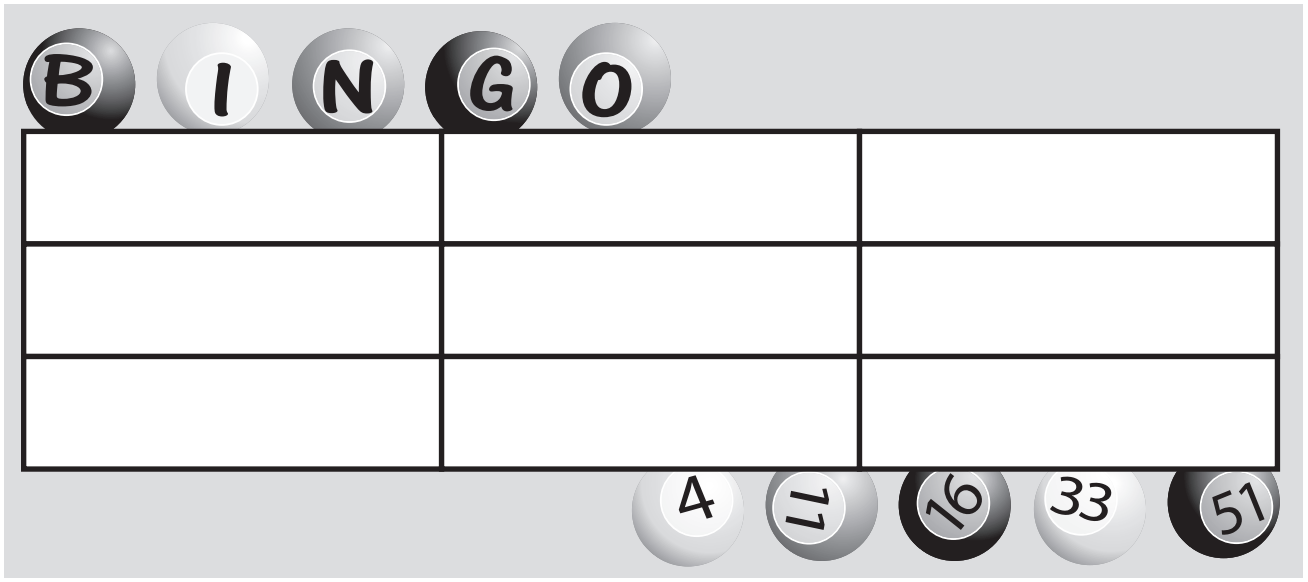
Foundation Bingo: Units of measure

4

Metre	Centimetre	Kilometre	Litre	Millilitre
Inch	Foot	Yard	Gram	Kilogram
Mile	Pound	Ounce	Pint	Millimetre



Metre	Centimetre	Kilometre	Litre	Millilitre
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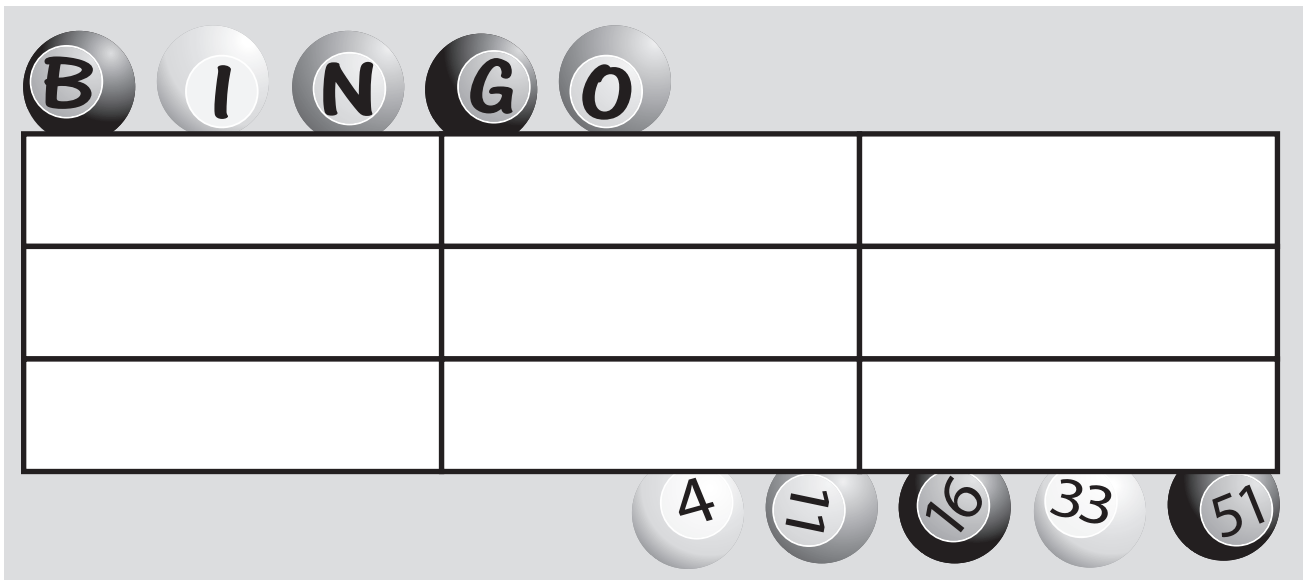


Teacher questions and answers

There are 100 of these in a metre.
Centimetre

There are 12 inches in one of these.
Foot

There are 1000 of these in a kilogram.
Gram

Two and a half centimetres are equivalent to this imperial unit.
Inch

2.2 pounds is about the same as this metric measure.
Kilogram

Five miles is approximately the same as eight of this metric measure.
Kilometre

One gallon is approximately equivalent to 4.5 of this metric measure.
Litre

There are 1000 millimetres in one of these.
Metre

This imperial unit is used to measure large distances.
Mile

There are 1000 of these in a litre.
Millilitre

There are 10 of these in a centimetre.
Millimetre

There are 16 of these in a pound.
Ounce

Eight of these make a gallon.
Pint

There are 14 of these in a stone.
Pound

This imperial measure is about the same as 1 metre.
Yard

Foundation Dominoes: Speed, distance and time

4

A	Q
37.5 miles	An aeroplane does a journey of 800 miles in 4 hours. What is the average speed of the aeroplane?
48 mph	An aeroplane flies at 940 mph for 2½ hours. How far does it fly?
350 miles	A boy walks at a speed of 2.5 mph. How far does he walk in 30 minutes?
3.5 hours	A man cycled a distance of 12 miles in 20 minutes. What speed was he travelling at?
8 mph	A tram travels a distance of 6 miles at a speed of 18 mph. How long does it take?
40 mph	A man walked for 4 hours and travelled 20 miles. What speed was he travelling at?

Foundation Dominoes: Speed, distance and time

A	Q
36 mph	A bee flies at a speed of 9 mph. If the bee travels for 20 minutes, what distance will it cover?
624 miles	A car took 15 minutes to travel 12 miles. What was the speed of the car?
2 hours	A train takes 3 hours to travel 120 miles. What speed is the train travelling at?
2 hours 30 minutes	A girl ran 2 miles in 15 minutes. How fast was she running?
150 miles	A bus travelled from York to London, a distance of 200 miles, at a speed of 40 mph. How long did the jouney take?
2350 miles	A man cycles 15 miles in 30 minutes. What is his speed?

Foundation Dominoes: Speed, distance and time

4

A	Q
1.25 miles	A kestrel flies at a speed of 25 mph for 1.5 hours. How far does it travel?
6.5 mph	A motorcyclist travels 90 miles at a speed of 40 mph. How long will it take her?
5 mph	A bus travels at a speed of 35 mph. How far will it travel in 3 hours?
3 miles	An aeroplane travels from London to Leeds, a distance of 300 miles, in 60 minutes. How fast is it travelling?
20 minutes	A ship sails for 2 days at a speed of 13 mph. How far does it travel?
105 miles	A car travelled for 2.5 hours at a speed of 60 mph. How far did it travel?

Foundation Dominoes: Speed, distance and time

4

A	Q
200 mph	An athlete completed a half marathon (13 miles) in 2 hours. What would his speed have been?
30 mph	A train travels from Exeter to Birmingham, a distance of 160 miles, at an average speed of 80 mph. How long does it take?
2 hours 15 minutes	A car travels at an average speed of 66 mph for a distance of 165 miles. How long will the journey take?
4 hours	A train travels for 3 hours 30 minutes at a speed of 100 mph. How far will it have travelled?
5 hours	A car travelling at a speed of 40 mph travels 140 miles. How long does it take?
300 mph	An athlete runs at a speed of 6.5 mph in a marathon event (26 miles). How long does it take her?

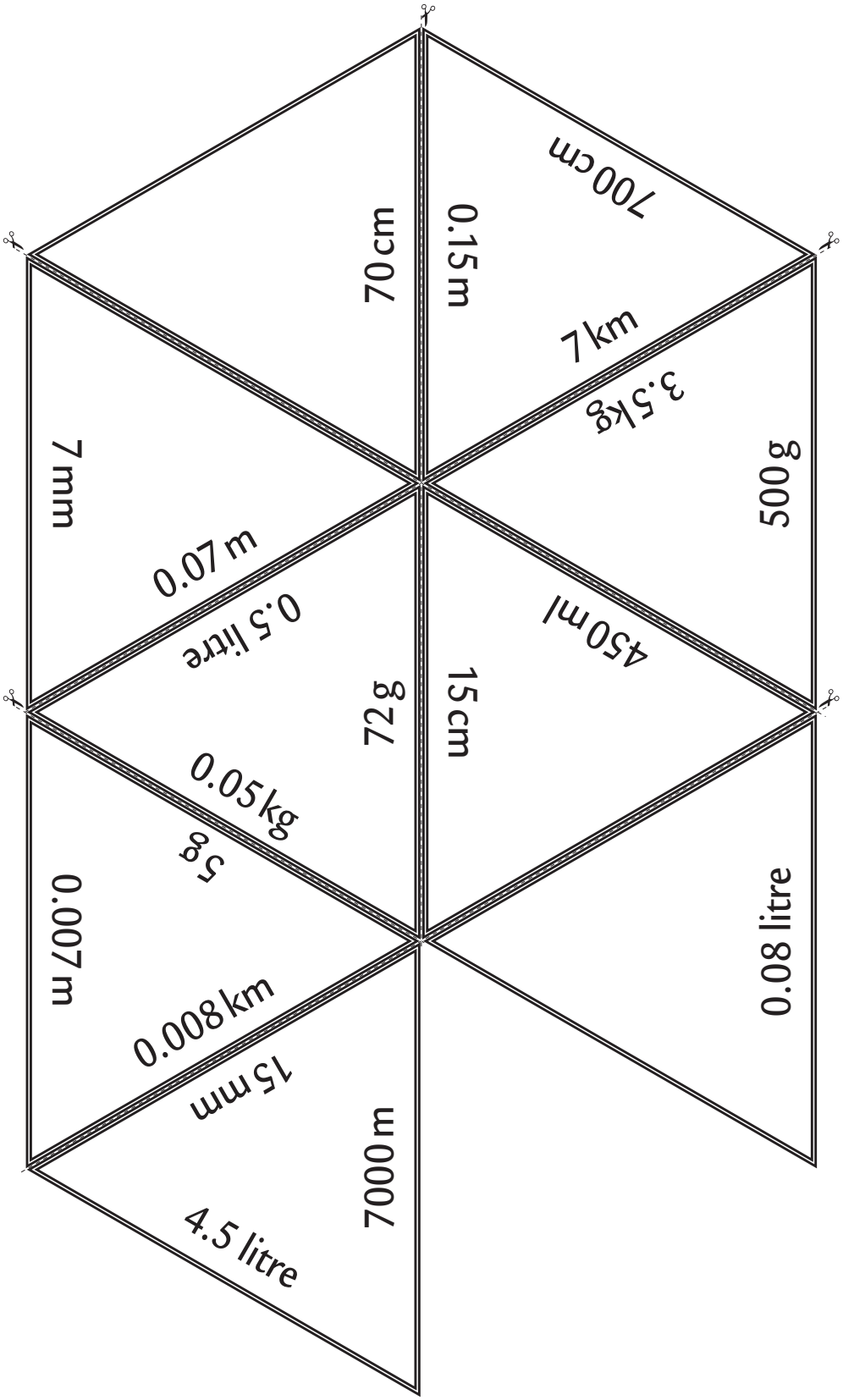
Foundation Dominoes: Speed, distance and time

Teacher answers

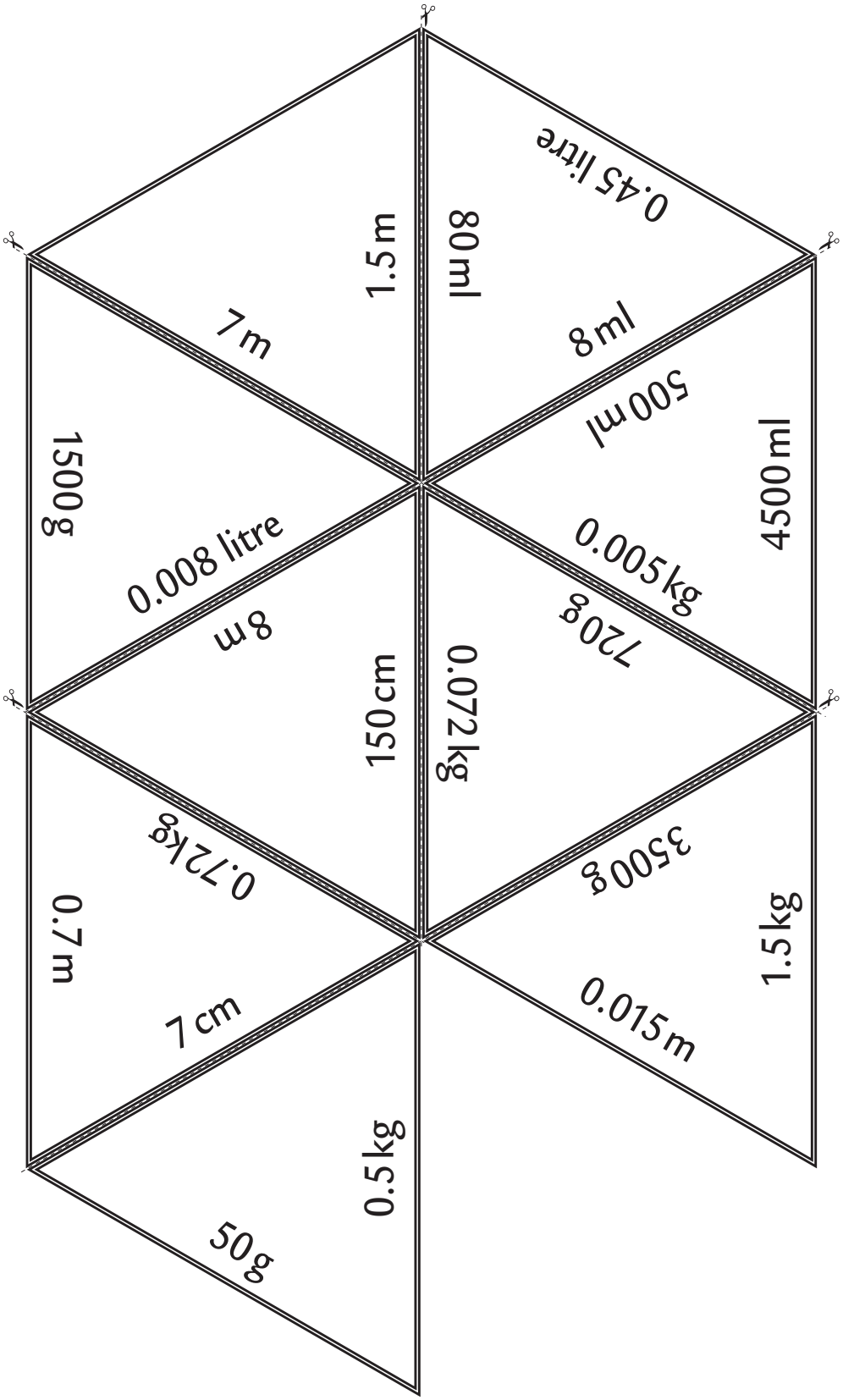
A 2 hours	Q A train takes 3 hours to travel 120 miles. What speed is the train travelling at?
A 40 mph	Q A man walked for 4 hours and travelled 20 miles. What speed was he travelling at?
A 5 mph	Q A bus travels at a speed of 35 mph. How far will it travel in 3 hours?
A 105 miles	Q A car travelled for 2.5 hours at a speed of 60 mph. How far did it travel?
A 150 miles	Q A bus travelled from York to London, a distance of 200 miles, at a speed of 40 mph. How long did the jouney take?
A 5 hours	Q A car travelling at a speed of 40 mph travels 140 miles. How long does it take?
A 3.5 hours	Q A man cycled a distance of 12 miles in 20 minutes. What speed was he travelling at?
A 36 mph	Q A bee flies at a speed of 9 mph. If the bee travels for 20 minutes, what distance will it cover?
A 3 miles	Q An aeroplane travels from London to Leeds, a distance of 300 miles, in 60 minutes. How fast is it travelling?
A 300 mph	Q An athlete runs at a speed of 6.5 mph in a marathon event (26 miles). How long does it take her?
A 4 hours	Q A train travels for 3 hours 30 minutes at a speed of 100 mph. How far will it have travelled?
A 350 miles	Q A boy walks at a speed of 2.5 mph. How far does he walk in 30 minutes?
A 1.25 miles	Q A kestrel flies at a speed of 25 mph for 1.5 hours. How far does it travel?
A 37.5 miles	Q An aeroplane does a journey of 800 miles in 4 hours. What is the average speed of the aeroplane?
A 200 mph	Q An athlete completed a half marathon (13 miles) in 2 hours. What would his speed have been?
A 6.5 mph	Q A motorcyclist travels 90 miles at a speed of 40 mph. How long will it take her?
A 2 hours 15 minutes	Q A car travels at an average speed of 66 mph for a distance of 165 miles. How long will the journey take?
A 2 hours 30 minutes	Q A girl ran 2 miles in 15 minutes. How fast was she running?
A 8 mph	Q A tram travels a distance of 6 miles at a speed of 18 mph. How long does it take?
A 20 minutes	Q A ship sails for 2 days at a speed of 13 mph. How far does it travel?
A 624 miles	Q A car took 15 minutes to travel 12 miles. What was the speed of the car?
A 48 mph	Q An aeroplane flies at 940 mph in 2½ hours. How far does it fly?
A 2350 miles	Q A man cycles 15 miles in 30 minutes. What is his speed?
A 30 mph	Q A train travels from Exeter to Birmingham, a distance of 160 miles, at an average speed of 80 mph. How long does it take?

Foundation Jigsaw: Metric measures

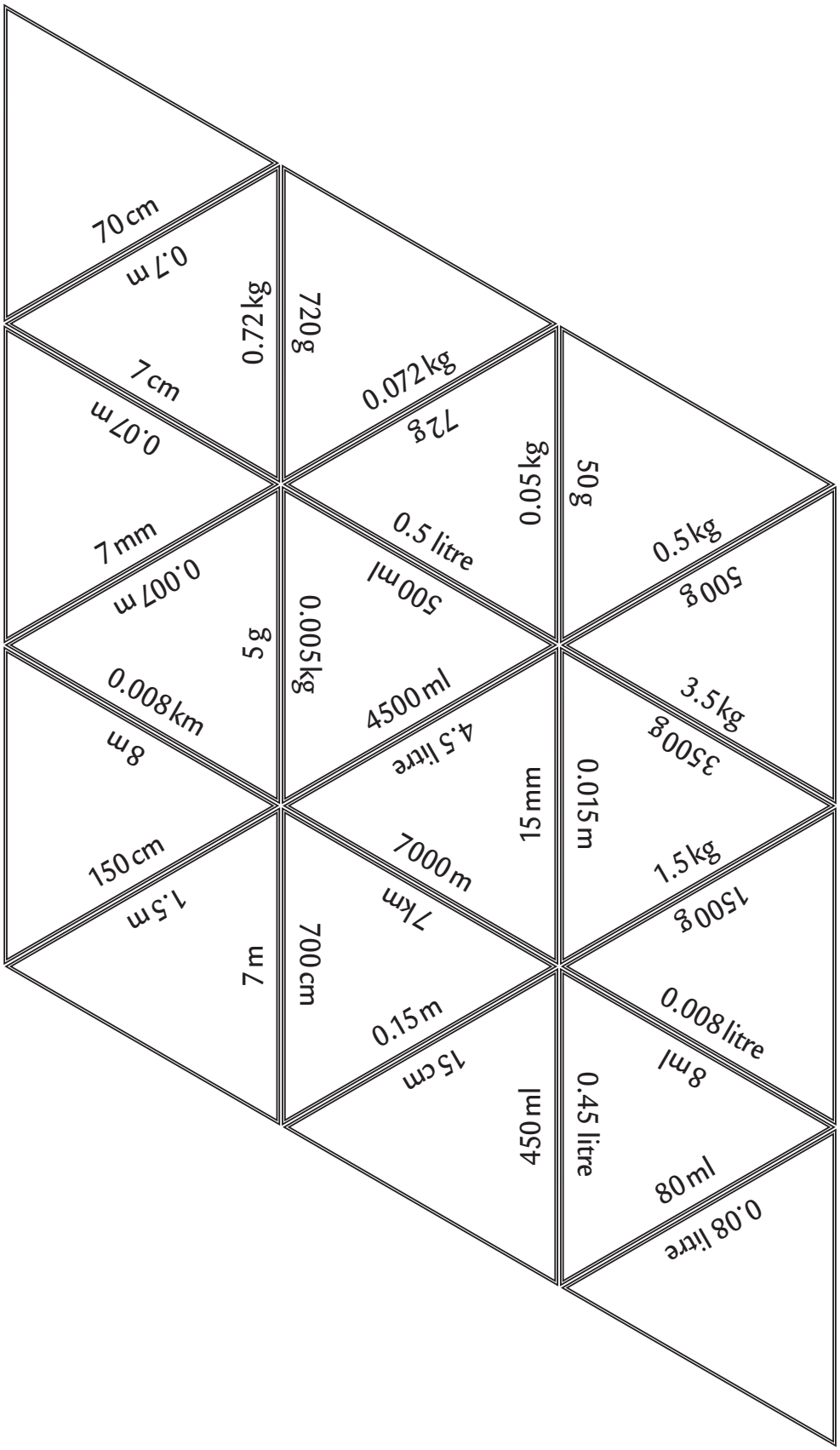
4



Foundation Jigsaw: Metric measures

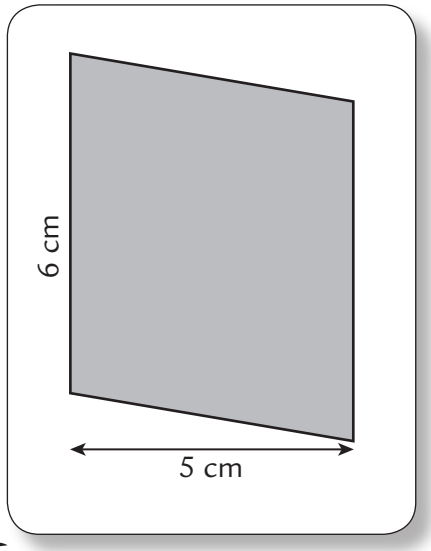


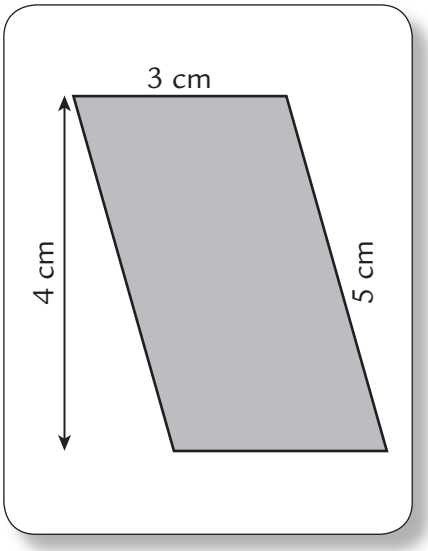
Teacher answers

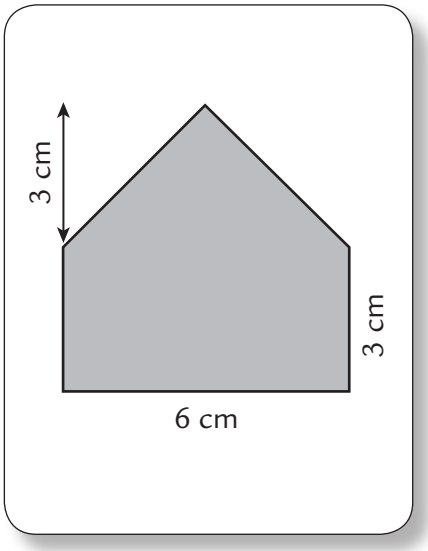


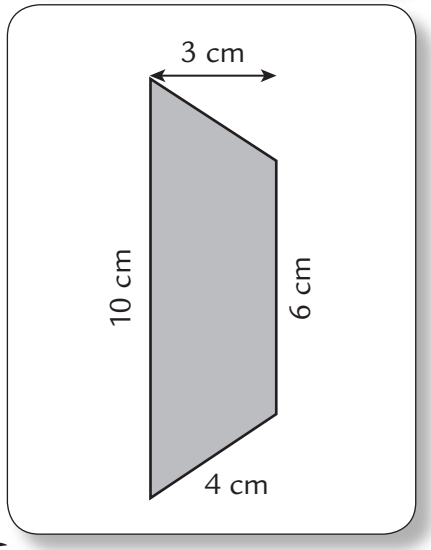
Foundation Matching: Areas of 2D shapes

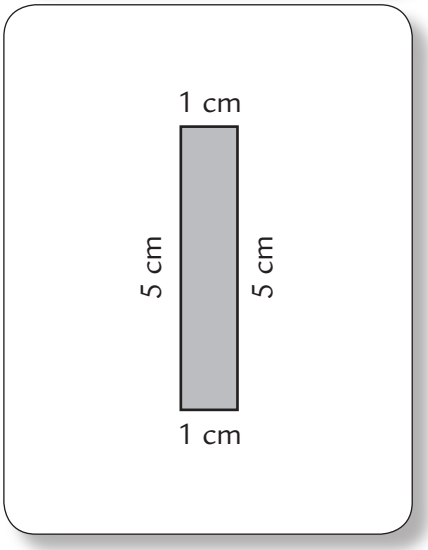
4

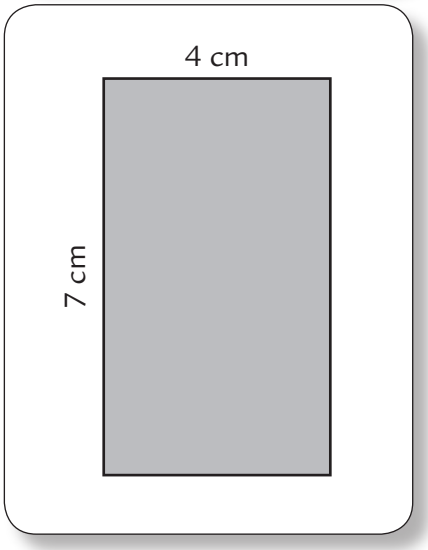


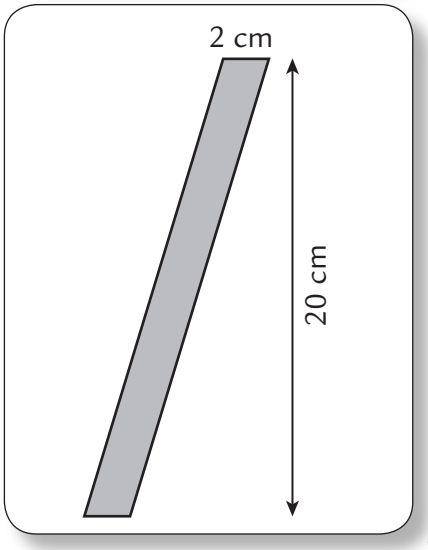


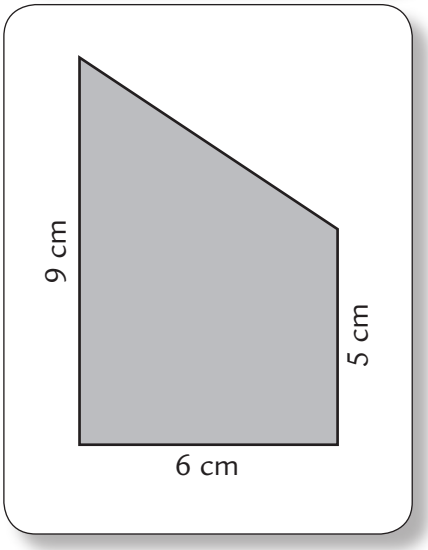


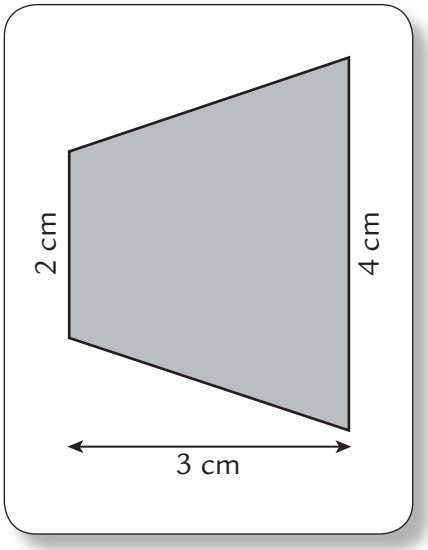




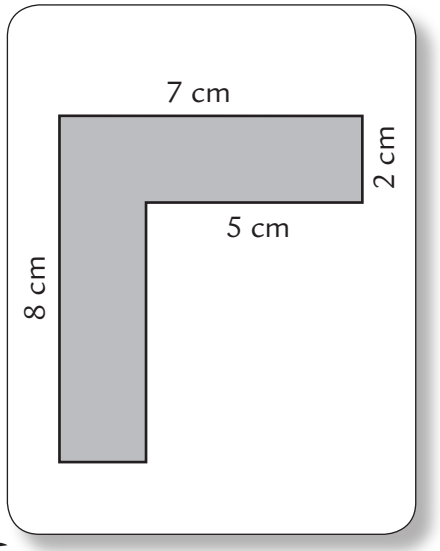


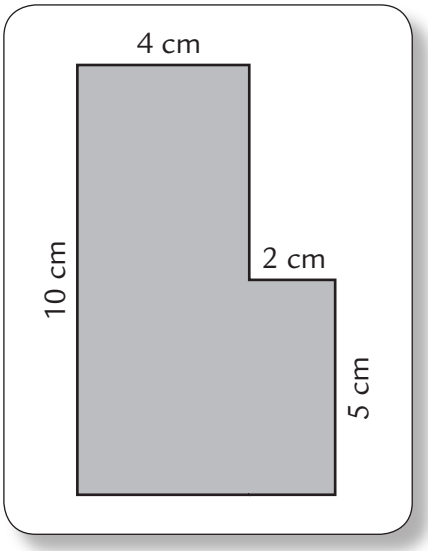


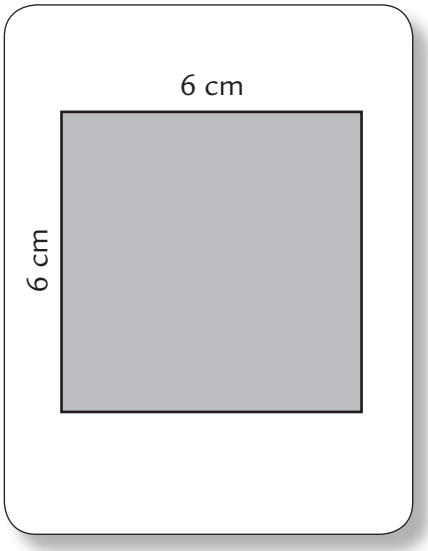


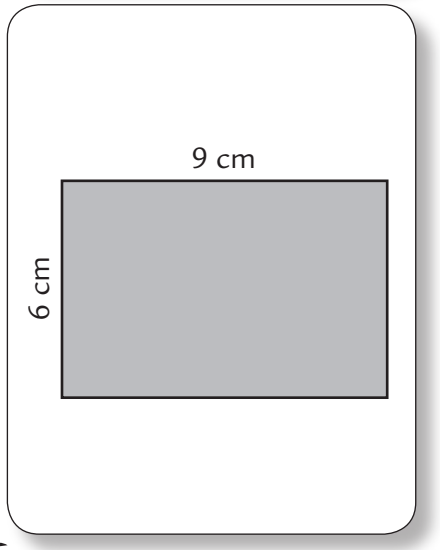


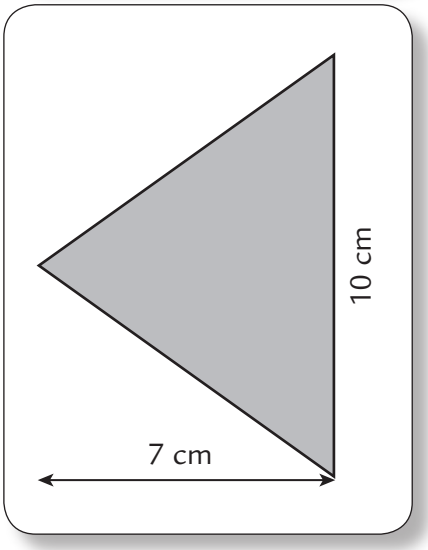
Foundation Matching: Areas of 2D shapes

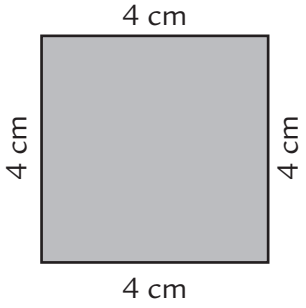


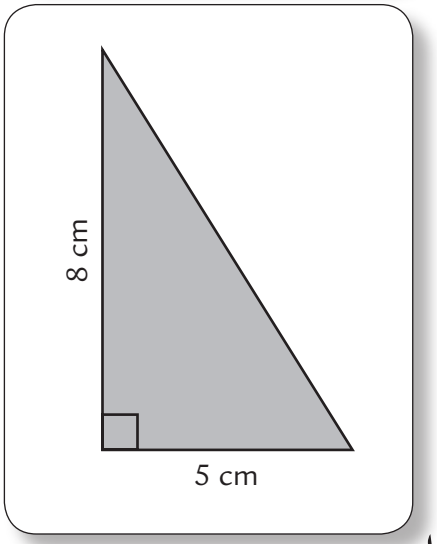


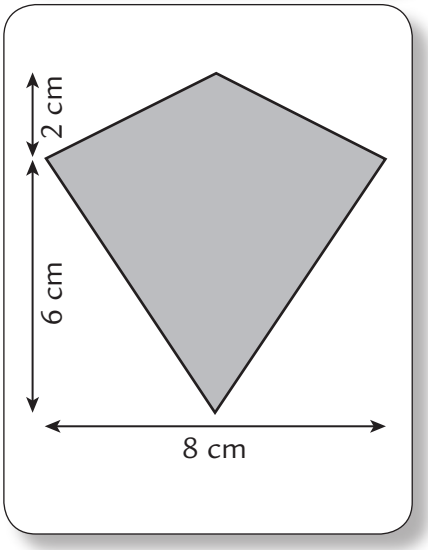


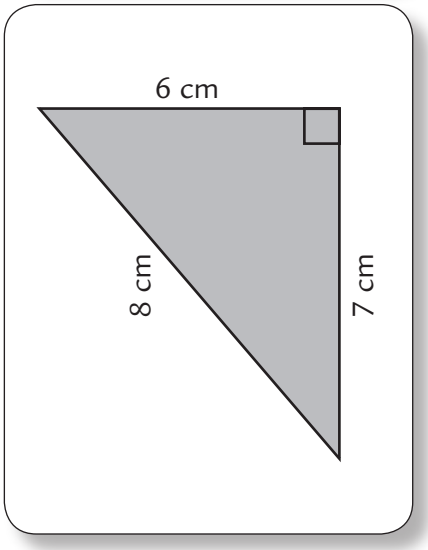












Foundation Matching: Areas of 2D shapes

4

$26cm^2$	$50cm^2$	$54cm^2$
$40cm^2$	$36cm^2$	$42cm^2$
$24cm^2$	$5cm^2$	$32cm^2$

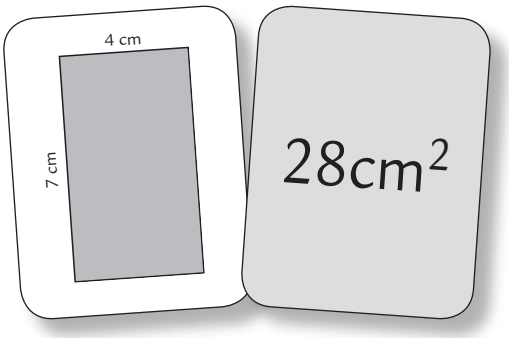
Foundation Matching: Areas of 2D shapes

4

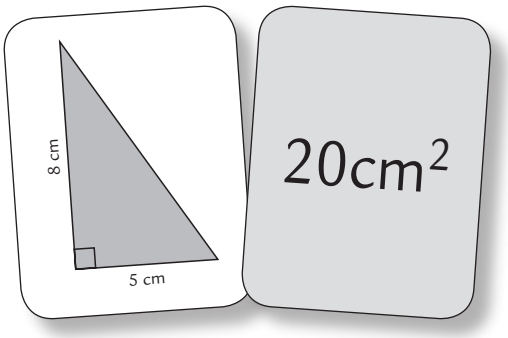
$20cm^2$	$21cm^2$	$16cm^2$
$35cm^2$	$27cm^2$	$12cm^2$
$30cm^2$	$28cm^2$	$9cm^2$

Teacher answers

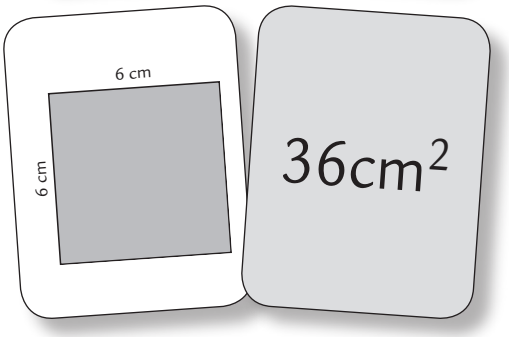
Suggestion: challenge students by providing blank cards for them to produce their own 2D shapes with the same areas.



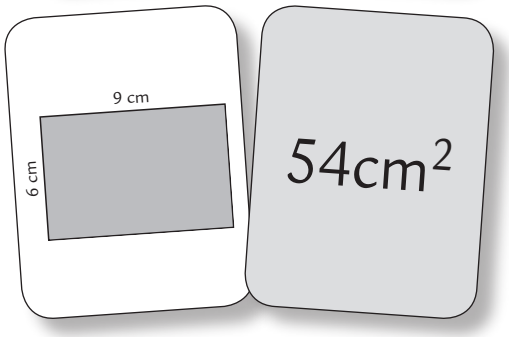
$28cm^2$



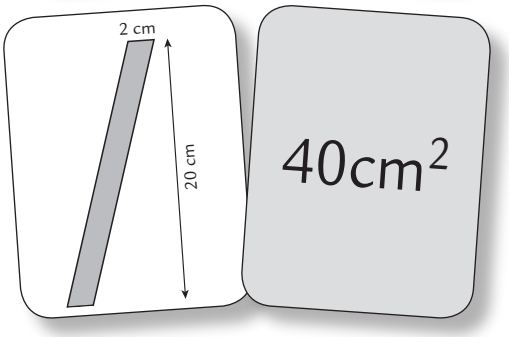
$20cm^2$



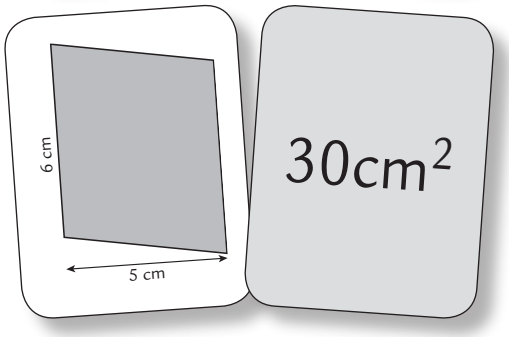
$36cm^2$



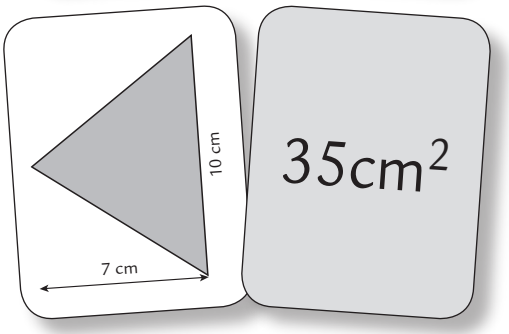
$54cm^2$



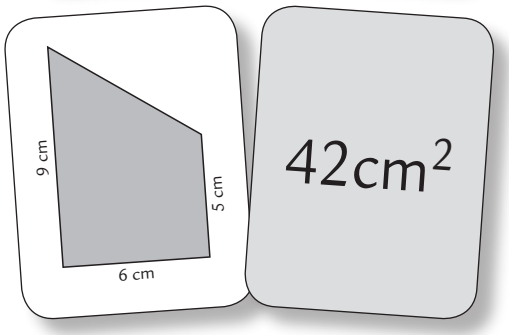
$40cm^2$



$30cm^2$

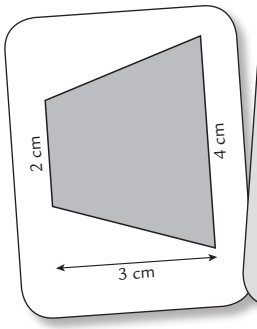


$35cm^2$

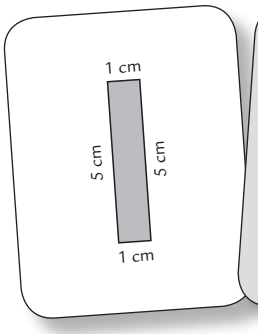


$42cm^2$

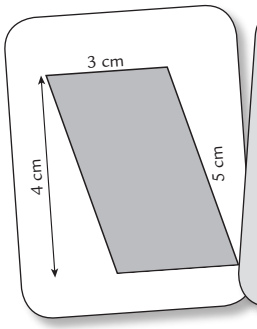
Foundation Matching: Areas of 2D shapes



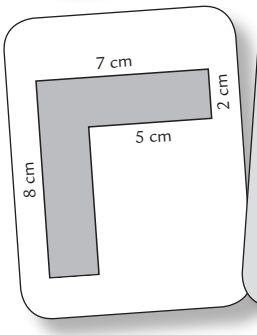
$9cm^2$



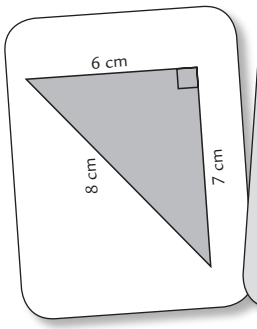
$5cm^2$



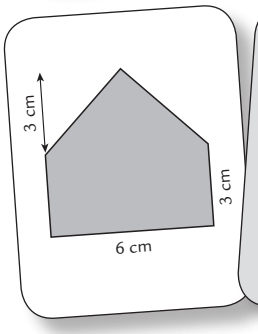
$12cm^2$



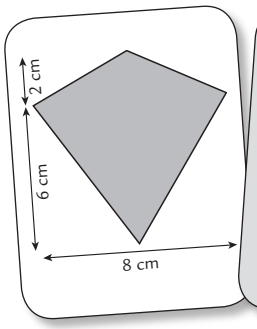
$26cm^2$



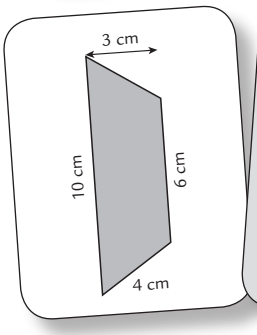
$21cm^2$



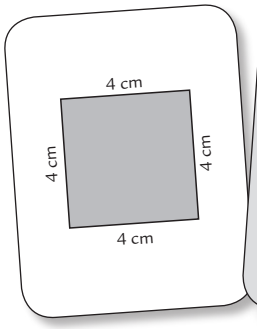
$27cm^2$



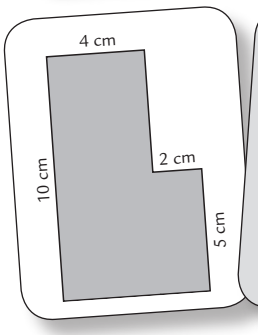
$32cm^2$



$24cm^2$



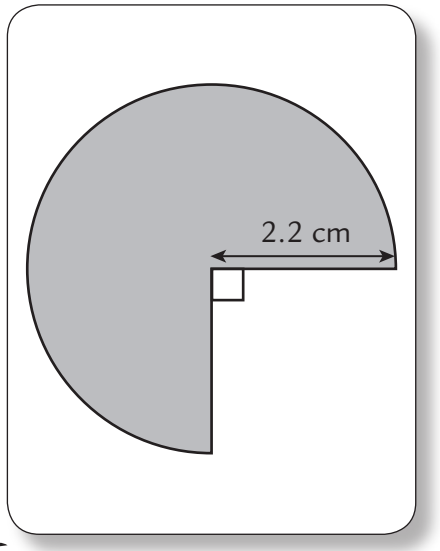
$16cm^2$

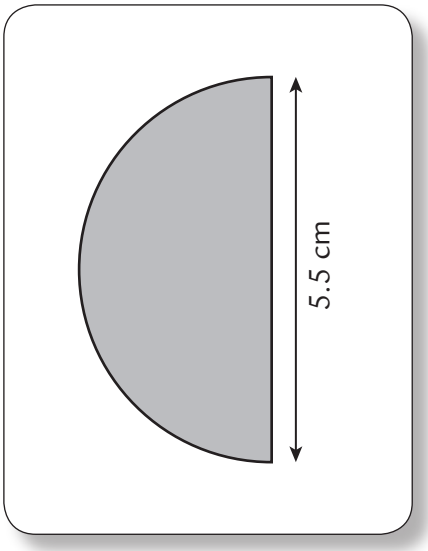


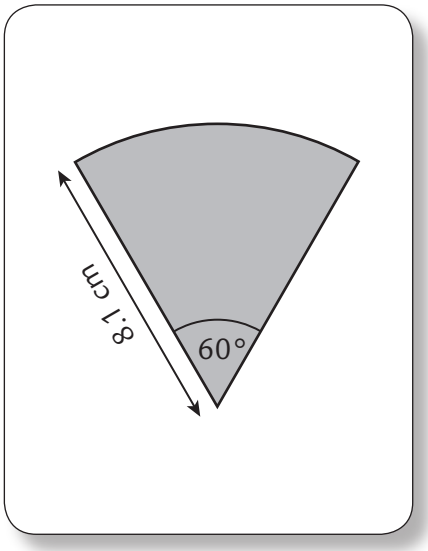
$50cm^2$

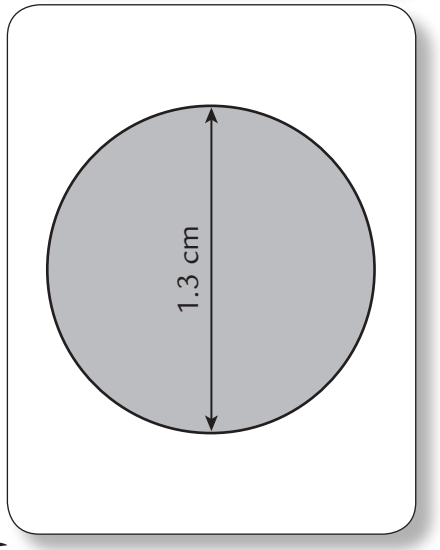
Higher Matching: Circles and sectors

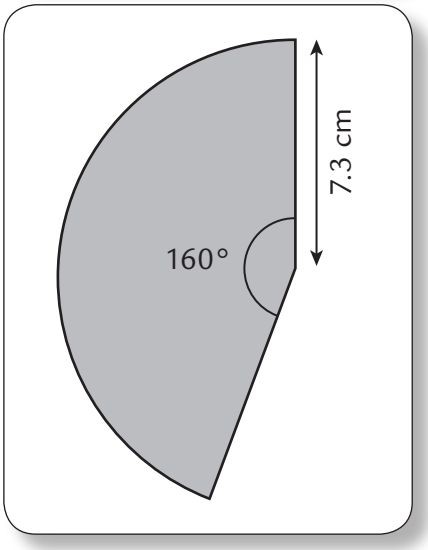
4

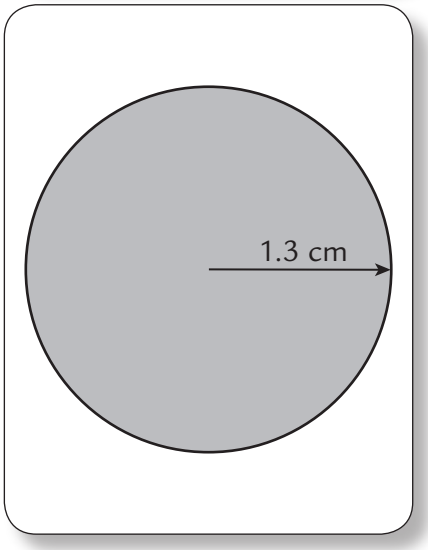


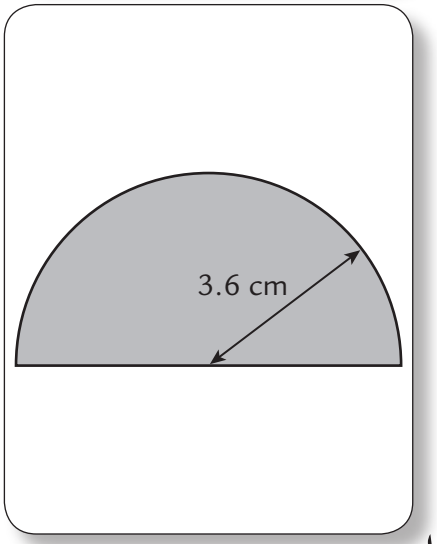


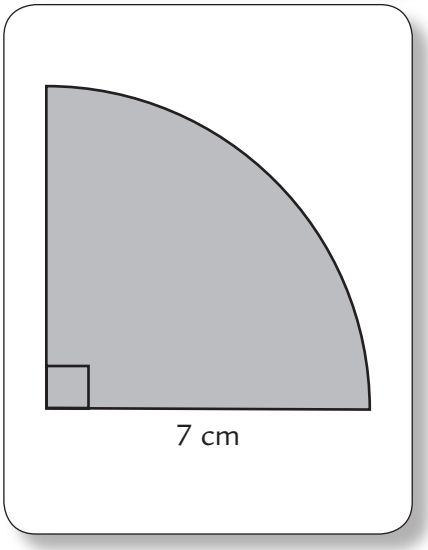


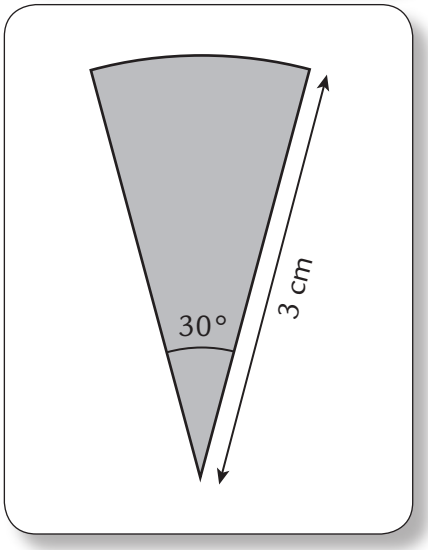












Higher Matching: Circles and sectors

4

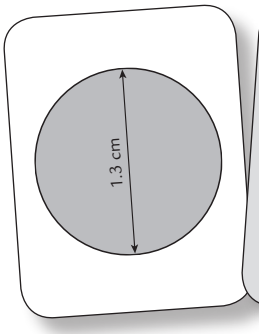
$5.31\,cm^2$	$2.36\,cm^2$	$11.40\,cm^2$
$34.35\,cm^2$	$74.41\,cm^2$	$20.36\,cm^2$
$38.48\,cm^2$	$1.33\,cm^2$	$11.88\,cm^2$

Higher Matching: Circles and sectors

14.77 cm	18.51 cm	8.17 cm
34.99 cm	24.68 cm	7.57 cm
4.08 cm	25.00 cm	14.14 cm

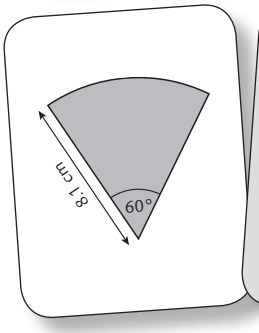
Teacher answers

A scientific calculator is required for this activity. The answers have been calculated using the value of pi in a scientific calculator and are correct to 2 d.p. Give students a set of picture cards and either the area or perimeter cards. Alternatively, give students three of the picture cards and all the area or perimeter cards. Then ask them to find the matching area or perimeter cards.



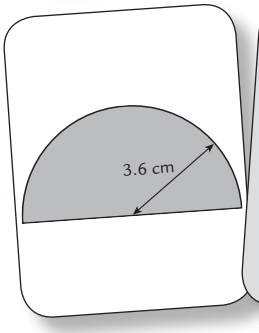
$1.33\,cm^2$

4.08 cm



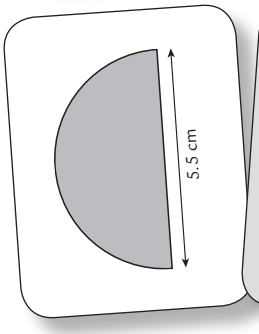
$34.35\,cm^2$

24.68 cm



$20.36\,cm^2$

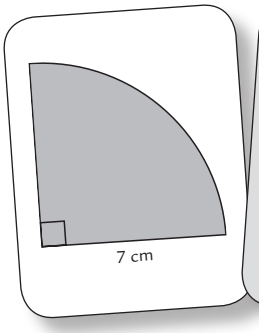
18.51 cm



$11.88\,cm^2$

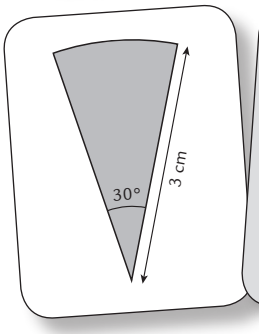
14.14 cm

Higher Matching: Circles and sectors



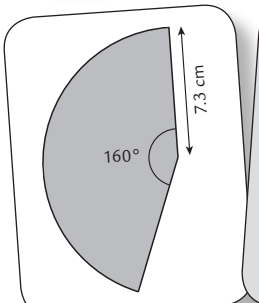
38.48 cm²

25.00 cm



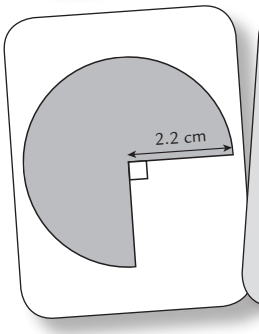
2.36 cm²

7.57 cm



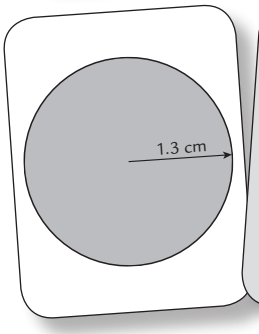
74.41 cm²

34.99 cm



11.40 cm²

14.77 cm



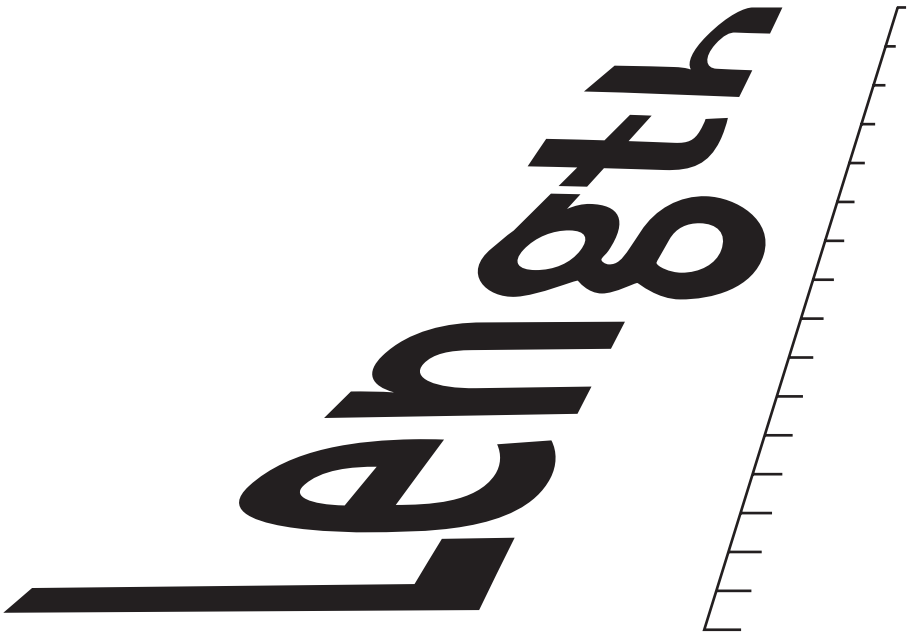
5.31 cm²

8.17 cm

Higher Play Your Cards Right: Dimensional analysis

4

Area



None of these

These formulae need to be copied onto OHT or otherwise displayed. They are also provided as Powerpoint slides on the enclosed CD-ROM.

$$4x + 4y^2$$

$$x^2 + y^2$$

$$3x^3$$

$$xyz$$

These formulae need to be copied onto OHT or otherwise displayed. They are also provided as Powerpoint slides on the enclosed CD-ROM.

$$(x+y+z)^3$$

$$3x^4$$

$$x+y$$

$$z^4$$

These formulae need to be copied onto OHT or otherwise displayed. They are also provided as Powerpoint slides on the enclosed CD-ROM.

$$2\pi(x+y)$$

$$\frac{xy}{z}$$

$$3x$$

$$\pi xy$$

These formulae need to be copied onto OHT or otherwise displayed. They are also provided as Powerpoint slides on the enclosed CD-ROM.

$$\pi xy + \pi xz$$

$$x + y^2 + z^3$$

$$\pi x^2 y^2$$

$$3x^2$$

Teacher questions and answers

x, y and z represent lengths.

$4x + 4y^2$	None of these
$x^2 + y^2$	Area
$3x^3$	Volume
xyz	Volume
$(x + y + z)^3$	Volume
$3x^4$	None of these
$x + y$	Length
z^4	None of these
$2\pi(x + y)$	Length
$\frac{xy}{z}$	Length
$3x$	Length
πxy	Area
$\pi xy + \pi xz$	Area
$x + y^2 + z^3$	None of these
$\pi x^2 y^2$	None of these
$3x^2$	Area