

# Maths - Year 5

## Calculating 4: Developing fluency with multiplying and dividing

Key Vocabulary		Mathematical Skills
Product	The result of multiplying two or more numbers together.	<ul style="list-style-type: none"> <li>- Explain that the commutative property of multiplying reduces the number of facts they have to learn.</li> <li>- Recognise patterns in multiplication tables and use these to make general rules for tables they are learning.</li> <li>- Develop fluency with a growing number of multiplying facts.</li> <li>- Have strategies to work out multiplication facts they cannot yet recall.</li> <li>- Recognise when to use their knowledge of times tables facts, factors and multiples to solve problems.</li> <li>- Use knowledge of multiples and related dividing facts to identify common factors.</li> <li>- Use knowledge of factors to work out missing numbers in multiplying calculations.</li> </ul>
Divisor	The number you are dividing by.	
Quotient	The result of dividing one number by another.	
Commutative property	When adding or multiplying 2 numbers, the answer will be the same no matter which order the numbers are in .	
Multiple	The product of two whole numbers.	
Factor	A number that divides into another number exactly.	

### Mathematical Methods

- Revising multiplication facts.

x	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

- Using multiplying facts e.g. exploring factors of 12.



- Solving problems with multiplying and dividing facts e.g. exploring factor relationships.

- Using factors to solve empty box balancing problems involving multiplying e.g.   x   x 5 = 42 x 5.

- Revising the short written method of multiplying and dividing.

	2	2	3	
x			4	
	8	9	2	

	1	2	3	rl
4	)	4	9	3

- Revising finding fractions of amounts using multiplying and dividing facts e.g. Finding  $\frac{1}{4}$  and  $\frac{1}{9}$  of 36.



