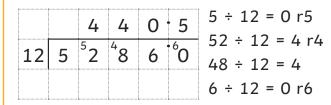
Four Operations

Knowledge Organiser

Short Division

Start from the left.



Common Factors

Factors of 48

1	2	3	4	6	8	12	16	24	48	
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Factors of 30

1	2	3	5	6	10	15	30
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Common factors: 1, 2, 3, 6

Common Multiples

Multiples of 3



Multiples of 7

7	14	21	28	35	42
1			l	1	

Common multiples: 21, 42...

Long Division

		1	2	0	r	3
14	1	6	8	3		
	1	4	0	0		
		2	8	3		
		2	8	0		
				3		

Primes

A prime number has only 1 and itself as factors: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 33, 37, 41, 43

A composite number has factors other than 1 and itself.

Squares and Cubes

Square numbers result from a number being multiplied by itself (e.g. $5 \times 5 = 25$):

1, 4, 9, 16, 25, 36, 49, 64, 81, 100

Cube numbers result from a number being multiplied by itself twice $(2 \times 2 \times 2 = 8)$: 1, 8, 27, 64, 125

Mental Calculations and Estimation

Order of calculations:

$$50 \times 34 \times 2 = 50 \times 2 \times 34 = 100 \times 34 = 3400$$

Money: £8.99 + £3.49 = £12.48

Use £9 + £3.50 = £12.50 and subtract 2p Estimate on a number line

-8 0 8 16 20 24

Subdivide line to estimate: 17

Reason from Known Facts

$$16 \times 9 = 144$$
 so $1.6 \times 9 = 14.4$

$$4352 \div 17 = 256$$

