arrays helps pupils to become aware of the commutative property of multiplication, that 2 × 5 is equivalent to 5 × 2

Please note that manipulatives and visual representations may be used alongside more formal recording as appropriate. It is important for pupils to explore structure and understand a concept before developing a more procedural approach, at which point all representations may be used alongside each other.

Stage 1	Stage 2	End of Year Expectation
Making equal groups – sharing. Concrete objects and pictorial representations, e.g: *I have 12 sweets and share them between myself and a friend (2 people), how many will we each have?*  "If I share **12** equally between **2** groups, there will be **6** in each group."	**Making equal groups – grouping.** Concrete objects and pictorial representations, e.g: *I have 12 cookies to put in bags.* *If I put 2 in each bag how many bags will I need?*  "There are **12** altogether. There are **6** equal groups of **2**."	**Making equal groups (including finding half of a quantity).** Bar models, e.g: *I had 12 grapes and I ate half. How many are left?*  "There are **12** altogether. They are shared into **2** equal groups. There are **6** in each group. Each group is half of the whole. I know that there are 6 grapes left."

Linked to Hampshire Scheme of Learning Units 1.3, 1.6 and 1.8

Division

Division – Year 2

Selected National Curriculum Programme of Study Statements	The Big Idea (NCETM)
Pupils should be taught to: • count in steps of two, three, and five from 0, and in tens from any number, forward and backward. • recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. • solve problems involving division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	It is important that pupils both commit multiplication facts to memory and also develop an understanding of conceptual relationships. This will aid them in using known facts to work out unknown facts and in solving problems. Pupils should look for and recognise patterns within tables and connections between them (e.g. 5× is half of 10×). Pupils should recognise multiplication and division as inverse operations and use this knowledge to solve problems. They should also recognise division as both grouping and sharing. The recognition of pattern in multiplication helps pupils commit facts to memory, for example doubling twice is the same as multiplying by four, or halving a multiple of ten gives you the related multiple of five

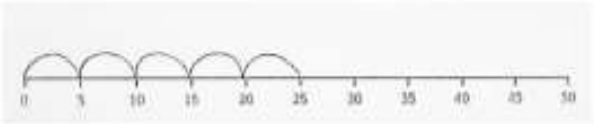
Please note that manipulatives and visual representations may be used alongside more formal recording as appropriate. It is important for pupils to explore structure and understand a concept before developing a more procedural approach, at which point all representations may be used alongside each other.

Stage 1

Count on in steps of two, three and five from 0.

Skip counting on a structured number line, e.g:

$25 \div 5 = \square$



$25 \div 5 = 6$

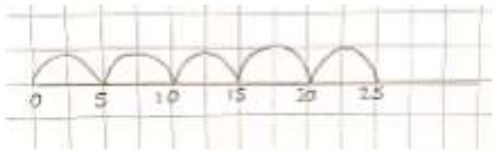
Bar model representation:

Stage 2

Count on in steps of two, three and five from 0.

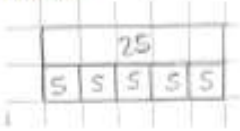
Skip counting on an unstructured number line, e.g:

$25 \div 5 = \square$



$25 \div 5 = 6$

Bar model representation:



End of Year Expectation

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.

Number line or bar model to 'prove it'

"If I know that 4 x 10 = 40, then I know 40 ÷ 4 = 10".