

LO: To convert metric units of measure (bronze)

Practise

Convert the following to cm.

- 1) 35mm
- 2) 2m
- 3) 2.57m
- 4) 345mm

Convert the following to metres

- 5) 574cm
- 6) 323cm
- 7) 5.43km
- 8) 1.24km

Convert the following to km or litres depending on relevance.

- 9) 3453m
- 10) 8587ml
- 11) 485m
- 12) 129ml

Fluency

13) Josh is trying to run 10 kilometres in one week. On day one he runs 1.3 kilometres. On day two he runs 749 metres and on day three he runs 4.28 kilometres. How much further does he have to run?

14) Miss Brown is making a packed lunch for each child in her class. They each receive: A 200g sandwich, a 35g packet of crisps, a 72g cookie and a 43g apple.

She has 32 children in her class. What is the total weight of the classes packed lunch?

15) Write $>$, $<$ or $=$ to complete the statements.

a) 100 m 1 km

b) 5.1 l 5,100 ml

10 m 10 cm

607 l 0.607 ml

10.1 mm 101 cm

0.05 l 5 ml

LO: To convert metric units of measure (silver)

Practise

Convert the following to cm.

- 1) 2.57m
- 2) 345mm
- 3) 47mm

Convert the following to metres

- 4) 5.43km
- 5) 1.24km
- 6) 736cm

Convert the following to km or litres depending on relevance.

- 7) 485cm
- 8) 129ml
- 9) 5943ml

Fluency

10) Miss Brown is making a packed lunch for each child in her class. They each receive: A 200g sandwich, a 35g packet of crisps, a 72g cookie and a 43g apple. She has 32 children in her class. What is the total weight of the classes packed lunch?

Reasoning

- 11) True or false? If you convert any amount of grams into kilograms then it will never have an amount in the units e.g. $76\text{g} = 0.0076\text{kg}$
- 12) A shop sells litre bottles of water for 99p each but has an offer for 8 x 300ml bottles for £2. If Steve wants to buy 12 l of water which should he buy and why?

Problem Solving

Dora and Amir are trying to convert 1.05 metres into millimetres.

13)



Dora

You can multiply 1.05 by 100 to convert it into centimetres, then multiply the product by 10 to convert it into millimetres.



Amir

You can just multiply 1.05 by 1,000!

Who do you agree with? _____

Explain your thinking.

LO: To convert metric units of measure (gold)

Practise

Convert the following to cm.

- 1) 2.57m
- 2) 345mm

Convert the following to metres

- 3) 5.43km
- 4) 736cm

Convert the following to km or litres depending on relevance.

- 5) 485cm
- 6) 5943ml

Fluency

- 7) Miss Brown is making a packed lunch for each child in her class. They each receive: A 200g sandwich, a 35g packet of crisps, a 72g cookie and a 43g apple. She has 32 children in her class. What is the total weight of the classes packed lunch?

Reasoning

- 8) A shop sells litre bottles of water for 99p each but has an offer for 8 x 300ml bottles for £2. If Steve wants to buy 12l of water which should he buy and why?

Problem Solving

- 9) Three athletes (Ben, Greg and Sam) jumped a total of 34.77m in a long jump competition. Greg jumped exactly 2 metres further than Ben. Sam jumped exactly 2 metres further than Greg. What distance did they all jump?

10)

There are 1,000 kg in one tonne.

- a) How many grams are there in one tonne?

- b) A car weighs 1.3 tonnes.

Write the weight of the car in grams.

LO: To convert metric units of measure (bronze) - answers

Practise

Convert the following to cm.

- 1) 3.5 cm
- 2) 200 cm
- 3) 257 cm
- 4) 34.5 cm

Convert the following to metres

- 5) 5,74 m
- 6) 3.23 m
- 7) 5430 m
- 8) 1240 m

Convert the following to km or litres depending on relevance.

- 9) 3.453 km
- 10) 8,587 l
- 11) 0.485 km
- 12) 0.129 l

Fluency

13) 3.671 km

14) 11,200g or 11.2 kg

15)

Write > , < or = to complete the statements.

a) 100 m 1 km

10 m 10 cm

10.1 mm 101 cm

b) 5.1 l 5,100 ml

607 l 0.607 ml

0.05 l 5 ml

LO: To convert metric units of measure (silver)

Practise

Convert the following to cm.

- 1) 257 cm
- 2) 34.5 mm
- 3) 4.7 mm

Convert the following to metres

- 4) 5430 m
- 5) 1240 m
- 6) 7.36 m

Convert the following to km or litres depending on relevance.

- 7) 0.00485 km
- 8) 0.129 l
- 9) 5.943 l

Fluency

10) 11,200g or 11.2 kg

Reasoning

11) False - any amount above 1000 will have an amount in the units column

e.g. 3450g = 3.45kg

12) $8 \times 300\text{ml bottles for } \pounds 2. - 1200 \div 300 = 40 \quad 40 \div 8 = 5 \quad 5 \times \pounds 2 = \pounds 10$

Whereas $12 \times 99\text{p} = \pounds 11.88$

Problem solving

13)

Dora and Amir are trying to convert 1.05 metres into millimetres.



Dora

You can multiply 1.05 by 100 to convert it into centimetres, then multiply the product by 10 to convert it into millimetres.

Amir

You can just multiply 1.05 by 1,000!



Who do you agree with?
Explain your thinking.

They are both right because...

LO: To convert metric units of measure (gold)

Practise

Convert the following to cm.

- 1) 2.57 cm
- 2) 34.5 cm

Convert the following to metres

- 3) 5430 m
- 4) 7.36 m

Convert the following to km or litres depending on relevance.

- 5) 0.00485 km
- 6) 5.943 l

Fluency

- 7) 11,200g or 11.2 kg

Reasoning

- 8) 8 x 300ml bottles for £2. - $1200 \div 300 = 40$ $40 \div 8 = 5$ $5 \times £2 = £10$
Whereas $12 \times 99p = £11.88$

Problem Solving

- 9) Sam = 13.59m Greg = 11.59m Ben = 9.59m

- 10) There are 1,000 kg in one tonne.

a) How many grams are there in one tonne?

b) A car weighs 1.3 tonnes.

Write the weight of the car in grams.

Reasoning

- 1) True or false? If you convert any amount of grams into kilograms then it will never have an amount in the units e.g. $76\text{g} = 0.0076\text{kg}$
- 2) A shop sells litre bottles of water for 99p each but has an offer for 8 x 300ml bottles for £2. If Steve wants to buy 12l of water which should he buy and why?

Problem Solving

- 11) Your friend has asked you to give them questions that test their fluency. Write some questions that check their fluency in converting measures (check fluency for ideas if you are unsure)