Group A – Maths
W/b 01.02.21

MONDAY - Can I fluently convert between units of length?

Challenge 1

1 Write each length in centimetres using decimals.

a 6 cm 3 mm b 12 cm 9 mm c 75 mm d 148 mm

2 Write each length in metres using decimals.

a 14 m 39 cm b 52 m 60 cm c 827 cm d 309 cm

3 Write each length in kilometres using decimals.

a 8 km 600 m b 4 km 130 m c 6500 m d 7720 m

Challenge 2

1 Write each length in kilometres.

a 3727 m b 4420 m c 5010 m d 3205 m

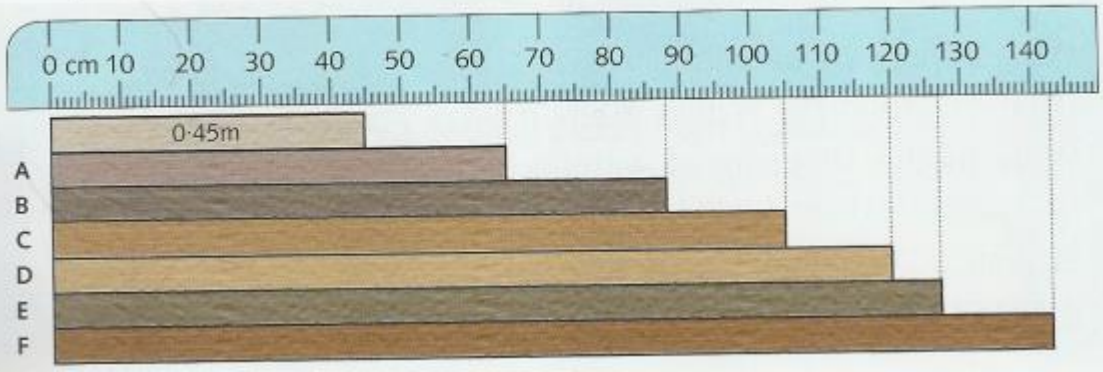
2 Write each length in metres.

a 0·725 km b 0·408 km c 914 cm d 702 cm

3 Write each length in centimetres then order the lengths, longest to shortest.

a 66 mm b 242 mm c 1·6 m d 9·73 m

4. The carpenter has cut some strips of wood.



a Write the length of each strip of wood in metres.

b Find the difference in length in centimetres between these strips of wood.

i A and D ii B and E iii C and F

c Find the total length in metres of these strips of wood.

i A and E ii B and F iii C and B iv D and F

d How many metres long is each small piece of wood when:

i strip C is cut into 5 equal lengths?

ii strip D is cut into 8 equal lengths?

Tuesday- Can I solve word problems involving units of length?

1 The distance round the sports ground running track is 420 m. Colin runs nine times round the track in training. How far does he run in kilometres?

2 Winston is a distance runner and he runs the same route every time. In five evenings, he ran a total of 4·73 km. How long is his training route:

a in kilometres? b in metres?

3 Meg cycles 37·5 km from home to school and home again in one week. How far is her house from her school?

4 The table shows the results of a long jump competition. By how many centimetres did Jordan beat each of his competitors?

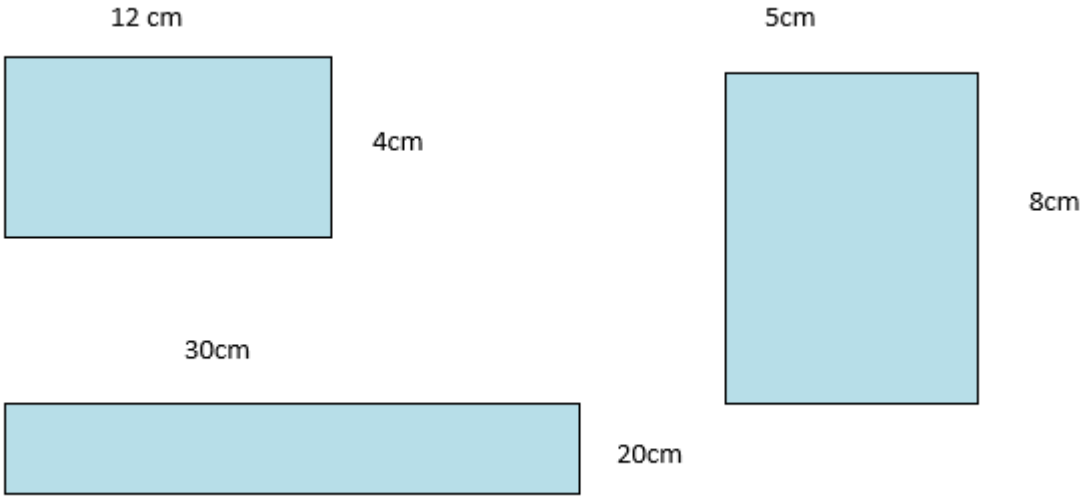
Name	Jordan	Keira	Len	Mark	Naomi
Length of jump (m)	4·42	3·97	4·29	3·88	4·16

5 A cross-country cycle competition has races at six different venues in Britain. Find the total length of each race in kilometres.

	Venue	Length of one course lap (km)	Number of laps
a	Peak District	3·87	4
b	Borders	2·85	5
c	Lake District	4·19	4
d	North Wales	5·025	3
e	South Downs	2·64	5
f	East Anglia	3·78	4

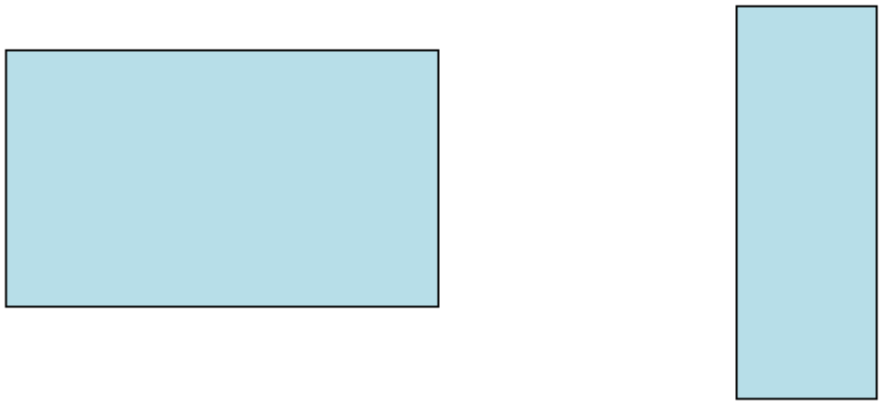
Wednesday – Can I calculate the area and perimeter of rectangles?

1) Calculate the area and perimeter of the following rectangles.



2)

Work out the area and perimeter of the shapes below by using a ruler to measure the length and width.



3) Without drawing the shapes, calculate the area and perimeter for the shapes described below.

a) A square with the side lengths of 5 cm.

b) A rectangle with a width of 10cm and a length of 4 cm.

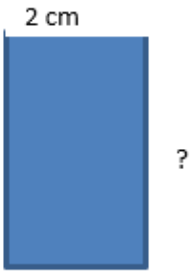
c) A rectangle with a width of 12cm and a length of 20.5cm.

For the challenge, please see the next page.

Challenge - Can I use my knowledge and understanding of area and perimeter to calculate missing lengths and widths of a rectangle?

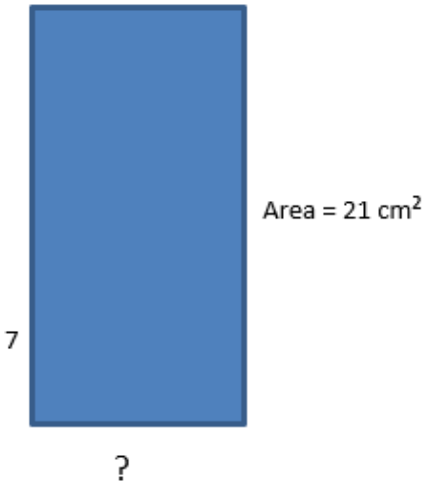
Calculate the missing lengths of the sides of a rectangle using this information.

a)



Perimeter = 20 cm

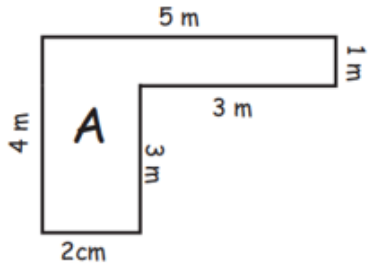
b)

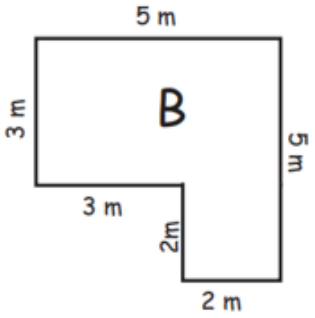


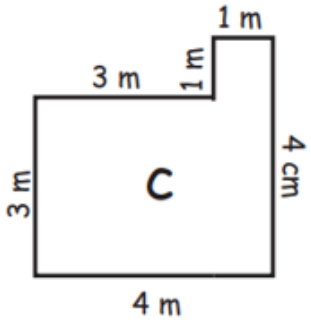
Perimeter = 32 cm

Thursday – Can I calculate the area and perimeter of compound shapes?

For each set of rooms, can you work out which has the longest perimeter and the largest area?

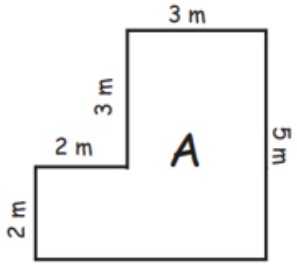


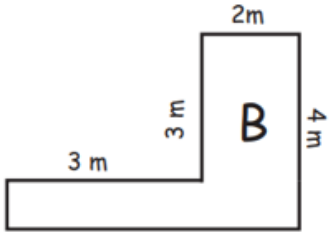


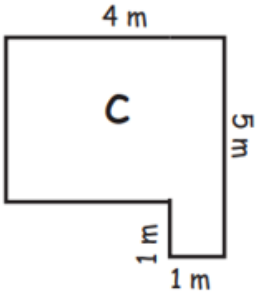


Room _____ has the longest perimeter.

Room _____ has the largest area.







Room _____ has the longest perimeter.

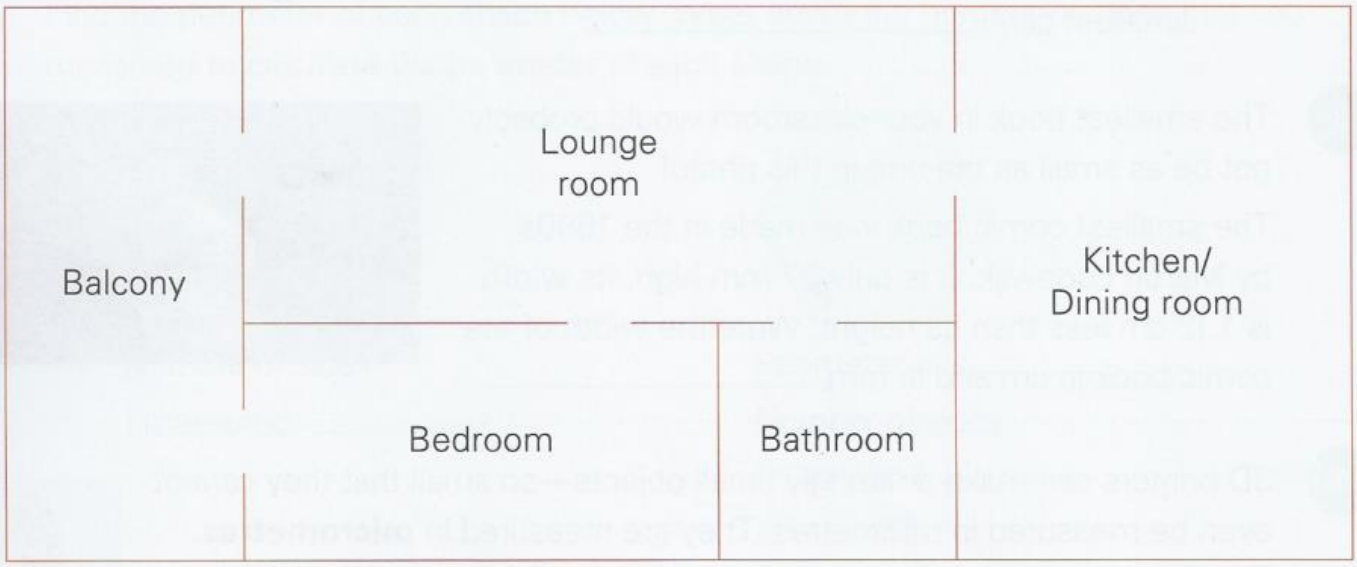
Room _____ has the largest area.

Friday – Can I develop my Arithmetic skills?

In this session, we will work together on some key arithmetic skills. After the session, complete the Week 3 arithmetic test, which can be found in the Lockdown Home Learning area of the Valley website.

WEEKLY OPTIONAL EXTRA CHALLENGE

This is a floor plan of a housing unit. Using a scale of 1 cm: 1 m, write the area of each room.



Balcony = _____ m^2

Bedroom = _____

Bathroom = _____

Lounge room = _____

Kitchen/Dining room = _____

Answers- Monday-Thurs

MONDAY

Ch1

1.	a. 6.3 cm	b. 12.9 cm	c. 7.5 cm	d. 14.8 cm
2.	a. 14.39 m	b. 52.6 m	c. 8.27 m	d. 3.09 m
3.	a. 8.6 km	b. 4.13 km	c. 6.5 km	d. 7.72 km

Ch 2

1.	a. 3.727 km	b. 4.42 km	c. 5.01 km	d. 3.205 km
2.	a. 725 m	b. 408 m	c. 9.14 m	7.02 m
3.	d. 973cm	c. 160 cm	b. 24.2 cm	a. 6.6cm

Carpenter

a.	A = 0.65cm	B= 0.88m	C= 1.05m	D = 1.2 m	E = 1.27m	F= 1.43m
b.	i) 40cm	ii) 39 cm	iii) 38 cm			
c.	i) 1.92 m	ii) 2.31 m	iii) 1.93 m	iv) 2.63 m		
d.	i) 0.21 m	ii) 0.15m				

TUESDAY

1. 3.78km
2. A) 0.946km b) 946m
3. 3.75 km
4. 45 cm further than Keira 13cm further than Len 54cm further than Mark
   26 cm further than Naomi
5. a) 15.48 km b) 14.25 km c) 16.76 km d) 15. 075 km e) 13.2 km f) 15.12 km

WEDNESDAY

1.

A= 48cm2 P = 32 cm
A = 40cm2 P = 26cm
A= 600cm2 P – 100cm

2.

L = 5.7cm W= 3.4 cm
A= 19.38 cm2 P = 18.2 cm

L = 1.8 cm W = 5.1 cm
A = 9.18 cm2 P = 13.8cm

3.

a) A = 25cm2 P = 20cm b) A= 40cm2 P = 28cm c) A= 246cm2 P = 65cm

CHALLENGE:

a) 7cm b) 3 cm c) 8cm d) 9cm

THURSDAY

A1) P= 18m A = 11m2 B1) P = 20m A = 19m2 C1) P=16m A= 13m2

Room B has the longest perimeter.
Room B has the largest Area.

A2) P= 20m A = 19m2 B2) P = 18m A = 11m2 C2) P=18m A= 21m2

Room A has the longest perimeter.
Room C has the largest Area.

OPTIONAL WEEKLY EXTRA CHALLENGE
Balcony = 21.9 m2
Bedroom = 19.22m2 Lounge = 39.06m2
Bathroom = 9.61 m2 Kitchen / dining = 37.96m2