

Y3 M5c. Can measure lengths using appropriate measuring equipment and record using the correct unit

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Teachers' Notes

- ❑ The PiXL therapies can be taught to a whole class or a target group. Year 3-5 therapies are designed to take approximately 30-40 minutes. However, this is flexible: it may be that only part of the therapy is taught or it could, of course, be adapted or extended.
- ❑ Each therapy begins with a LORIC activity to develop relevant learning behaviours.
- ❑ This is followed by a vocabulary task, which uses the PiXL 5-phase approach to teach key mathematical vocabulary. Further resources to develop vocabulary can be found in the Whole School area.
- ❑ Each therapy adopts the 'Teach, model and apply' process with opportunities for pupils to demonstrate the taught skill independently.
- ❑ Problem solving and reasoning activities are an integral part of each therapy.

Progress across amber – the 4-stage model

The three therapy tests which accompany this resource can be used to revisit the taught skill to check that the pupil is able to perform it independently and consistently.

A

A child has successfully completed a therapy test independently, following a set of therapy sessions.

A

A child has successfully completed a therapy test independently, a period after the relevant therapy sessions – we would advise about 2 weeks.

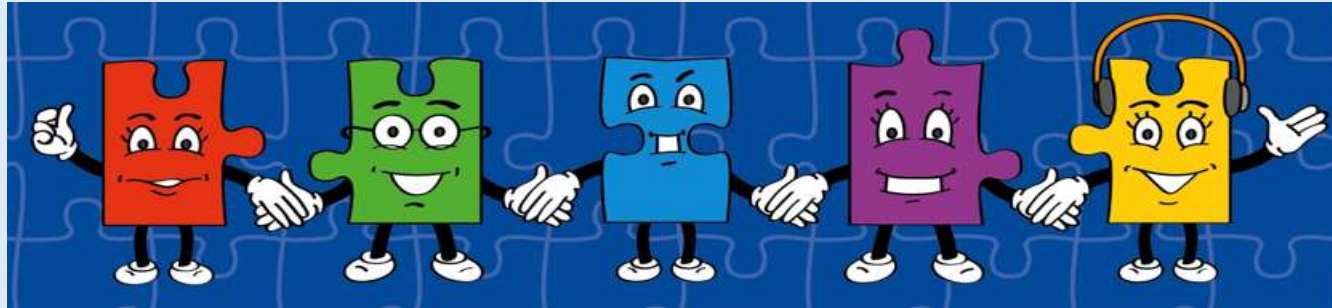
DA

A child has successfully applied their knowledge or skill in an unfamiliar context. This may be application across the curriculum or in a problem.

G

A pupil has successfully re-visited the skills at a later point, and applies these in an unfamiliar context or problem, or across the curriculum.

LORIC task



Our Primary Edge attributes help us to become better learners and today is no exception. Before you start this activity, here are some ideas for how you will need your Raj Resilience skills today:

- Persevere, even when tasks seem difficult
- Consider all options carefully
- Always check your answer

LORIC task

In your pair you have been given a ruler, a die and a counter. Place the counter in the centre of the ruler (at 15cm if this is a 30cm ruler). Choose one end of the ruler each.

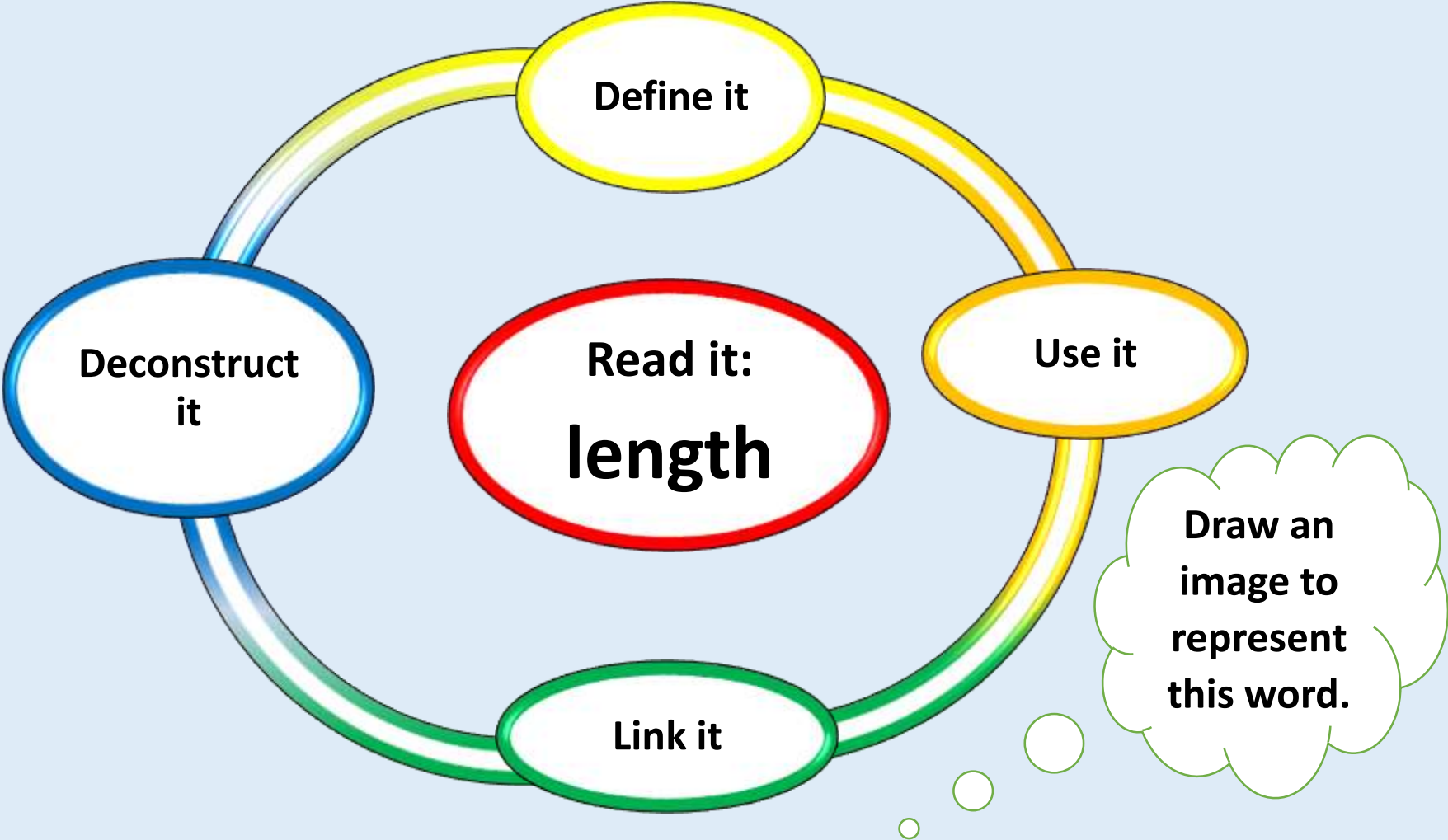
Take turns to roll the die. After your roll, move the die in your direction (e.g. if you roll a 3, you will move the counter 3cm closer to your end of the ruler).

The winner is whoever reaches their end of the ruler first!



Vocabulary activity

measure
length



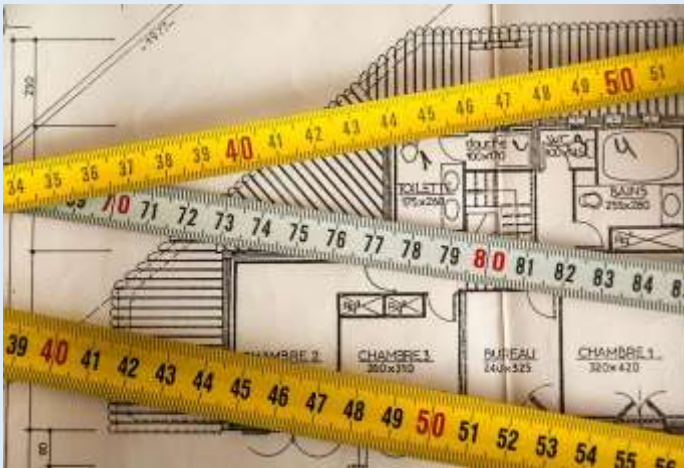
Teach

Length tells us
how **long** or **far**
something is.

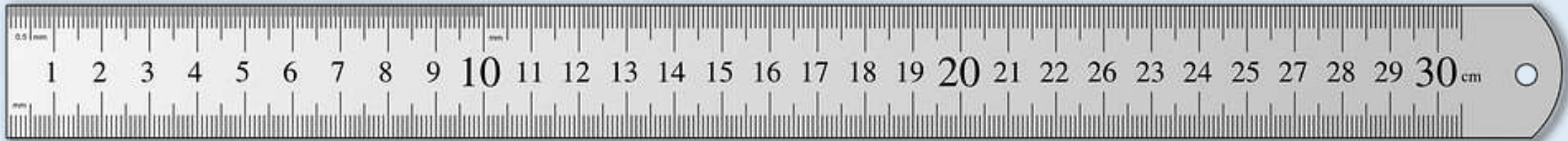
Teach



When might we
need to measure
length in real life?



Teach



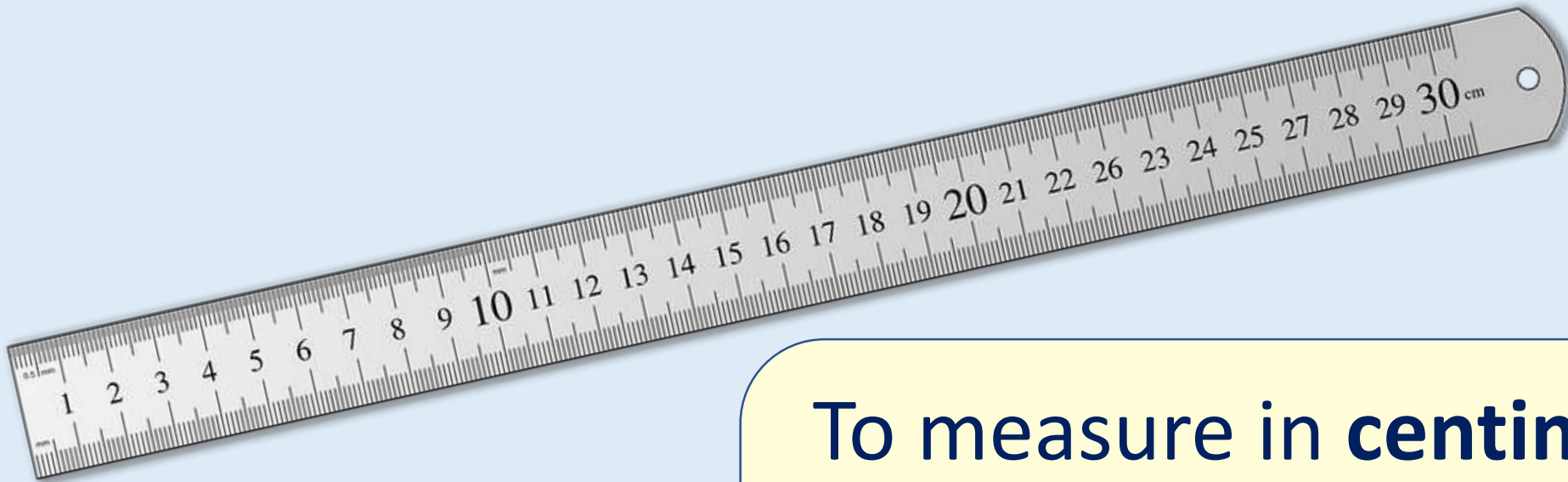
Look at your ruler. There are
**10 millimetres (mm) in
1 centimetre cm).**

Model

Millimetres (mm) are used for measuring very small lengths accurately.

Centimetres (cm) are used for measuring quite small lengths.

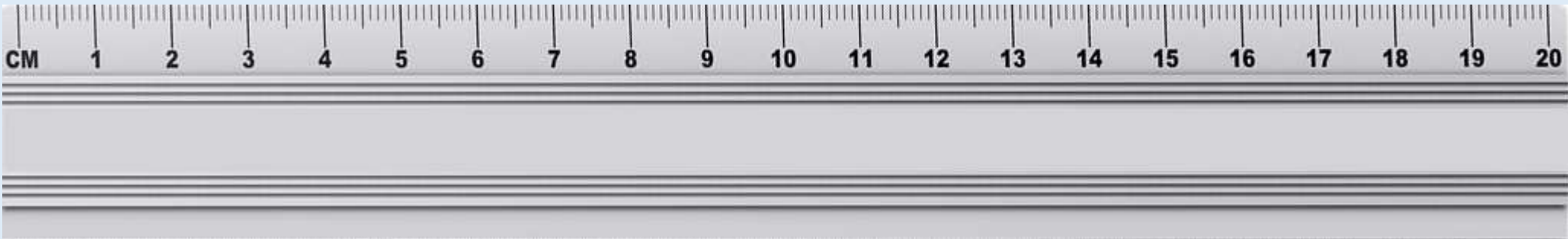
Model



To measure in **centimetres (cm)** and **millimetres (mm)**, we use a ruler, a metre stick or a tape measure.

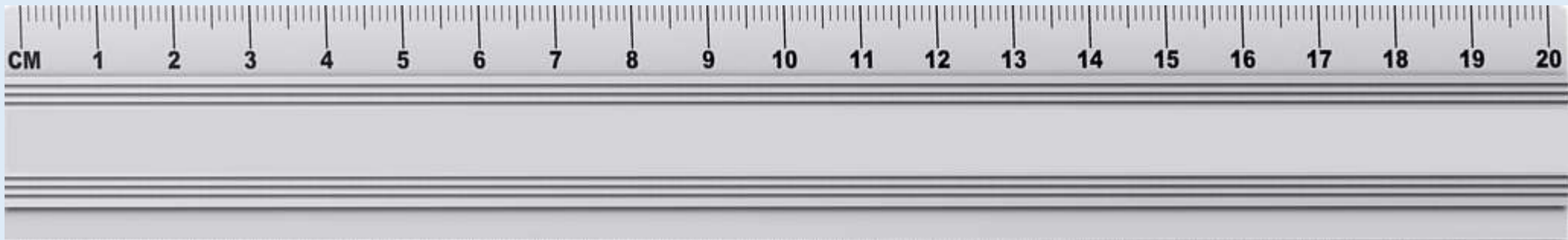
Model

Look at your ruler. Where is 0?



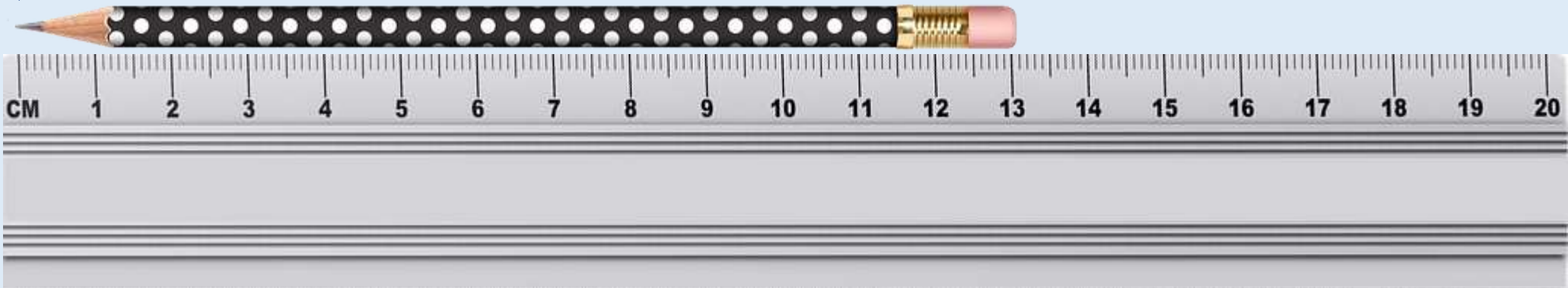
Model

Many rulers have a space at the end.
0 might not be at the end of the ruler.



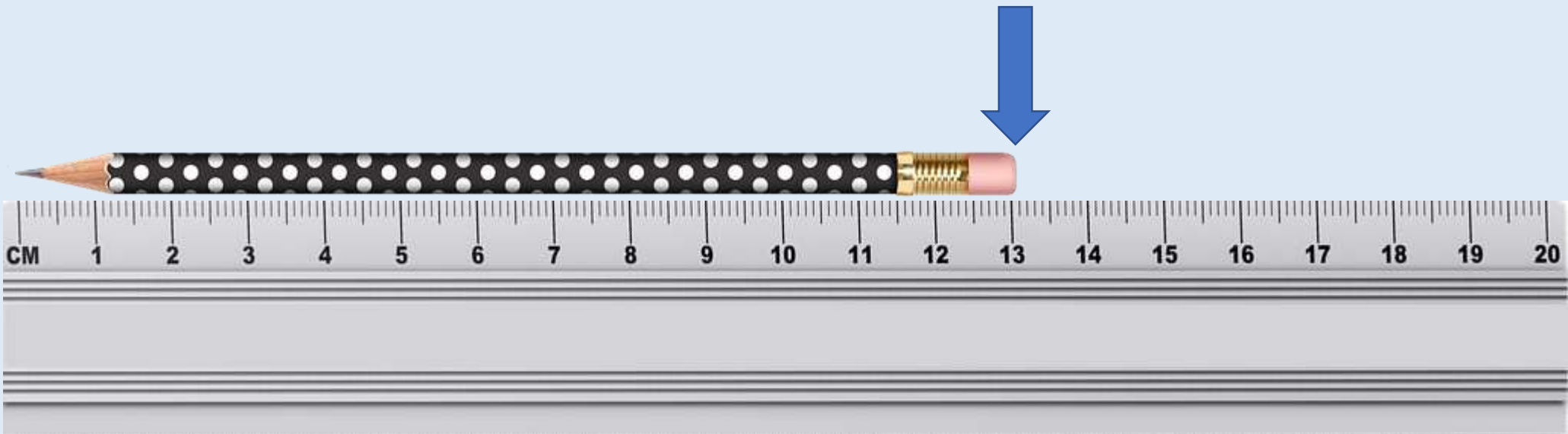
Model

When we are measuring something, we must make sure the 0 is lined up with the end of the line or object.



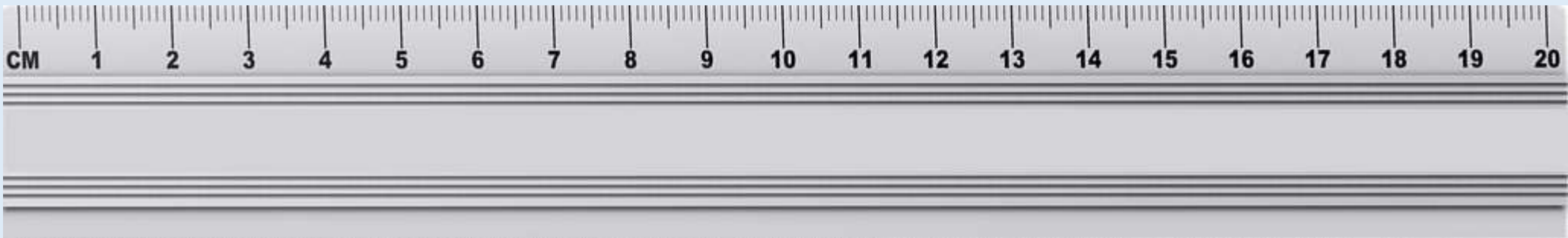
Model

We can then see where the end of the line or object comes to on our ruler. This pencil is 13cm long.



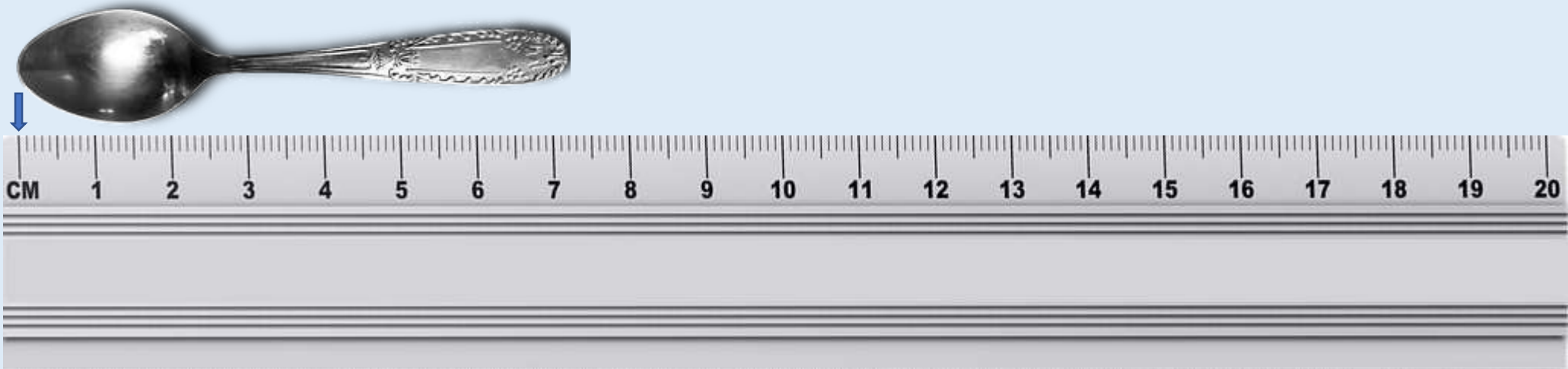
Model

If the item is in between **centimetres (cm)**, we will need to use **millimetres (mm)** too.



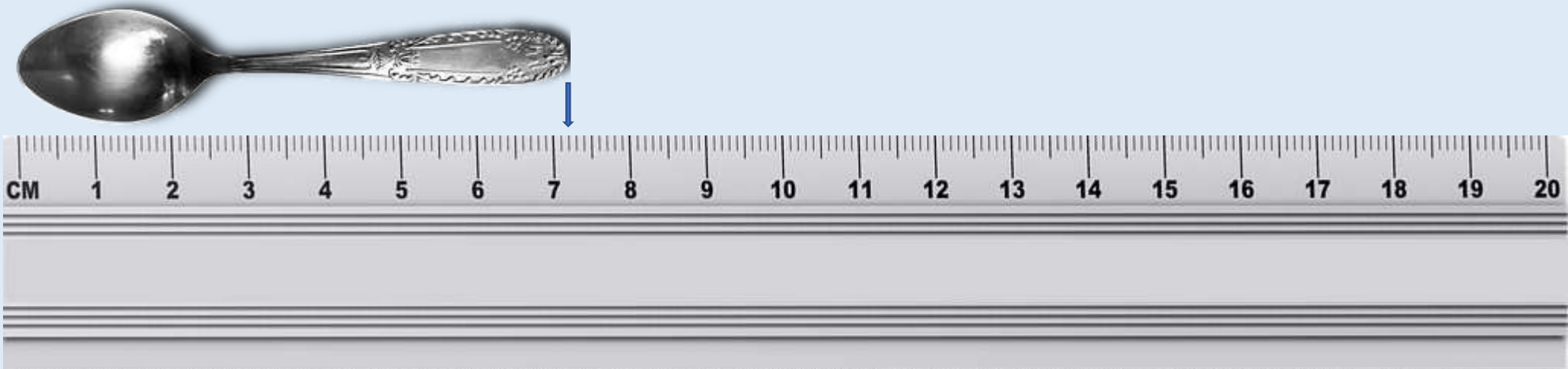
Model

Again, we line up the edge of the item with 0 on our ruler.



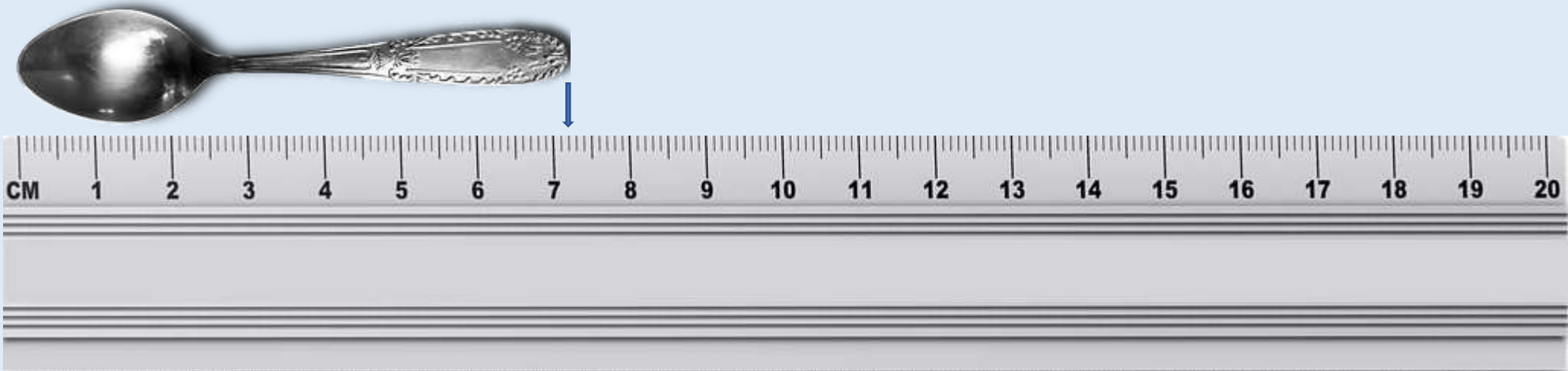
Model

We can then read how many **centimetres** and how many extra **millimetres** the item measures.



Model

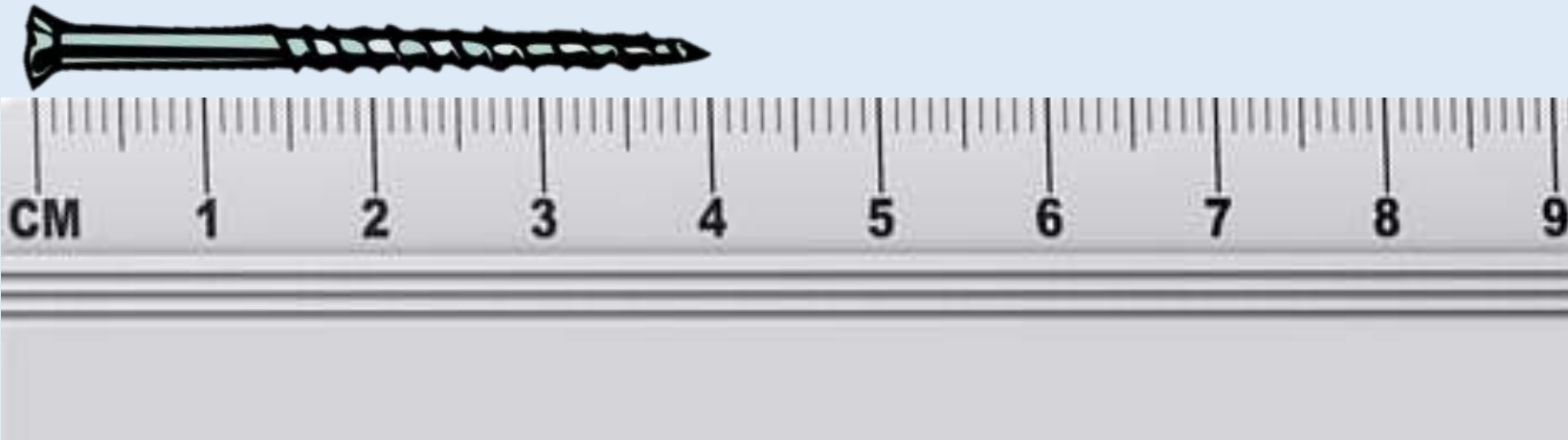
This spoon measures 7cm and 2mm.



Apply

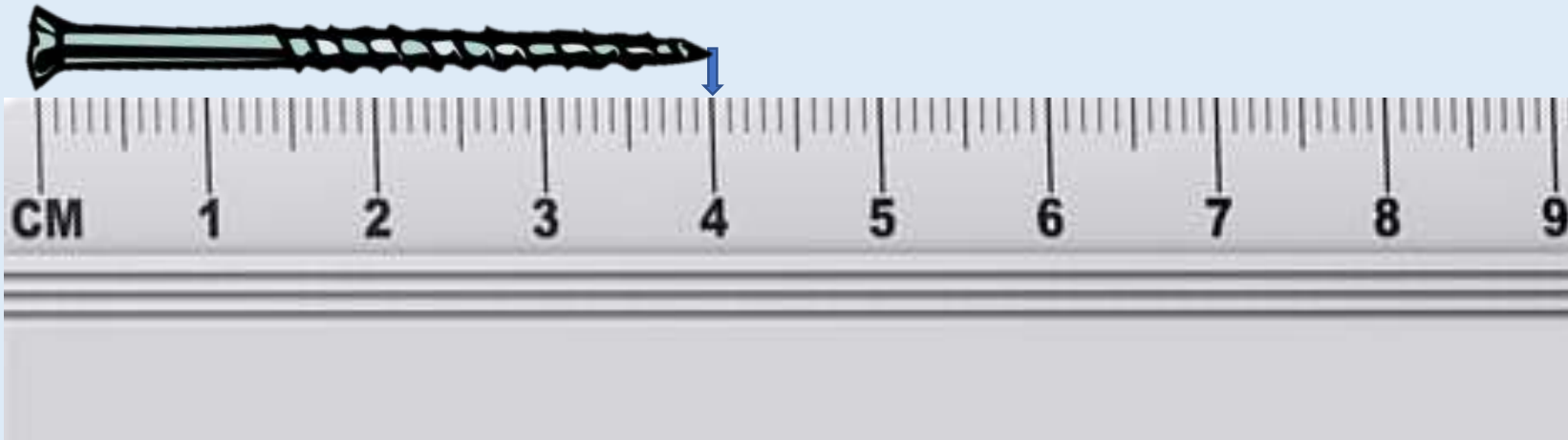
How long is this item?

The ruler has already been lined up for you.



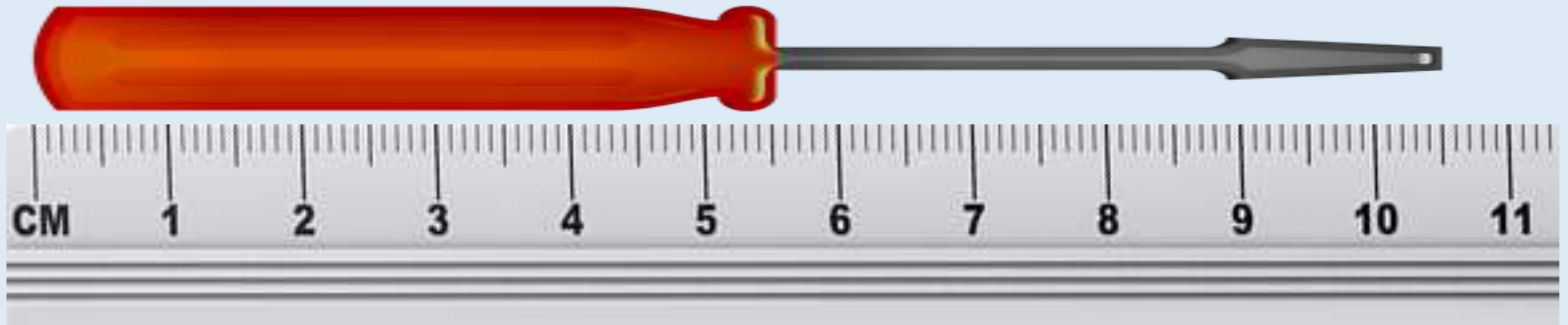
Apply: How did you do?

The screw is 4cm long.



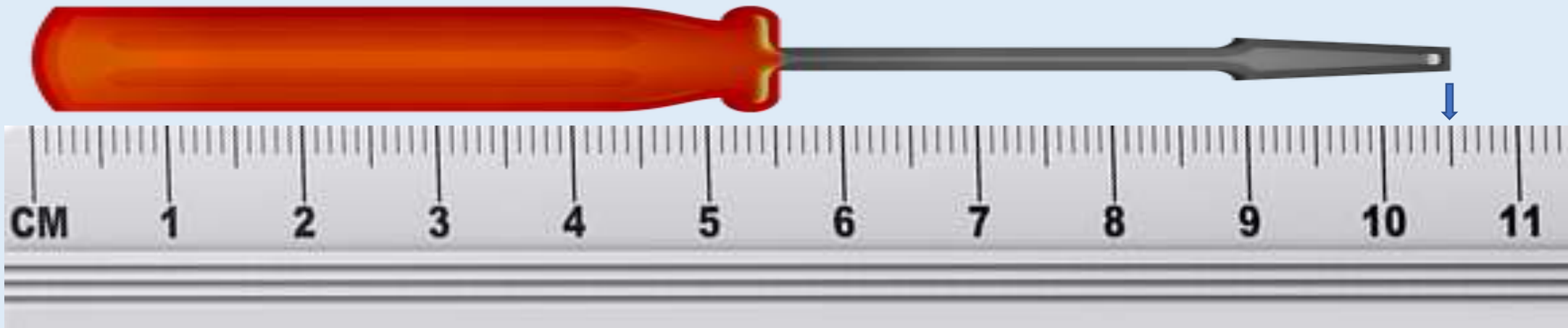
Apply

How long is this item?
The ruler has already been lined up for you.



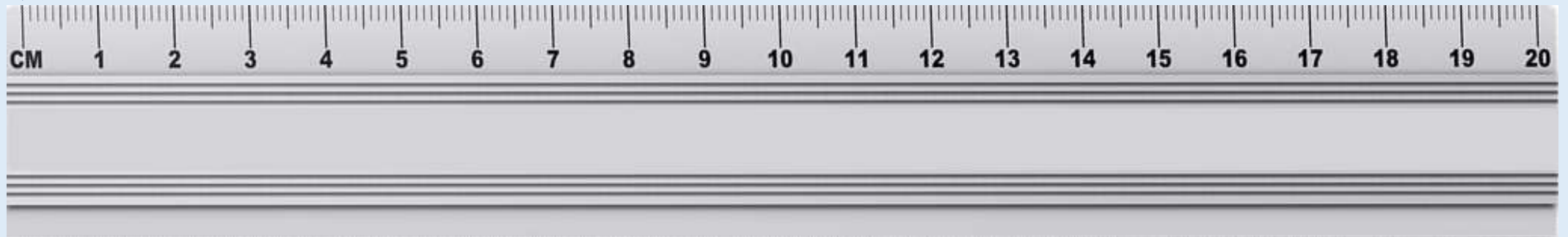
Apply: How did you do?

The screwdriver is 10cm and 5mm long.



Apply

Now use your own ruler to measure the length of some items in real life. Don't forget to line up the edge of the item with the 0 on your ruler.



Teach



Look at a metre stick or tape measure. There are **100 centimetres (cm)** in **1 metre (m)**.

Model

Metres are used for
measuring larger
lengths.

Model

We can use metre sticks, tape measures or trundle wheels.

Again, we must remember to line the item up carefully with the 0.

Apply

As a group, let's measure the length of the room.
What equipment shall we use?
What advice would you give to someone to avoid making mistakes?

Apply: How did you do?

Remember:

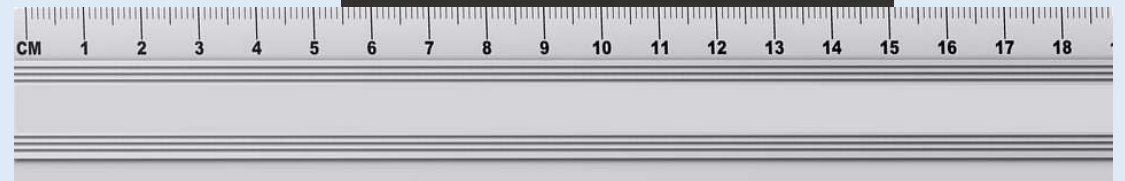
- Choose the right measuring equipment before you start.
- Line up the start with 0 on the equipment.
- When you read the length, be careful to use metres, centimetres and millimetres accurately.

Apply

Kay is measuring the dimensions of her picture.

She says the picture is 15cm wide.

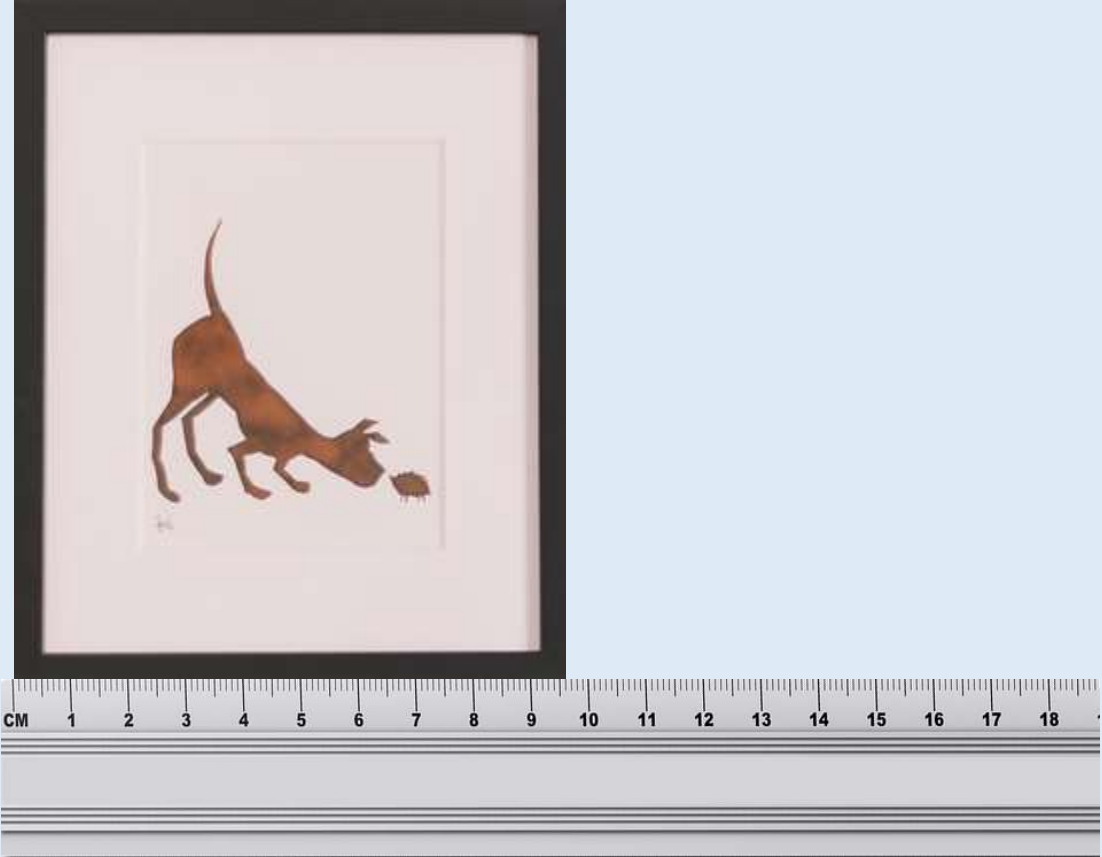
Is she correct? Explain your answer.



Apply: How did you do?

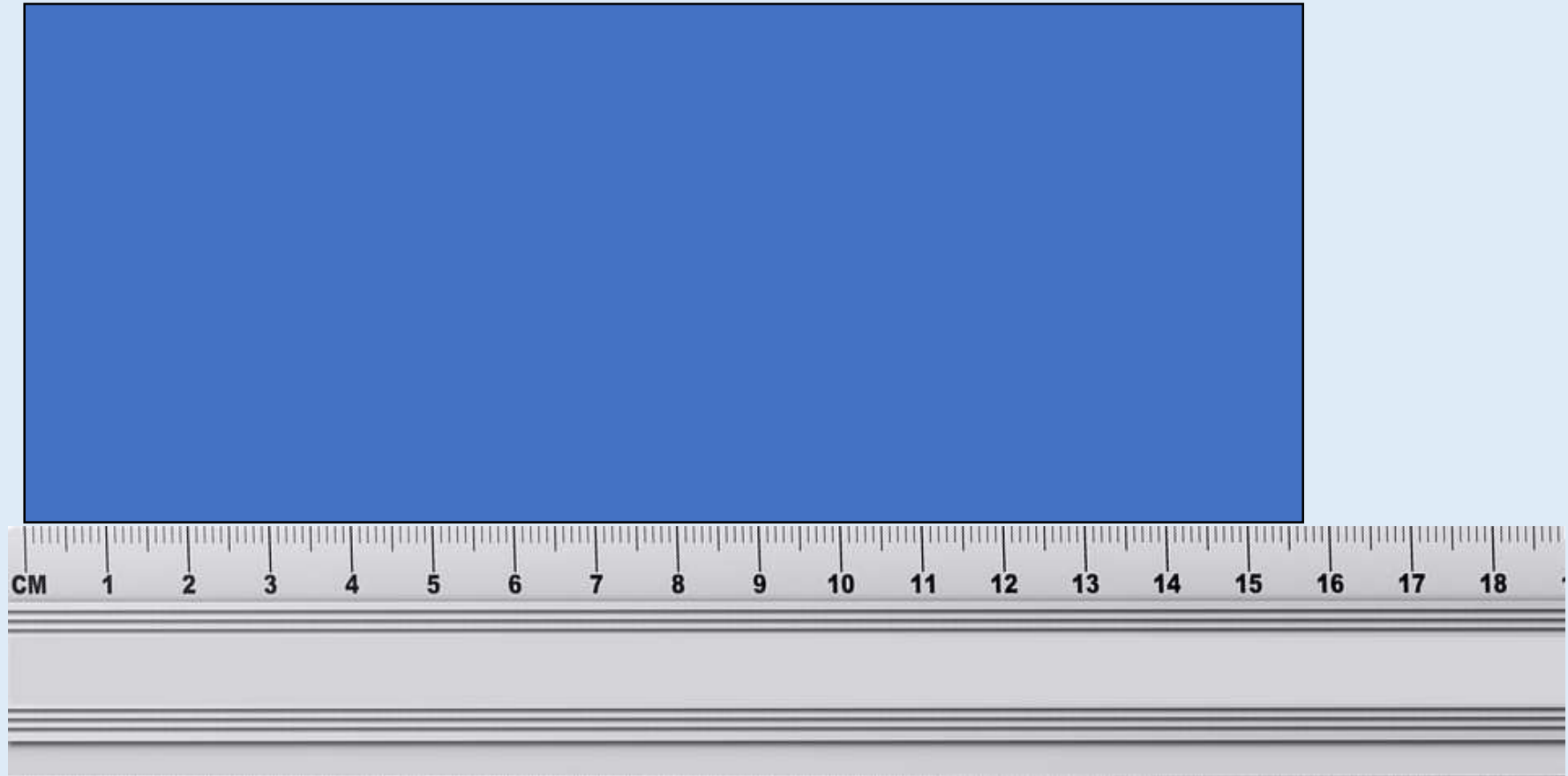
No, Kay isn't correct as she has not lined up the edge of the picture with 0 on the ruler.

The picture is not 15cm. It is actually 9cm and 6mm.



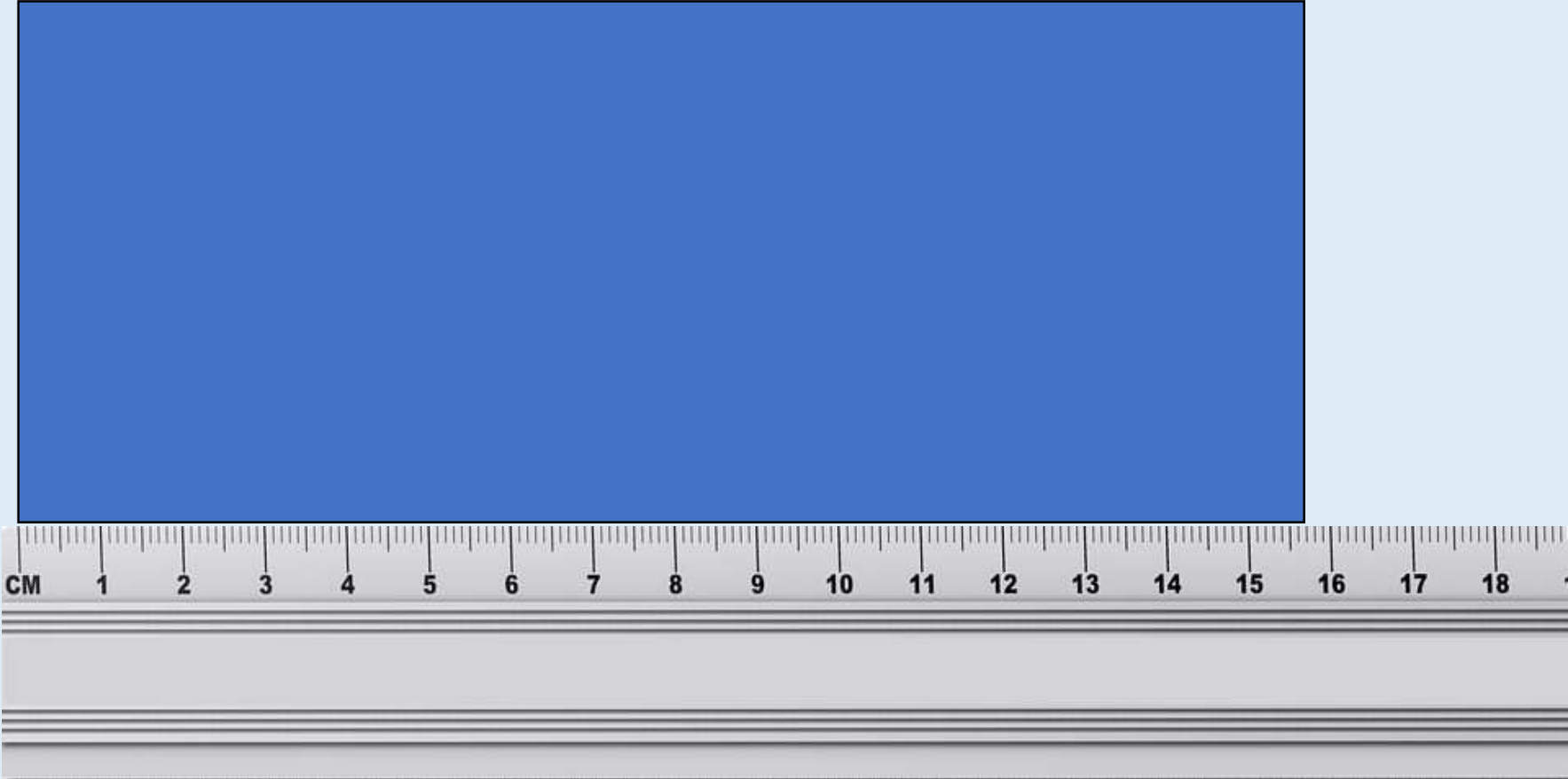
Apply

Harry is measuring some material to make a wallet. He says the material is 16cm wide. Is he correct? Explain your answer.



Apply: How did you do?

Although he has lined up the material correctly, Harry has not been accurate enough when reading the measurement. It does not measure 16cm. It is 15cm and 7mm.



Reflect/Remember

What top tips would you give to someone who is measuring the length of something using measuring equipment?