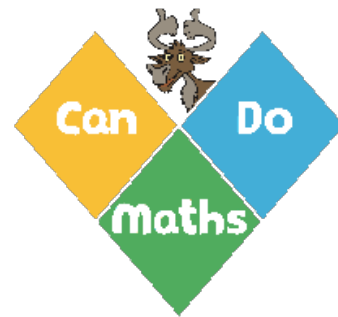
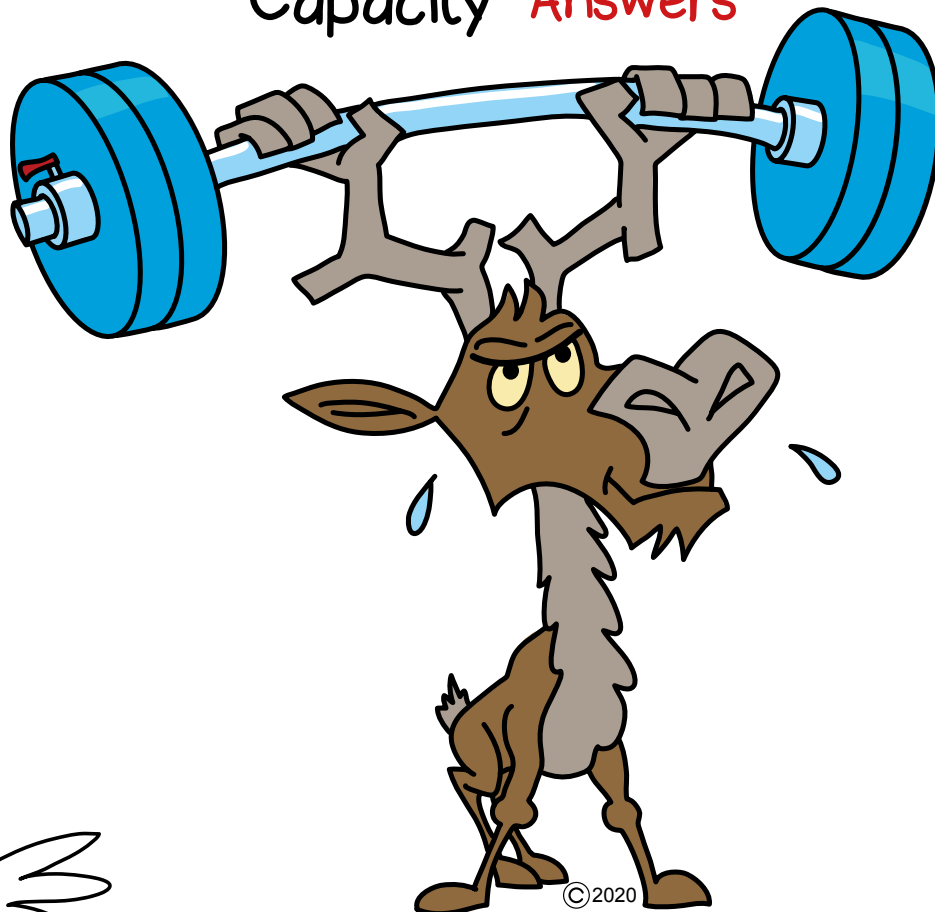




Colin and Coco's Deliberate Practice

Year 5 Unit 10

Measurement: Length, Mass and
Capacity **Answers**





Contents

This pack of deliberate practice is designed to be used flexibly to secure the manageable steps of this unit.

The table below indicates which activities are linked to which manageable steps.

	Do It	Challenge It	Play It
Convert kilometres to metres using decimal notation	1		
Convert metres to kilometres using decimal notation		1	
Convert metres to centimetres using decimal notation			1
Convert centimetres to metres using decimal notation			1
Convert between centimetres and millimetres using decimal notation		2	
Calculate the perimeter of composite rectilinear shapes where all measurements are given including mixed units	2		
Calculate the perimeter of composite rectilinear shapes where some measurements need to be calculated			2
Convert between kilograms and grams using decimal notation	3		
Convert between litres and millilitres using decimal notation		3	
Know approximate equivalences between metric and imperial units including pounds and pints			3
Know approximate equivalences between inches and centimetres			3



Convert to metres:

Do It 1

$$1.5 \text{ km} = 1500 \text{ m}$$

$$1.25 \text{ km} = 1250 \text{ m}$$

$$1.523 \text{ km} = 1523 \text{ m}$$

$$4.5 \text{ km} = 4500 \text{ m}$$

$$4.35 \text{ km} = 4350 \text{ m}$$

$$3.401 \text{ km} = 3401 \text{ m}$$

$$5.4 \text{ km} = 5400 \text{ m}$$

$$5.14 \text{ km} = 5140 \text{ m}$$

$$5.023 \text{ km} = 5023 \text{ m}$$

$$0.6 \text{ km} = 600 \text{ m}$$

$$0.62 \text{ km} = 620 \text{ m}$$

$$0.206 \text{ km} = 206 \text{ m}$$

Challenge It 1

Find the missing digits.
Complete each statements in several different ways.

$$\boxed{2} \boxed{4} \boxed{0} 0 \text{ m} = \boxed{2} . \boxed{4} \text{ km}$$

$$\boxed{6} \boxed{3} 5 \text{ m} = \boxed{0} . \boxed{6} 3 \boxed{5} \text{ km}$$

$$\boxed{1} 7 \boxed{8} \boxed{9} \text{ m} = 1 . \boxed{7} \boxed{8} \boxed{9} \text{ km}$$

Solve all the statements together using the digits
0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 at least once each.



Which is Longest? Game

Play It 1

You need:
Card set

To play:

All the cards are shuffled and placed face down.

Players take turns to turn over one card each.

The card that has the greatest value wins.

The player wins the pair of cards.

To win:

The winner is the player with the highest number of cards.

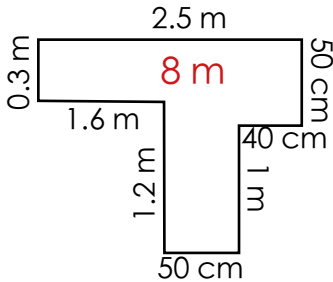
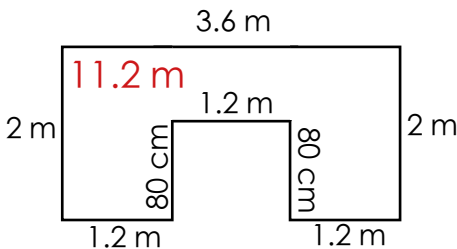
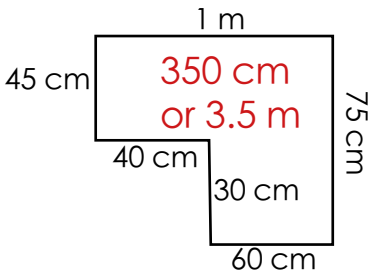
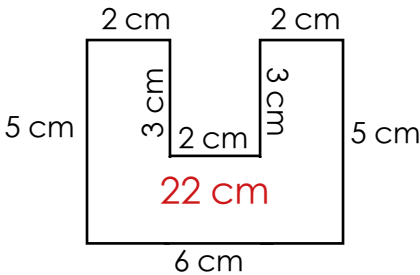
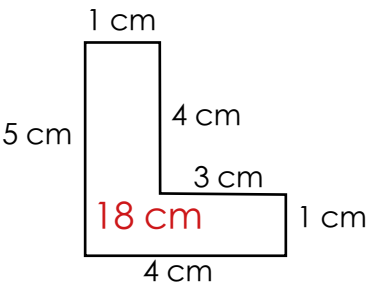
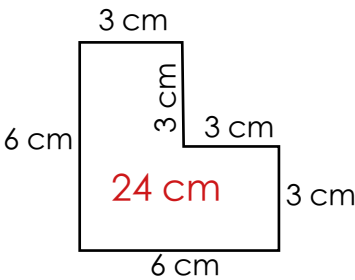
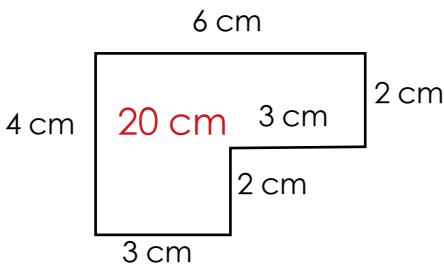
70 cm	0.8 m	55 cm	0.9 m
40 cm	0.3 m	105 cm	2 m
4 cm	0.03 m	19 cm	0.03 m
110 cm	1.9 m	17 cm	1.4 m
100 cm	0.65 m	300 cm	0.45 m
170 cm	1.07 m	160 cm	1. m



Do It 2

Calculate the perimeter of the shapes.

All diagram not to scale



Challenge It 2

Match the lengths.
Find the missing buddies.

16 mm		16 cm
106 mm		60 cm
600 mm		0.6 cm
6 mm		6 cm
610 mm		10.6 cm
160 mm		60.1 cm
601 mm		6.1 mm
60 mm		1.6 cm
61 mm		61 cm



Perimeter Game

Play It 2

You need:

2 Dice 0 - 9

Shape cards

To play:

Player 1 picks a shape card.

Player 2 rolls the two 0 - 9 dice.

Player 2 uses the two numbers to create a 2-digit number.

This is the perimeter of the shape.

Player 1 works out the lengths of each side of the shape to make the perimeter.

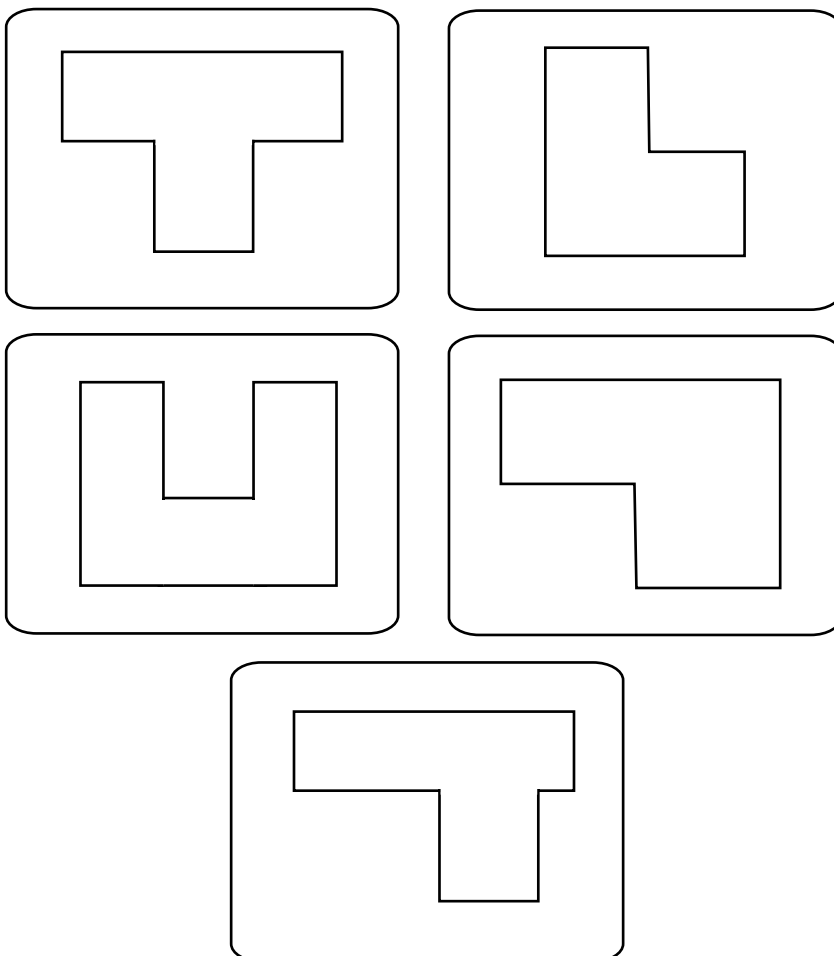
Player 2 checks the dimensions. If they are correct, player 1 scores 1 point.

Player 2 now picks a shape card and player 1 rolls the two 0 - 9 dice.

To win:

The winner is the first player to 10 points.

Shape cards





Do It 3

Convert to grams:

$$2.5 \text{ kg} = \boxed{2500} \text{ g}$$

$$1.25 \text{ kg} = \boxed{1250} \text{ g}$$

$$2.613 \text{ kg} = \boxed{2613} \text{ g}$$

$$6.5 \text{ kg} = \boxed{6500} \text{ g}$$

$$4.35 \text{ kg} = \boxed{4350} \text{ g}$$

$$4.301 \text{ kg} = \boxed{4301} \text{ g}$$

$$9.4 \text{ kg} = \boxed{9400} \text{ g}$$

$$5.14 \text{ kg} = \boxed{5140} \text{ g}$$

$$7.032 \text{ kg} = \boxed{7032} \text{ g}$$

$$0.3 \text{ kg} = \boxed{300} \text{ g}$$

$$0.62 \text{ kg} = \boxed{620} \text{ g}$$

$$0.809 \text{ kg} = \boxed{809} \text{ g}$$

Find the missing digits.
Complete each statements in several
different ways.

Challenge It 3

$$\boxed{3} \boxed{6} \boxed{8} 0 \text{ ml} = \boxed{3} . \boxed{6} \boxed{8} \text{ litres}$$

$$\boxed{2} \boxed{4} \text{ ml} = 0 . \boxed{0} \boxed{2} \boxed{4} \text{ litres}$$

$$\boxed{1} 5 \boxed{7} \boxed{9} \text{ ml} = 1 . \boxed{5} \boxed{7} \boxed{9} \text{ litres}$$

Solve all the statements together using the digits
0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 at least once each.



Metric Imperial Game

Play It 3

You need:
Measures Cards

To play:

The cards are mixed up and placed face down.

Player 1 turns over one card and then turns over another card.

If the cards are approximate metric and imperial equivalents the player keeps the pair. If the cards are not equivalent, the cards are turned back face down. Player 2 turns over two cards to try and find a matching pair.

To win:

The winner is the player with the most pairs.

1 kg

2
pounds

1
litre

2
pints

2.5 cm

1
inch

10 kg

20
pounds

2 kg

4
pounds

5 cm

2
inches

0.5
litre

1
pint

0.5 kg

1
pound

5
litres

10
pints

10 cm

4
inches

5 kg

10
pounds

4
litres

8
pints