



Year 2

Remote Learning

Maths Week 7

Message

Hello Year 2,

We hope you enjoyed revising your division and multiplication skills last week. Did you remember how to use the strategies from when you learnt them in school? Some of you sent in your work and you did so well!

This week, we are starting a new unit of work all about measuring length. **You will need a ruler** or a tape measure (that shows centimetres) for some of the activities.

By the end of the week you will be able to measure in centimetres (cm) and metres (m), as well as compare and order different lengths.

We've also attached some fun **challenge cards**. You may enjoy having a go at some of these challenges once you've learnt about measuring length this week.

Remember, you can send any of your learning to: year2@coleridgeprimary.net. We really love seeing what you have been up to.

Take care,
Ms Creamer, Mr Heidensohn, Miss Ibbotson and Mr Ibbotson

Parent Message

Dear Parent,

This week's maths, is all about measuring length in centimetres and metres. This concept has not yet been taught to the children in Year 2 so these units of measurements may be new to them.

This is a very practical unit, and if we were teaching this at school, we would have lots of resources at our fingertips to use. The most important things the children will need to carry out many of the activities are a **ruler and/or a tape measure showing cms**.

By lesson 2, the children will be measuring in metres, so if you don't have a tape measure, we have attached a metre ruler template that can be printed out and stuck together. This can then be stuck onto card (if you have any) to make it sturdier!

Everyone's family situation and time available for home learning is different, so please feel free to tailor these lessons to suit your family. You could simply get your child to just watch the 10min online teaching video and skip the questions, or they could do one of the activities, or the whole lesson. Whatever works for you!

Best wishes,

The Year 2 Team

Website Links

Measuring length:

Practise measuring in centimetres (cm). There are 2 levels of challenge that you can try.

<https://www.topmarks.co.uk/maths-games/measuring-in-cm>

Help the gnome measure different things found in the garden. Select centimetres and click on whole numbers when starting the game.

<https://www.abcya.com/games/measuring>

Measure the length of items when the ruler hasn't been positioned correctly!

https://www.softschools.com/measurement/games/ruler/measuring_length_in_cm/

Calculation practic

e:

Learn your times tables with **TTRockstars** (use your Numbots or TTRockstars login for this)

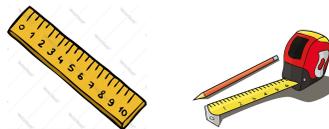
<https://play.ttrockstars.com/auth/school>

Practise your number facts with **Numbots**.

<https://play.numbots.com/#/intro>

Lesson 1 - Measuring length in centimetres (cm)

You will need:



A ruler or a tape measure that shows centimetres.

Introduction:

In this lesson, we are going to learn how to measure the **length** of things using **centimetres**. Centimetres is quite a long word to write so we mostly use the shortened version, **cm**, when we write it. Have a look at your ruler or tape measure, can you find **cm** written on it? Look at how long 1 cm is - not very long is it? Can you find 10cm on your ruler? How about 30cm?

Teaching video: Please go to the White Rose online lesson here <https://whiterosemaths.com/homelearning/year-2/> and click on Summer term, Week 1, lesson 3. We have attached the questions that go with this for you to read or print out, if you have a printer.

Activity 1:

Watch the online lesson all about measuring in cm. Use the attachment to answer the questions during the presentation and at the end. Have fun measuring ears!

How many questions did you get right?

Activity 2:

You should feel more confident about measuring length in cm now, so we are going to ask you to measure a few more things very carefully.

Get your favourite cuddly toy and imagine you are a dressmaker, just like Halibut Jackson. When dressmakers design and make clothes for someone, they need to take very careful measurements of the person's body first, so that the clothes are the right size. Your toy wants the finest suit and hat made to attend the Queen's party in, this means you need to measure each of its body parts so that their outfit will fit.



1. First make a list of all your toy's body parts that you are going to measure on the worksheet attached.
2. Now have a go at **estimating** how long each body part is in cm. Remember that estimating means making a sensible guess based on what you already know; in this case, what you already know about **cm**. Don't forget to fill in your estimates for each body part on your worksheet.
3. You are now ready to get your ruler or tape measure out and start measuring each part of your toy. Remember to start at '0' on your ruler. Fill in the measurements on your worksheet. Were your estimates close? Were any of your estimates spot on?
Make sure you keep this worksheet safe, because you will need these measurements for an activity in Lesson 5 later on this week.

****Super, super, super, extra super challenge:** You could have a go at measuring out and making your toy's outfit now!

Lesson 2 - Measuring length in metres (m)

Introduction:

Today we are going to carry on measuring length, but this time we are going to use a different unit of measurement. I hope you remembered that we used **cm** to measure yesterday. Look at your tape measure or your long ruler that you may have helped make. Can you find 100cm?



Instead of saying 100cm we can also say 1 metre (m) because 100cm is the same as 1m.

We usually measure bigger things such as buildings or people using metres.



Quick question: If we know that $100\text{cm} = 1\text{m}$ (metre) then:

What would $200\text{cm} = ?$

What about $300\text{cm} = ?$

How about $600\text{cm} = ?$

Teaching video: Please go to the White Rose online lesson here <https://whiterosemaths.com/homelearning/year-2/> and click on **Summer term, Week 1, lesson 4**. We have attached the questions that go with this for you to read or print out, if you have a printer.

NB: Where it says 'classroom' in some of the questions, change that for a room in your home, such as your bedroom. For the questions that ask you to discuss with a partner, have a chat about it with someone from your family.

Activity 1:

Watch the online lesson all about measuring in **metres (m)**. Use the attachment to answer the questions during the presentation and at the end. How many questions did you get right?

Activity 2:

Choose 5 objects from around your home that you think are longer/taller than 1m. Have a go at measuring them using your measuring tape or the metre ruler that you made. Record your measurements on the attached sheet.

Activity 3: Discussion

What would you use to measure these items in real-life? Centimetres or metres?

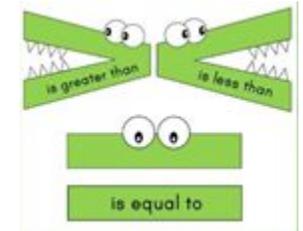
For each item explain your reasoning to someone else. Why would it be better to use centimetres? Or why would it be better to use metres?



Lesson 3- Comparing lengths

Introduction:

Today, we are going to look at comparing lengths in centimetres (**cm**) and in metres(**m**) and finding out if different lengths are **equal (=)**, **greater than (>)** or **less than (<)**. We should now understand that 100cm equals 1m. So you can say these lengths are equal in length but they are not measured using the same unit of measure. You will need to keep this in mind to work out some activities.



Teaching video: Please go to the White Rose online lesson here <https://whiterosemaths.com/homelearning/year-2/> and click on Summer term, **Week 2, lesson 1**. We have attached the questions that go with this for you to read or print out, if you have a printer.

Activity 1:

Watch the online lesson all about comparing lengths in **centimetres (cm)** and **metres (m)**. Use the attachment to answer the questions during the presentation and at the end.

How many questions did you get right?

Activity 2: Measure the height of everyone in your house.

We want you to measure the height of at least 4 people. Write the name of the person and can you estimate which person is the longest before measuring? After that, measure their height in cm and write it beside their name. NB: If there are not 4 people in your family, you can use your favourite teddy, your pet or call a friend or different family member and ask for their height in cm. You will need this information again in tomorrow's lesson on ordering measurements.

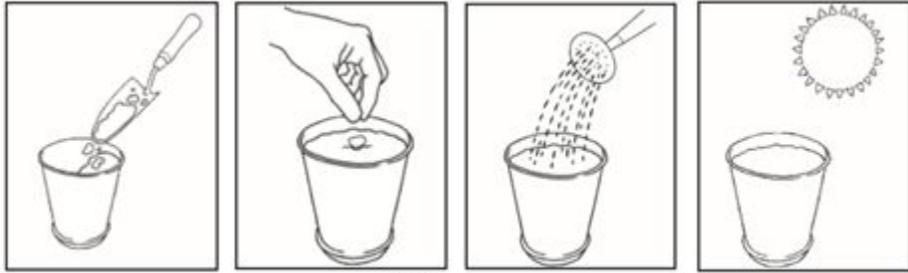
Finally, write statements to go with the measurements you have gathered.

1. _____ is taller/shorter than _____.
2. _____ is _____cm taller/shorter than _____.
3. _____ is the shortest.
4. _____ is the tallest.

Activity 3: Bonus- Plant a sunflower seed and see how tall it can grow!

A mix of science with maths, this is a lovely activity if you can get hold of the seeds!

What you need: A seed, compost, water and warmth.



Once your seed has germinated (this is the scientific word for when the seed grows a root and a shoot!), you are going to measure the growth of the sunflower with a ruler. You will take a measurement every week and record its height and what it looks like. Saved is a diary to record everything you notice about the plant. Happy measuring! :)

Top tips: They like sunny spots, only water if compost is dry and they will need a stick for support as it grows tall!

Lesson 4- Ordering Lengths

Introduction:

Today, we are going to look at **ordering lengths** in centimetres (**cm**) and in metres (**m**). You will be watching a new video and answering questions, using information you gathered yesterday and solving a robot challenge!

Teaching video: Please go to the White Rose online lesson here <https://whiterosemaths.com/homelearning/year-2/> and click on **Summer term, Week 2, lesson 2**. We have attached the questions that go with this for you to read or print out if you have a printer.

Activity 1:

Watch the online lesson all about ordering lengths in centimetres (cm) and metres (m). See how Ron and Rosie solve some tricky measures problems and then have a go at answering similar problems during the presentation and at the end. We have attached the question sheet for you to complete.

How many questions did you get right?

Activity 2: Order the height of everyone in your house.

Using your measurements from yesterday, order the different heights from biggest to smallest.

(Remember if there are not enough people at home, you could measure all your favourite toys!)

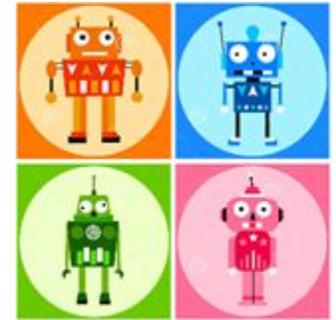
Now draw a family portrait or picture of all the teddies you measured in height order and write the measurements under each person. Why not date it and keep it as a memory from this time?

Activity 3: Robot line up

The Year 2 teachers met 4 robots and asked them to tell us their height. One gave an answer in cm and another in m. The other two made statements comparing their height to each other. Can you help us work out how tall the robots are?

Follow the statements, and create a bar model to help you work out how tall each robot is, before you put the robots in height order.

- The pink bot is 120cm tall.
- The green bot is 1 and half metres tall.
- The blue bot is 10cm taller than the orange bot.
- The blue bot is taller than the orange but not as tall as the pink bot.
- Three orange bots are equal to the same height as the green bot.



Lesson 5 - Calculations with length, using all four operations

Introduction: Today we are going to use what we have learned this week about measurements of length, together with what we have practised over the last two weeks - calculations using addition, subtraction, multiplication and division. We will also be looking at how long and how tall some different dinosaurs were!

Teaching video: Please go to the White Rose online lesson here <https://whiterosemaths.com/homelearning/year-2/> and click on Summer term, Week 2, lesson 3 - Four operations with lengths. We have attached the questions that go with this for you to read or print out, if you have a printer.

Activity 1:

Pause the beginning of the video ('Flashback 4') and have a go at the 4 questions and at telling the time on the clock. How did you get on?

Activity 2:

Watch the rest of the online lesson all about doing calculations involving lengths in **centimetres (cm) and metres (m)**. Use the attachment to answer questions 1, 2 and 3, when you are asked to pause the video. Then watch the rest and do questions 4 and 5 at the end. How many questions did you get right?

Activity 3:

Remember how, in the video, they measured the lengths of the dinosaurs and then made bar models to help them work out different calculations. For example, how much shorter is the T Rex than the Stegosaurus? This made the calculation $12 - 7$. How long are they both altogether? This made the calculation $12 + 7$.

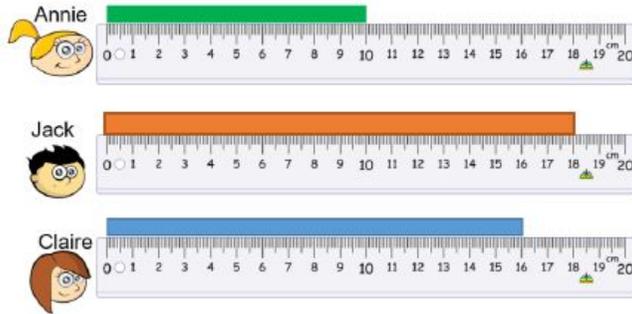
Now it's your turn to use the teddy bear body part **lengths in cms** you measured on Monday to make up and work out your own calculations, using all four operations (add, subtract, times and divide). For example, how much longer/shorter is your teddy's leg than it's head? What length in **cm** would six teddy legs be altogether? Write down and solve your calculations, making sure you write out a clear number sentence

for each one, e.g. $11 + 12 = 23$, $4 \times 5 = 20$. When you have finished, you could do the same using the heights in **m (metres)** of the three dinosaurs at the end of the video, or another set of objects you have measured yourself.

Bonus activity:

Have a go at solving the questions in these three problems below. As well as writing number sentences, you could draw pictures or bar models to help explain how to solve the problems.

1.



Annie, Jack and Claire each have a piece of ribbon.

- How much longer is Jack's ribbon than Annie's?
- Jack and Claire put their ribbons together, how long are they altogether?
- Annie cuts three more ribbons to the same length as hers, what is the length of all four ribbons?

2.

Ted has a toy train and a toy plane. The train is 28 cm long. The plane is 16 cm longer.

How long is the plane?

A toy train is double the length of a toy car. How long is the toy car?

3.

There are 3 teddies in a box.

The brown teddy is 15 cm taller than the yellow teddy.

The yellow teddy is 3 cm shorter than the pink teddy.

The pink teddy is 42 cm tall.

How tall are the brown and yellow teddies?