



# KNOWLEDGE ORGANISER: Maths- Multiplication and Division Year 4 Block 2

## Key Vocabulary

Multiply

Groups of

Lots of

Times

Divide

Share

Remainder

Factor

Multiple

Product

Mental Calculations for Solving Problems

$(2 \times 3) \times 4 = 24$

$16 \times 3$

$10 \times 3$        $6 \times 3$

$30 + 18 = 48$

Factor pairs and Commutativity

20

The factors of 20 are 1, 2, 4, 5, 10 and 20.  
The factor pairs are:

1 and 20    2 and 10    4 and 5

$5 \times 4 = 20$        $4 \times 5 = 20$

Short Division with Exact Answers

$576 \div 4 = 144$

Hundreds	Tens	Ones
100	10 10 10 10	1 1 1 1
100	10 10 10 10	1 1 1 1
100	10 10 10 10	1 1 1 1
100	10 10 10 10	1 1 1 1

There are 69 tennis balls packed in tubes of 3.

576

$400 \div 4 = 100$        $160 \div 4 = 40$        $16 \div 4 = 4$

$69 \div 3 = 23$

23

3 | 69

23 23 23

Multiply Using Informal and Formal Methods

$10 \times 3 = 30$      $10 \times 3 = 30$      $4 \times 3 = 12$      $24 \times 3 = 60 + 12 = 72$

Tens	Ones
10 10 10	1 1 1 1
10 10 10	1 1 1 1
10 10 10	1 1 1 1
10 10 10	1 1 1 1

24

20      4

$\downarrow \times 3$        $\downarrow \times 3$

60      12

Th	H	T	O
	5	4	3
$\times$			4
2	1	7	2
	1	1	

Correspondence Problems

Hat	Scarf	Gloves
2	4	3

Number of different combinations is:

$2 \times 4 \times 3 = 24$