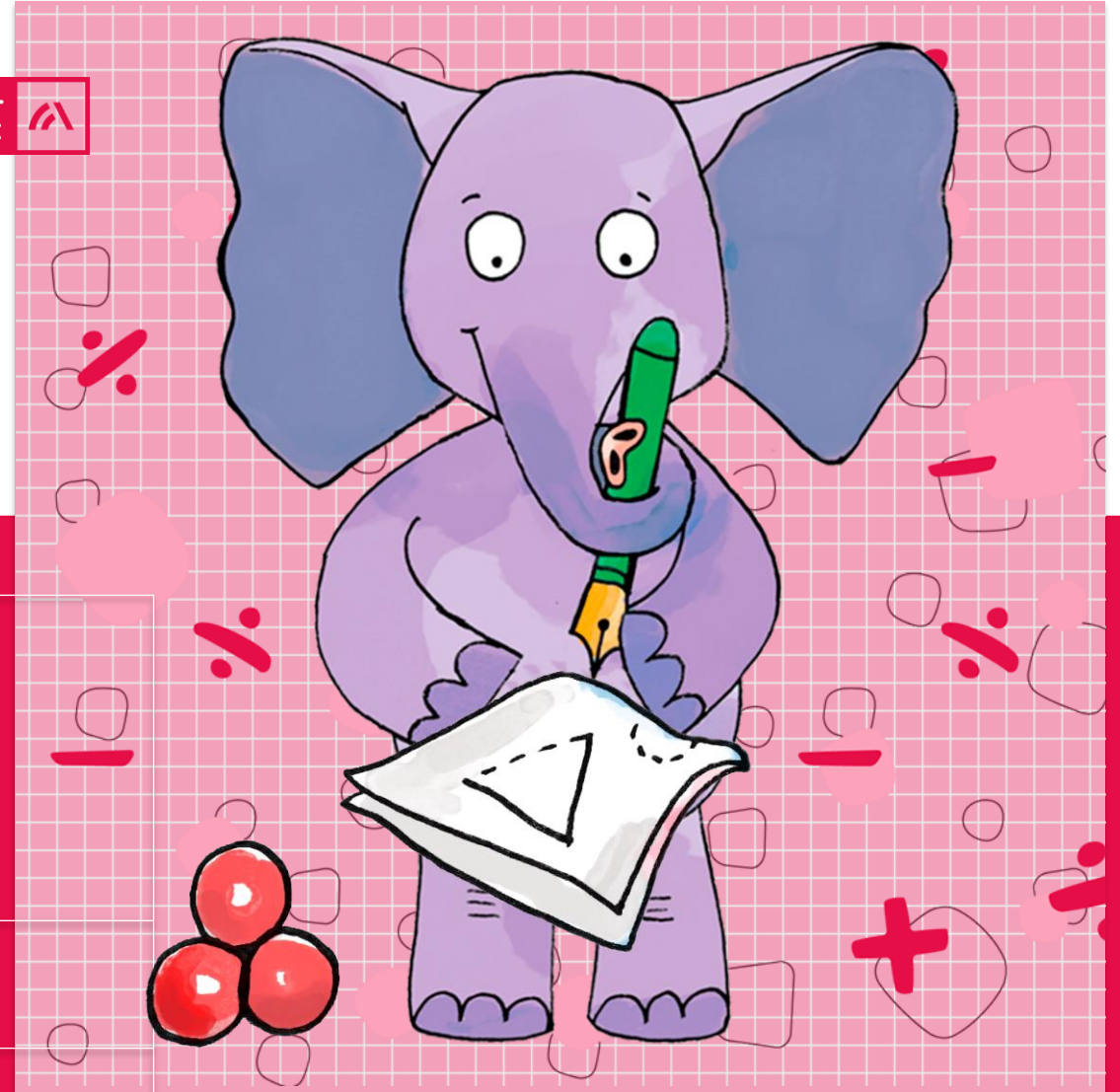


09.03.21

Big ?: Can I convert
between metric units of
length?



Key learning: To convert between metric units of length



length

breadth



height



distance



ruler



tape measure



millimetre (mm)



centimetre (cm)

metre (m)



kilometre (km)

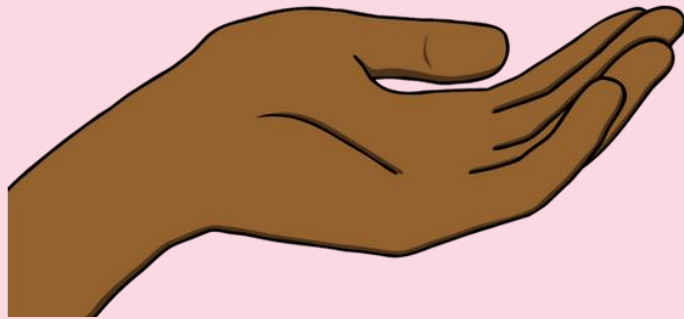


Star Words

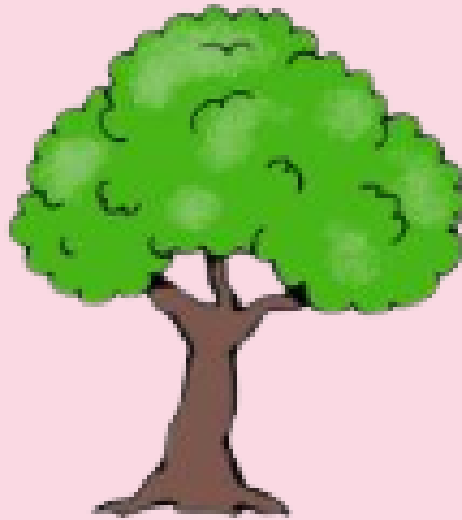


Standard and non-standard units of measure

How many different non-standard units of length can you think of?



A hand



A tree



A jump

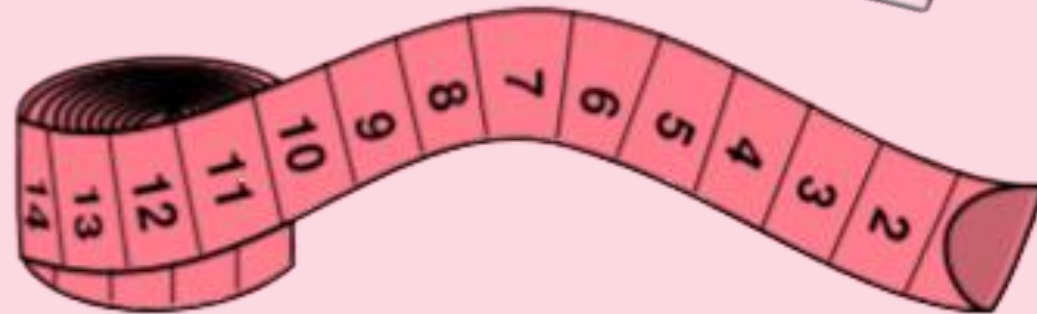
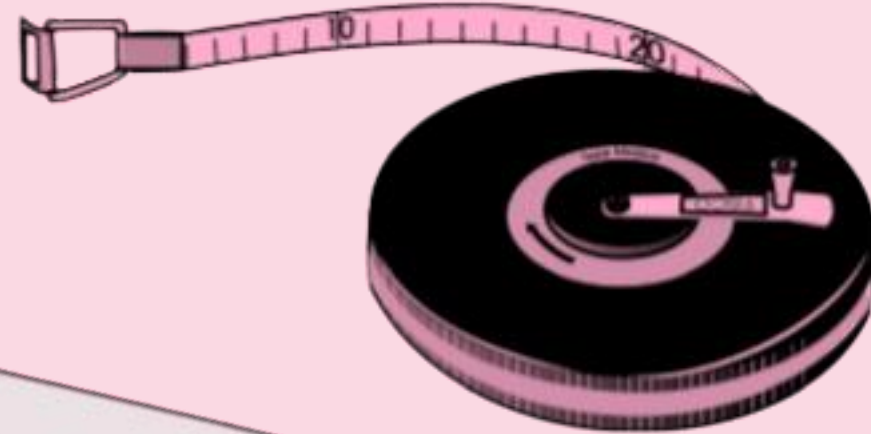


Do Now

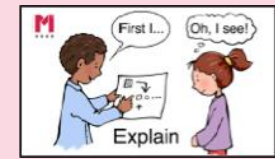


Units of length

What standard units of length do we use?
Why do we use different units?



Units of length



What facts do you know that might help you to convert between units of length?

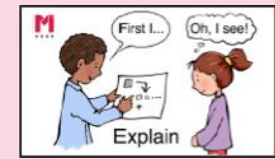
1	kilometre	=	<input type="text"/>	metres
1	km	=	<input type="text"/>	m
1	metre	=	<input type="text"/>	centimetres
1	m	=	<input type="text"/>	cm
1	centimetre	=	<input type="text"/>	millimetres
1	cm	=	<input type="text"/>	mm

Move the red boxes to reveal content.

Which units of length will you need to help plan an Olympic Stadium and village?



Units of length



What facts do you know that might help you to convert between units of length?

1	kilometre	=	1000	metres
1	km	=	1000	m
1	metre	=	100	centimetres
1	m	=	100	cm
1	centimetre	=	10	millimetres
1	cm	=	10	mm

Move the red boxes to reveal content.

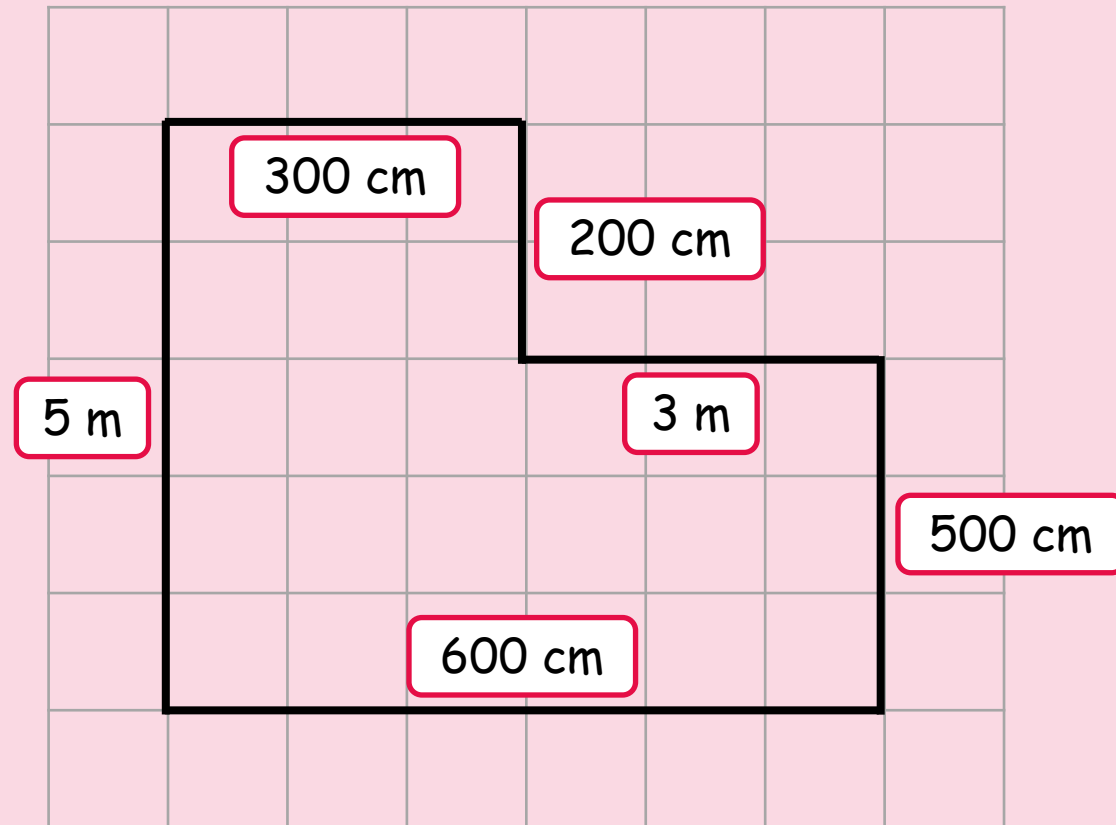
Which units of length will you need to help plan an Olympic Stadium and village?



Units of length



Athlete's bedroom



The Tokyo Olympic committee has received the plans for the Olympic Stadium and Olympic village - but there are some problems.

What problems can you see?



Converting units of length

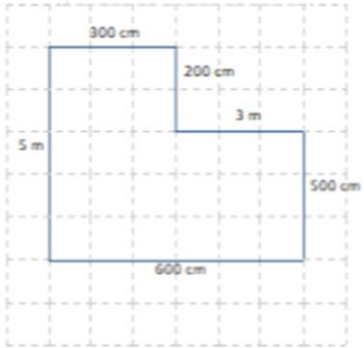


Talk Task

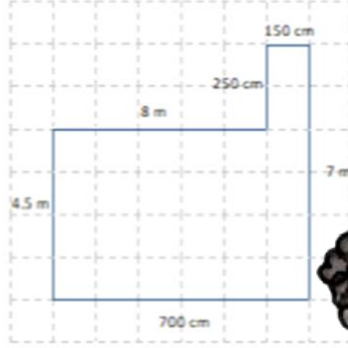
Olympic Village planning

Explore the plans for different parts of the Olympic village. What mistakes can you find in these?

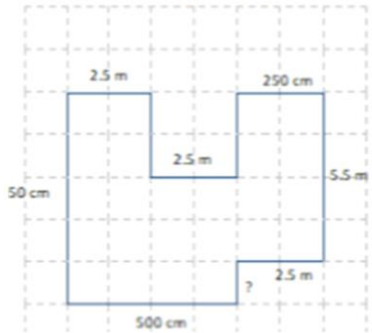
Athlete bedroom



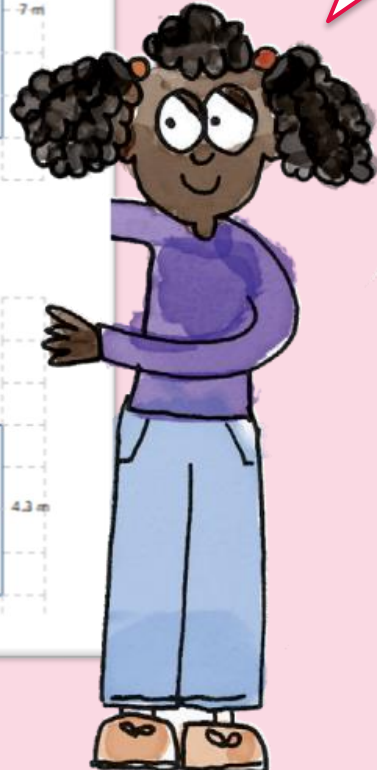
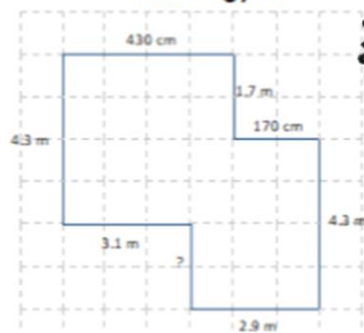
Athlete bathroom



Athlete kitchen



Athlete gym

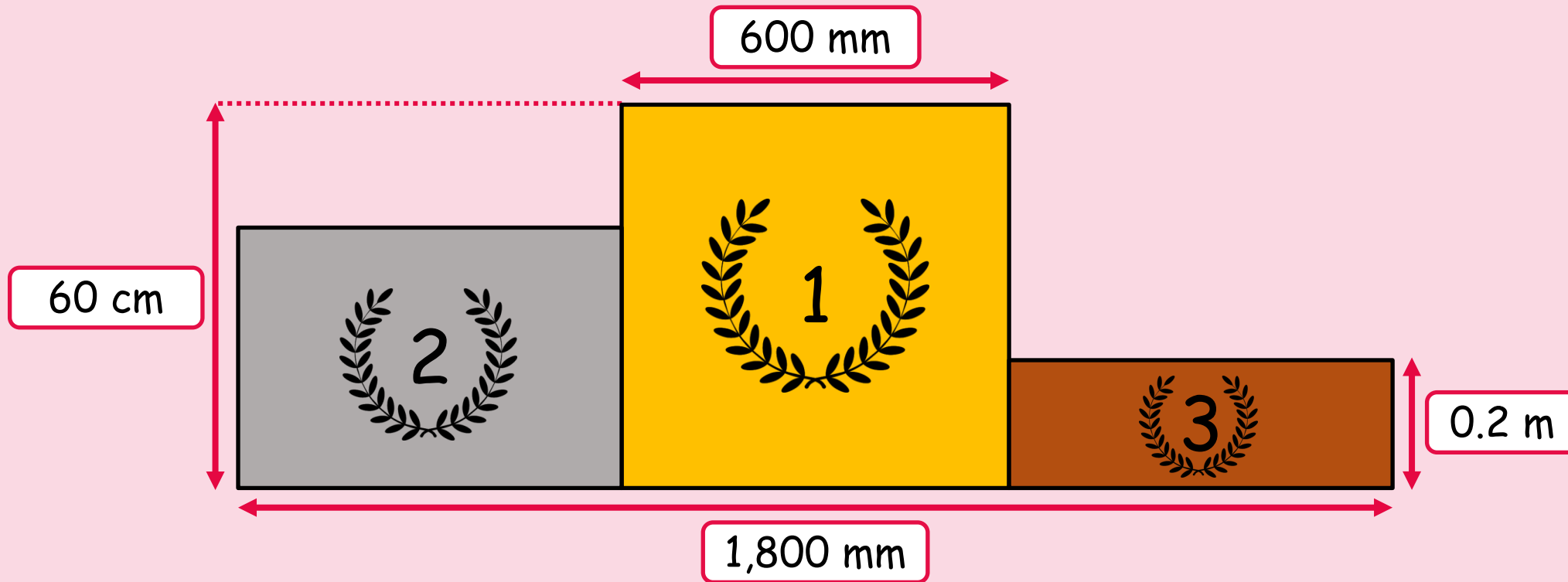


I can see that the plan is in both centimetres and metres. I am going to convert all of the lengths into centimetres.

I know there are 100 cm in 1 m, so I am going to multiply the metre lengths by 100 to find the equivalent centimetre lengths.



Converting between millimetres, centimetres, metres and kilometres



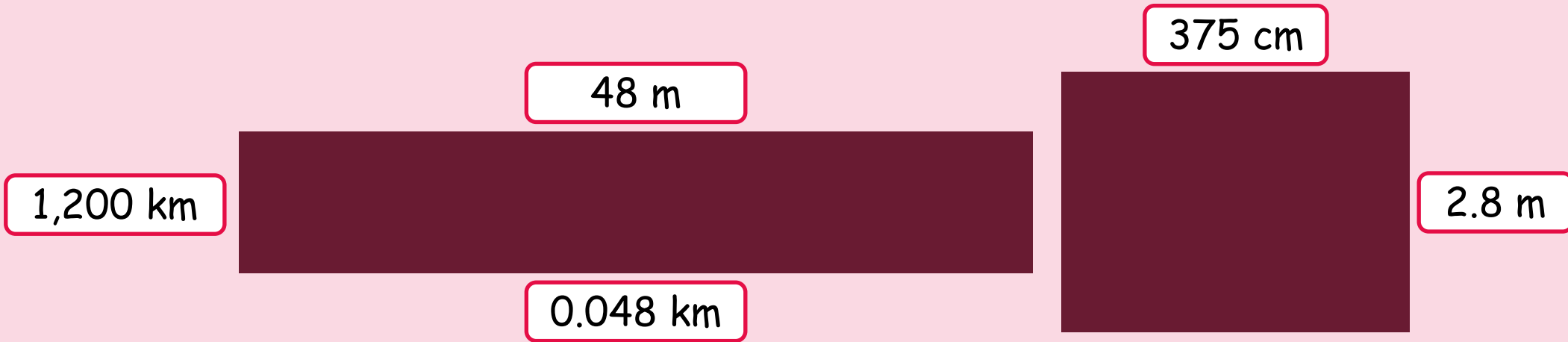
- Are these efficient units of measure?
- Into which unit should these measures be converted?



Converting between millimetres, centimetres, metres and kilometres



Proposed long-jump area



- Are these appropriate units of measure?
- Into which unit should these measures be converted?



Key learning: To convert between metric units of length

Olympic stadium track and field

Part of stadium	Original measure (with unit)	Converted measure (with unit)
Running track (length)	0.1 km	100 m

Using the Independent activity sheet (which can be found on the blog) can you complete this table?

The answers can also be found on the blog.



Independent Task



Celebrating success and addressing misconceptions

- What strategies did you use to complete the table?
- What known facts did you use?
- Which values did you find most difficult to calculate?

