



THIRD SPACE
LEARNING

Ready-to-go Lesson Slides

Year 4

Measurement: Length & Perimeter
Lesson 1

Aut1

At Third Space Learning we provide personalised online lessons from specialist maths tutors to support the target groups in your school.

These ready-to-go slides are designed to work alongside our interventions to supplement quality first teaching and raise attainment in maths for all pupils.

To find out more about how you could use our 1-to-1 interventions year-round to boost maths progress in your school then get in touch:

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Boosting maths progress through 1-to-1 conversations...



To be able to convert between cm and m

STARTER:

Which one of these is not a reasonable estimate?

I think the distance from my school to my house is about 1,500m.

I think the length of our school hall is about 150m.

I think the width of a computer key is approximately 15mm.

I think the height of our classroom window is roughly 150cm.

Success Criteria:

Mastery:

I can convert between cm and m in a real-life context.

Greater Depth:

I can apply what I have learned about converting between cm and m to solve more complex problems.

To be able to convert between cm and m

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For a school hall to be 150m long, your Headteacher would need a loudspeaker to do Assembly every morning!
The other estimates are appropriate, but this one is not!

To be able to convert between cm and m

There are 100 cm in 1 m

To convert metres to centimetres, we multiply by 100.

Success Criteria:

Mastery:

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Greater Depth:

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Try these:

$$3\text{m} = \underline{\hspace{2cm}}\text{cm}$$

$$6\text{m} = \underline{\hspace{2cm}}\text{cm}$$

$$8\text{m} = \underline{\hspace{2cm}}\text{cm}$$

$$2.3\text{m} = \underline{\hspace{2cm}}\text{cm}$$

$$6.5\text{m} = \underline{\hspace{2cm}}\text{cm}$$

To be able to convert between cm and m

There are 100 cm in 1 m

To convert metres to centimetres, we multiply by 100.

Try these:

$$3\text{m} = 300\text{cm}$$

$$6\text{m} = 600\text{cm}$$

$$8\text{m} = 800\text{cm}$$

$$2.3\text{m} = 230\text{cm}$$

$$6.5\text{m} = 650\text{cm}$$

Success Criteria:

Mastery:

I can convert between cm and m in a real-life context.

Greater Depth:

I can apply what I have learned about converting between cm and m to solve more complex problems.

Convert: cm to m

$$1\text{m} = 100\text{cm}$$

To convert cm to m you divide by 100

$$100\text{cm} = 1\text{m}$$

$$200\text{cm} = 2\text{m}$$

$$500\text{cm} = 5\text{m}$$

Convert: m to cm

$\div 100$

How many m in 100 cm?



in 200 cm?



in 1000 cm?



in 5000 cm?



To be able to convert between cm and m

ACTIVITY 2:

Convert these measurements.

Use a place value grid to help you

a) $7\text{m} = \underline{\hspace{2cm}}\text{ cm}$

b) $300\text{ cm} = \underline{\hspace{2cm}}\text{ m}$

c) $2.5\text{m} = \underline{\hspace{2cm}}\text{ cm}$

d) $9.5\text{ m} = \underline{\hspace{2cm}}\text{ cm}$

e) $450\text{ cm} = \underline{\hspace{2cm}}\text{ m}$

f) $2.4\text{ m} = \underline{\hspace{2cm}}\text{ cm}$

Convert: m to cm
 $\div 100$

Convert: cm to m
 $\times 100$

Success Criteria:

Mastery:

I can convert between cm and m in a real-life context.

Greater Depth:

I can apply what I have learned about converting between cm and m to solve more complex problems.

To be able to convert between cm and m

ACTIVITY 2:

Convert these measurements.

Sketch bar models to help you calculate each answer.

a) $7\text{m} = \text{700 cm}$

b) $300 \text{ cm} = \text{3m}$

c) $2 \frac{1}{2} \text{ m} = \text{250 cm}$

d) $9 \frac{1}{2} \text{ m} = \text{950 cm}$

e) $450 \text{ cm} = \text{4.5 m}$

f) $2.4 \text{ m} = \text{240 cm}$

Success Criteria:

Mastery:

I can convert between cm and m in a real-life context.

Greater Depth:

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To be able to convert between cm and m

ACTIVITY 4:

Use $<$, $>$ or $=$ to make each statement correct.

17 m 1700 cm

10.5 m 150 cm

885 cm 8.8 m

50 cm + 1 m 150 m

45 cm 4.5 m

Success Criteria:

Mastery:

I can convert between cm and m in a real-life context.

Greater Depth:

I can apply what I have learned about converting between cm and m to solve more complex problems.

To be able to convert between cm and m

ACTIVITY 4:

Use $<$, $>$ or $=$ to make each statement correct.

$$17 \text{ m} \quad = \quad 1700 \text{ cm}$$

$$10.5 \text{ m} \quad > \quad 150 \text{ cm}$$

$$885 \text{ cm} \quad > \quad 8.8 \text{ m}$$

$$50 \text{ cm} + 1 \text{ m} \quad > \quad 150 \text{ m}$$

$$45 \text{ cm} \quad < \quad 4.5 \text{ m}$$

Success Criteria:

Mastery:

I can convert between cm and m in a real-life context.

Greater Depth:

I can apply what I have learned about converting between cm and m to solve more complex problems.

To be able to convert between cm and m

ACTIVITY 5:

Jack is 1.5m tall.

James is 25cm taller.

How tall is James?

Success Criteria:

Mastery:

I can convert between cm and m in a real-life context.

Greater Depth:

I can apply what I have learned about converting between cm and m to solve more complex problems.

What are the different steps you need to do to solve this problem?

To be able to convert between cm and m

ACTIVITY 5:

Jack is 1.5m tall.

James is 25cm taller.

How tall is James?

What are the different steps you need to do to solve this problem?

We know that Jack is 1.5m tall. Convert to cm ($\times 100$) = **150cm**.

James is 25cm taller. **150 cm + 25 cm = 175cm**

How tall is James? **175cm or 1.75m ($\div 100$)**

Success Criteria:

Mastery:

I can convert between cm and m in a real-life context.

Greater Depth:

I can apply what I have learned about converting between cm and m to solve more complex problems.

Bigger unit → smaller unit **TIMES**

Smaller unit → bigger unit **DIVIDE**

$m \rightarrow cm \quad \times 100$

$cm \rightarrow m \quad \div 100$