

Metric conversion

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	Joe
Tuesday	10.11km	10010m	Joe
Wednesday	703,654cm	6.7km	Joe
Thursday	560,400cm	5.65km	Tyrone
Friday	10km	4.6km and 5.7km	Tyrone

REHEARSE

Write the mass shown on each scale in grams.
The circular scale shows a mass of 2375g and the digital scales show a mass of 2780g.

REHEARSE

Draw a rectangle with sides of 23cm and 45mm.
What is its perimeter?
Check that children have accurately converted 45mm to 4.5cm or 23cm to 230mm.
Perimeter equals 55cm or 550mm

APPLY AND EXPLORE

Draw two different rectangles with a perimeter of 210mm.
Label the lengths of the sides in mm and again in cm.
Dependent on children's chosen measurements. Children should ensure that the length and width of their rectangles measures 10.5cm or 105mm in total. Examples could include: 9.5cm and 1cm; 8cm and 2.5cm; 5cm and 5.5cm.

APPLY AND EXPLORE

Samerah says that $\frac{2}{5}$ litre is the same as 0.25 litre. Is she correct?
Children should reason that Samerah is incorrect because $\frac{1}{5}$ litre = 0.2 litres so $\frac{2}{5}$ litre = 0.4 litres or 400ml

REHEARSE

- a) Ivo has 3 pieces of ribbon measuring 3.25m, 130cm and 130mm.
What is the total length of ribbon he has?
 $325\text{cm} + 130\text{cm} + 13\text{cm} = 468\text{cm}$ or 4.68m or 4680mm
- 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?
 $1\frac{3}{4}\text{kg} = 1750\text{g}$ $1750\text{g} - 1700\text{g} = 50\text{g}$ or 0.05kg
- c) A jug of 2290ml of water is poured into 0.2 litre cups.
How many cups can be filled from the jug?
 $2290\text{ml} \div 200\text{ml} = 11.45$ 11 cups can be filled
- 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?
 $3\text{kg} = 30\text{ mins} \times 6 = 3\text{ hours}$ $500\text{g} = 30\text{ mins}$ $250\text{g} = 15\text{ mins}$
 $3\text{ hours} + 30\text{ mins} + 15\text{ mins} + 15\text{ mins} = 4\text{ hours}$
- e) Jack says that 20% of 1600ml is 0.32 litres. Is he correct? Explain your thinking.
Children should reason that Jack is correct because $10\% = 160\text{ml}$ $20\% = 320\text{ml}$ $320\text{ml} = 0.32\text{ litres}$

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?

75% of 180 = 135

50% of £1670 = £835

10% of 1290 = 129

25% of £3580 = £895