

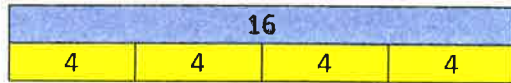
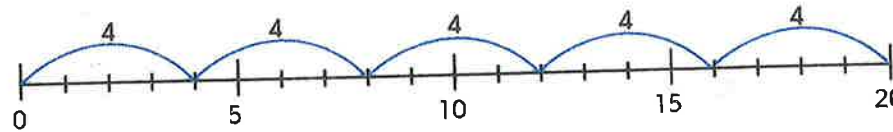
Y3

National Curriculum

Recall and use multiplication and division facts for the 3, 4 and 8 (2,5,10 Y2) multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods to solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators

Multiplication

Know by heart all the multiplication and division facts derived from the 2x, 3x, 4x, 5x, 8x and 10x tables



Multiply and divide whole numbers by 10 and 100 (Divide to give whole number answers i.e. not $743 \div 10$) $370 \div 10 = 37$ etc.

1000s	100s	10s	1s
	3	7	0
		3	7

Recognise that multiplication is commutative. (E.g. $3 \times 8 = 8 \times 3$)

Recognise that division is not commutative. (E.g. $15 \div 5 \neq 5 \div 15$)

Use place value and number facts in mental multiplication and division. (E.g. 30×5 is 15×10 & $84 \div 4$ is half of 42)

Double numbers up to 50

Halve even numbers to 100, halve odd numbers to 20.



Find unit fractions of quantities and begin to find non-unit fractions of quantities

Partition teen numbers & 2-digit numbers to multiply by a single-digit number.

E.g. $3 \times 14 =$

$3 \times 10 = 30$

$3 \times 4 = 12$

add to find $3 \times 14 = 42$

Written method - multiplication

Use partitioning (grid multiplication) to multiply 2-digit and 3-digit numbers by 'friendly' single digit numbers.

X	20	4	=
3	60	12	72

Division

Models and images

Concrete apparatus: counting equipment, numicon, multilink, etc. Fingers Bead string/bead bar/beaded line number line 100 grid Bar model Arrays

Maths Talk

Clever counting (2s, 5s 10s, 3s halves, quarters) Doubling Halving Set/lots of/array Division 'undoes' multiplication 'Inverse operations'

Perform divisions within the tables including those with remainders, e.g. $38 \div 5 = 7 \text{ r}3$ (write remainders as whole numbers).

Divide larger numbers mentally by subtracting the tenth multiple, including those with remainders. (Efficient chunking, answers up to teen numbers)

E.g. $57 \div 3 =$

We know $10 \times 3 = 30$

$57 - 30 = 27$

We know $9 \times 3 = 27$

So $57 \div 3 = 19$