



Year 2 multiplication and division

Prior Knowledge (from Y1)

- 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

multiplication and division		Working Towards	Within	Expected	Above
$\times \div$	Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers				
	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs				
	Show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot				
	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts				
Highlights: _____					



Glossary

vocabulary	word class	definition
multiplication	noun	the process of combining matrices, vectors, or other quantities under specific rules to obtain their product
division	noun	the process of dividing a matrix, vector, or other quantity by another under specific rules to obtain a quotient
calculating	verb	determine (the amount or number of something) mathematically
arrays	noun	an arrangement of quantities or symbols in rows and columns; a matrix

multiply



times
times by

divided by
shared by



equally grouped
equally shared

equals



makes



$$3 \times 3 = 9$$

arrays



$$3 \times 2 = 6 \text{ or } 2 \times 3 = 6$$



$$4 \times 2 = 8 \text{ or } 2 \times 4 = 8$$

Even Numbers

0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20,
22, 24, 26, 28, 30...

Odd Numbers

1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21,
23, 25, 27...

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Recognise Equal Groups



5 equal groups with 3 in each group



2 equal groups with 4 in each group

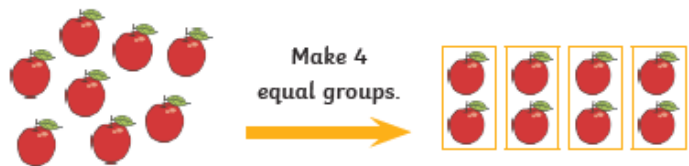


4 equal groups of 10



6 equal amounts of 5 pence

Make Equal Groups



Add Equal Groups



$2 + 2 + 2 + 2 = 8$ apples

The Multiplication Symbol



$$4 \times 2 = 8$$

$$2 \times 4 = 8$$

8 apples



$$2 \times 5 = 10$$

$$5 \times 2 = 10$$

10 cookies



4 rows of 10 = 40
10 columns of 4 = 40



Future Learning

Year 3

- Recall and use multiplication and division facts for the 3, 4 and 8 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
- 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

Year 6

- Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context