Knowledge Organiser - Maths

Written Multiplication - No Regrouping
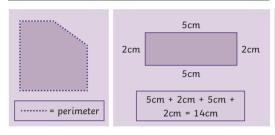
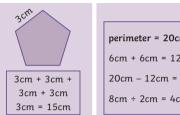| Tens	Ones

$23 \times 3 = 69$

	T	O
	2	3
×		3
	6	9

Written Multiplication - With Regrouping

Tens	Ones

$24 \times 4 = 96$

	T	O
	2	4
×		4
	9	6
	1	

Written Division - No Regrouping

Tens	Ones

	2	1
4	8	4

$84 \div 4$
$80 \div 4$ $4 \div 4$

Written Division - With Regrouping

Tens	Ones

	1	5
3	4	^{1}5

$45 \div 3$
$30 \div 3$ $15 \div 3$

Perimeter

······ = perimeter

5cm · 2cm · 2cm · 5cm
5cm + 2cm + 5cm + 2cm = 14cm

3cm
3cm + 3cm + 3cm + 3cm + 3cm = 15cm

perimeter = 20cm
6cm + 6cm = 12cm
20cm − 12cm = 8cm
8cm ÷ 2cm = 4cm
?   6cm

Equivalent Length

100 centimetres = 1 metre

10 millimetres = 1 centimetre

Millimetres (mm) ÷10 / ×10 Centimetres (cm) ÷100 / ×100 Metres (m)

317cm	
300cm	17cm
3m	17cm
3m 17cm	

Measuring Length

5mm   5cm

10mm = 1cm

4cm 6mm

38mm

Comparing Lengths

6mm < 6cm
6cm = 60mm
6mm is shorter than 6cm

320cm > 2m 6cm
320cm > 200cm + 60cm
320cm is longer than 2m 60cm

98mm < 12cm 3mm
98mm < 120mm + 3mm
98mm is shorter than 12cm 3mm

Adding and Subtracting Lengths

14cm + 19cm = 33cm
8cm 2mm + 16mm = 98mm or 9cm 8mm

?	
8cm 2mm	16mm
82mm	16mm

6m − 2m 28cm
6m − 2m = 4m
4m − 28cm = 3m 72cm

6m	
2m 28cm	?

Key Vocabulary

metre (m)	
centimetre (cm)	
millimetre (mm)	
height	the distance from top to bottom
length	distance from one end to another
width	the distance from side to side
perimeter	the total distance around the outside of a shape