

Metric conversion

WORKED EXAMPLE

| | |
|-------------|-------------|
| kilometres | metres |
| millilitres | grams |
| centimetres | millimetres |
| litres | kilograms |

These are all **metric** units of measurement.

Kilometres, metres, centimetres and millimetres measure length, distance, perimeter.

We also use km^2 , m^2 , cm^2 to measure area and m^3 and cm^3 as units of volume.

Grams and kilograms measure mass.

Millilitres and litres measure capacity and volume of

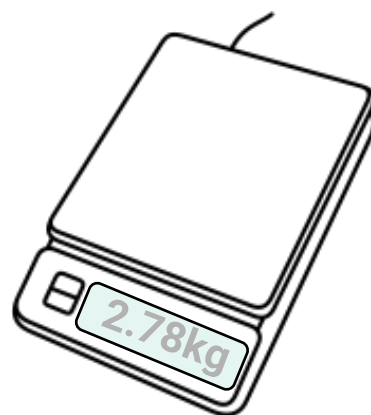
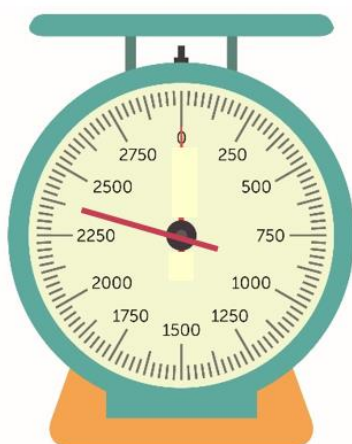
REHEARSE

Joe and Tyrone recorded the distances they cycled over five days.
Which rider cycled the furthest each day?

| Day | Joe | Tyrone | Rider who cycled furthest |
|-----------|-----------|-----------------|---------------------------|
| Monday | 26.75km | 26,570m | |
| Tuesday | 10.11km | 10010m | |
| Wednesday | 703,654cm | 6.7km | |
| Thursday | 560,400cm | 5.65km | |
| Friday | 10km | 4.6km and 5.7km | |

REHEARSE

Write the mass shown on each scale in grams.



REHEARSE

Draw a rectangle with sides of 23cm and 45mm.

What is its perimeter?

APPLY AND EXPLORE

Draw two different rectangles with a perimeter of 210mm.

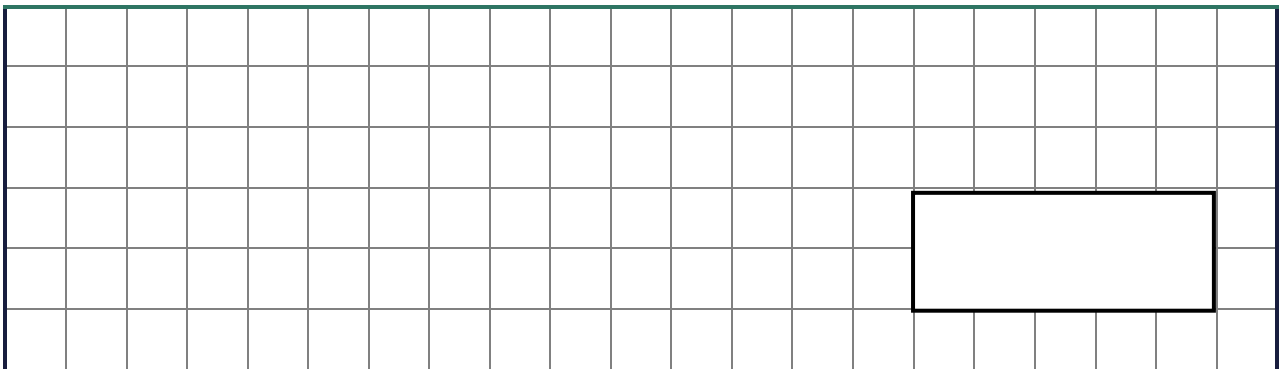
Label the lengths of the sides in mm and again in cm.

APPLY AND EXPLORE

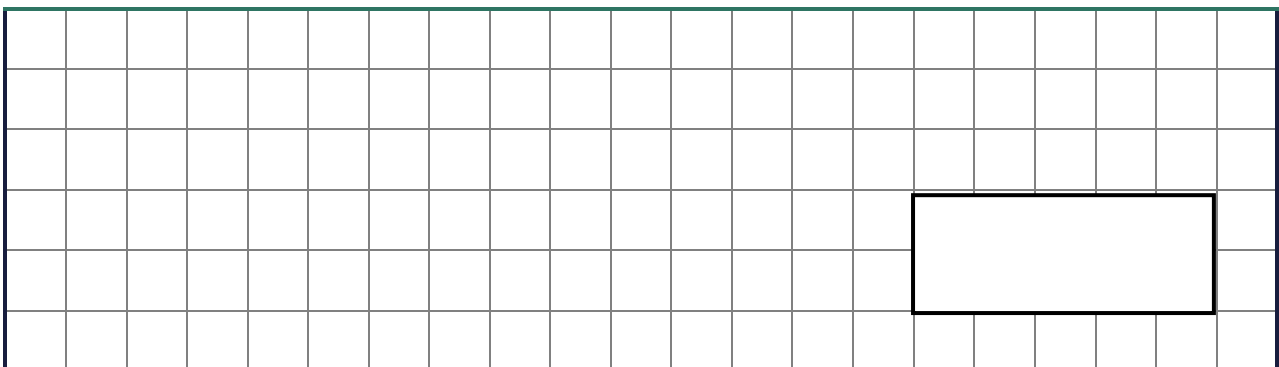
Samerah says that $\frac{2}{5}$ litre is the same as 0.25 litre. Is she correct?

REHEARSE

- a) Ivo has 3 pieces of ribbon measuring 3.25m, 130cm and 130mm.
What is the total length of ribbon he has?



- b) One of David's presents has a mass of $1\frac{3}{4}$ kg and another has a mass of 1700g.
What is the difference between the masses of the presents?



- c) A jug of 2290ml of water is poured into 0.2 litre cups.
How many cups can be filled from the jug?

- d) A chicken takes 30 minutes per 500g and an extra 15 minutes to roast.
How long would it take for a 3.75kg chicken to roast?

- e) Jack says that 20% of 1600ml is 0.32 litres. Is he correct? Explain your thinking.

RETRIEVE

Can I still find percentages of amounts?

Which is greater:

- 75% of 180 **or** 10% of 1290?
- 50% of £1670 **or** 25% of £3580?