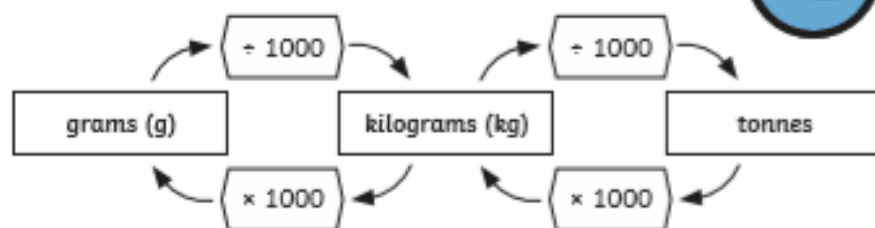




Use the conversion charts to help you convert between the different units of measurement.



1)

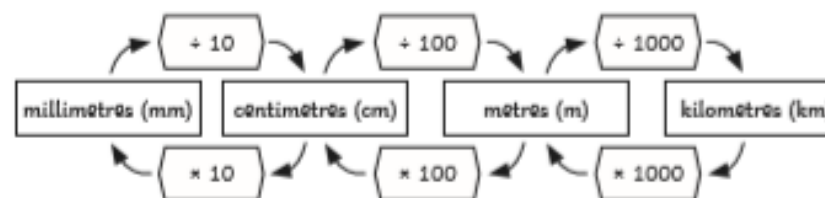
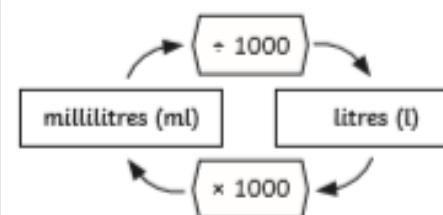
g	kg
1500	
	0.8
3010	
	2.95

2)

kg	tonnes
	7
1500	
	0.9
4080	

3)

ml	l
	7.5
950	
	0.065
1990	



4)

mm	cm	m	km
	20 000		
		412	
			1.1

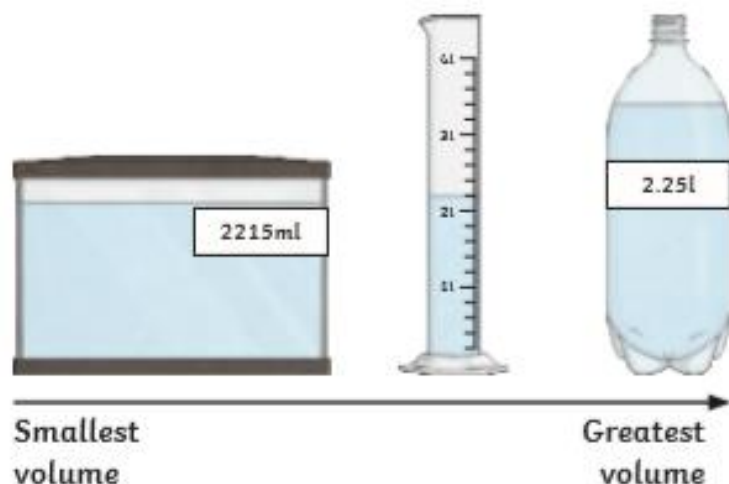


1) True or false? Correct any mistakes.

a) $1.7\text{km} = 1.700\text{km} = 1700\text{m}$

b) $10\,001\text{g} < 10.1\text{kg} > 0.1\text{ tonnes}$

c) The three volumes shown are correctly ordered from smallest to greatest.



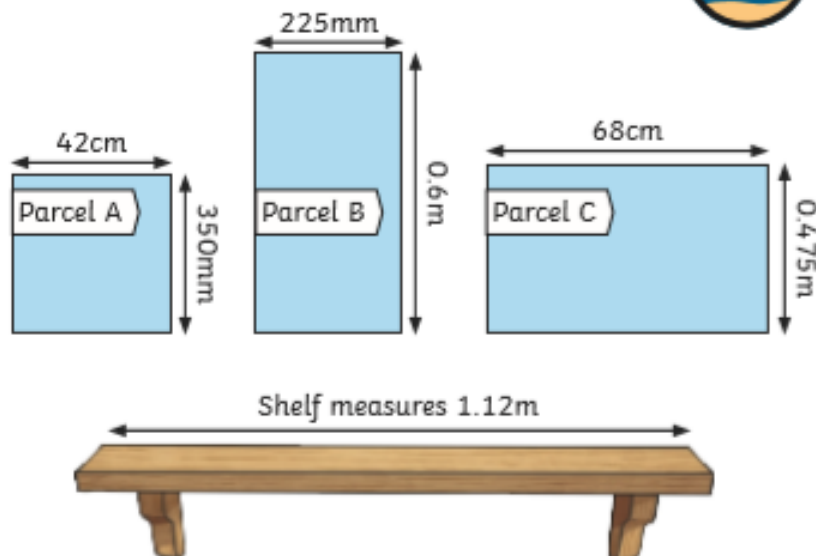
2) Explain if each statement is correct or not, giving a reason.



- a) 100 of these rulers put together could measure 15 metres.
- b) 1000 of these rulers put together would make a distance greater than a km.
- c) If I had a pencil point measuring 0.5mm, I would need 300 of them to make a length equal to the length this ruler can measure.

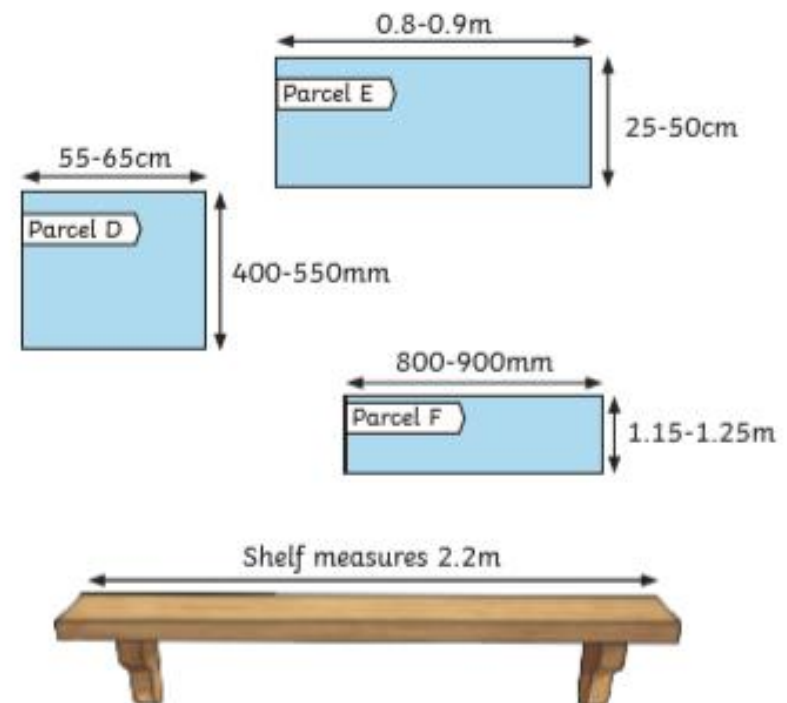


Patsy, the postal worker, is arranging some parcels on the shelves in the post office.



- 1) How could she arrange the three parcels so that they sit on the shelf with no gaps? (Think about turning the parcels round so they could fit.)
- 2) How could Patsy fit the same parcels on a shelf which measures 1.05m?

- 3) Patsy receives three more parcels. When placed on the shelf below, there are no gaps between them.



Give the possible dimensions for each parcel so that all three parcels can be arranged on the shelf with no gaps. Find three different possible answers.

ANSWERS

1)

g	kg
1500	<i>1.5</i>
<i>800</i>	0.8
3010	<i>3.01</i>
<i>2950</i>	2.95

2)

kg	tonnes
<i>7000</i>	7
1500	<i>1.5</i>
<i>900</i>	0.9
4080	<i>4.08</i>

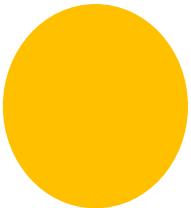
3)

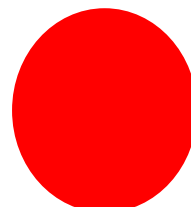
ml	l
<i>7500</i>	7.5
950	<i>0.95</i>
<i>65</i>	0.065
1990	<i>1.99</i>

4)

mm	cm	m	km
<i>200 000</i>	20 000	<i>200</i>	<i>0.2</i>
<i>412 000</i>	<i>41 200</i>	412	<i>0.412</i>
<i>1 100 000</i>	<i>110 000</i>	<i>1100</i>	1.1



- 
- 1) a) True. 1.7km and 1.700km show the same amount in km and 1700m is equal to 1.7km.
b) False. $10\ 001\text{g} < 10.1\text{kg} < 0.1\text{ tonnes}$
c) False. At the moment they are ordered 2215ml, 2200ml and 2250ml. The measuring cylinder needs to be swapped with the aquarium.
 - 2) a) Incorrect. Because the rulers are slightly longer than 15cm, 100 of them would measure more than 15m.
b) Incorrect. $1000 \times 15\text{cm} = 15\ 000\text{cm}$ or 0.15km which is less than 1km.
c) Correct. 2 pencil points make 1mm, so 20 make 1cm and $20 \times 15 = 300$.

- 
- 1) $42\text{cm (A)} + 22.5\text{cm (B)} + 47.5\text{cm (C)} = 112\text{cm}$
 - 2) $35\text{cm (A)} + 22.5\text{cm (B)} + 47.5\text{cm (C)} = 105\text{cm}$
 - 3) Various answers are possible to make a total length of 220cm.

For example:

Parcel D height of 500mm + parcel E length of 0.85m + parcel F length of 850mm = 2.2m

Parcel D height of 500mm + parcel E height of 50cm + parcel F height of 1.2m = 2.2m

Parcel D height of 400mm + parcel E length of 0.9m + parcel F length of 900mm = 2.2m