



Year Reception Maths Distance Teaching and Learning

Week beginning: 06.07.20

Lesson 1		
Learning Intention: WALT measure height and length using our hands and feet	Key Vocabulary: Estimate – guess Measure Length Tall - height	What you will need: A computer, tablet or phone Paper + Pencil Video: Maths Lesson 1 Small jar/ treasure – small objects Roll of paper – ribbon or toilet roll
Starter		
<p>You will need a small jar filled to the top with ‘treasure’; this should be small items like marbles, cotton wool balls or Lego bricks.</p> <p>Now look at the jar and estimate how many items of treasure you think are in the jar. Remember ‘estimate’ is just another word for guessing.</p> <p>Repeat this with other types of ‘treasure’. Which treasure could you fit the most of in the jar? Which was the least? We will be using estimation all this week when we are learning about measuring.</p>		
Main Teaching		
<p>Today we are going to use our hands and feet to measure. Today you are Captain Black Beard and he has had problems getting through the door of his cabin so we need to measure you to make changes to the doorway. Lie down on the floor and ask a member of your family to make a strip of paper the same length as you; they could use ribbon or toilet paper if they don’t have a roll of paper long enough. Don’t forget you need to be measured from the bottom of your foot right up to the top of your head. Now you’re going to measure this strip of paper using your hands but first have a guess as to how many hands tall you think you are. Now, when we measure using our hands the bottom of our hand by our wrist needs to be on the edge of the start of the paper. Then when we put our second hand down the bottom of that hand, by the wrist, needs to be next to the tips of our first hand’s fingers. There shouldn’t be any space between. Write down how many hands long you are. Now we are going to do the same but using our feet. Again, estimate (guess) how many feet tall you are. Do you think you will be more or less than the hands? Why? Using the same method you used for your hands measure the paper with your feet, remember no gaps! Write down how many.</p>		
Independent Tasks		
Challenge 1		
<p>Now you need to measure your shipmates using the same method we’ve just used. Measure another member of your family or one of your soft toys. Don’t forget to estimate (guess) before you measure! Then write it down. Who is taller, shorter?</p>		
Challenge 2		
<p>Now you need to measure your shipmates using the same method we’ve just used. Measure 2 other members of your family or two of your soft toys. Don’t forget to estimate (guess) before you measure! Then write it down. Who is taller, shorter?</p>		
Challenge 3		
<p>Now you need to measure your shipmates using the same method we’ve just used. Measure all the other members of your family or at least 4 of your soft toys. Don’t forget to estimate (guess) before you measure! Then write it down. Who is taller, shorter? Draw a picture of your shipmates in order of height from shortest to tallest.</p>		

Lesson 2

Learning Intention:
WALT measure length using items of the same size

Key Vocabulary:
Estimate – guess
Length
Long

What you will need:
A computer, tablet or phone
Paper + Pencil
Video: Maths Lesson 2
Furniture in your room
Items the same size - Lego bricks/
pens/ spoons
Print out or drawing of chart

Starter

Think back to yesterday's lesson when we used our hands and feet to measure. Look at the table in your room and estimate(guess) how many hands long it is. Now measure it. Were you close? Do the same with other items in the room for example: a rug or the sofa.

Main Teaching

Today Captain Black beard, using all his vast amounts of treasure, would like to buy some items for his cabin but we need to make sure they will fit through the door and that there's enough room in his cabin. So today, we are going to measure using items that are the same size for example: Lego bricks, pens and spoons. Remember, when we measure we start right at the end and leave no space between each item we're measuring with. Go back to the items you measured in the starter. Looking at the table, how many Lego bricks long do you think it might be? Estimate. Record it in the chart below; if you can't print the chart out you can draw it. Now, how many pens long do you think it might be? Estimate. Now measure it, were you close? Record it on the chart. Finally, how many spoons long do you think it might be? Estimate. Again were you close? Record it on the chart.

Item	Lego bricks	Pens	Spoons
Table 			
Rug 			
Sofa 			



Independent Tasks
Challenge 1
You need to carry on measuring using the Lego, pens and spoons. Measure the rug or the sofa using this equipment and don't forget to estimate before you measure.
Challenge 2
You need to carry on measuring using the Lego, pens and spoons. Measure the rug and the sofa using this equipment and don't forget to estimate before you measure.
Challenge 3
You need to carry on measuring using the Lego, pens and spoons. Measure the rug and the sofa using this equipment and don't forget to estimate before you measure. Then you need to find at least two more items in your house to measure, estimate, measure and fill in the chart.



Lesson 3

<p>Learning Intention: WALT measure capacity</p>	<p>Key Vocabulary: Estimate – guess Capacity – how much something will hold Cupful Full / fill</p>	<p>What you will need: A computer, tablet or phone Paper + Pencil Video: Maths Lesson 3 Treasure – small toys/ pebbles? 3 different waterproof containers A cup A bowl of water Print out or drawing of chart</p>
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Starter

You will need a pile of treasure; this can be anything from small toys to pebbles. You are now going to guess how many Captain Black Beard (you!) can steal by picking up a handful. Estimate! Now grab a handful of treasure and sneak off to count it without being seen! How much treasure did you manage to steal? Were you close? Now do the same but this time using 2 hands again estimate and then count. If you have another member of your family with you ask them to try to steal the treasure first with 1 hand and then with 2. Don't forget to estimate! Did they manage to steal more or less than you?

Main Teaching

Today we are going to learn how to measure the capacity of items. Capacity means how much something can hold; for example, how much treasure you can fit in a treasure chest. Today Captain Black Beard is stocking up on food and drink for his pirates and needs to find the boxes and bottles with the largest capacity (amount they can hold) so he can take as much food and drink as possible on his boat. So starting with drink you need to collect 3 different shaped containers, a cup and bowl of water. Draw your 3 different containers in the chart below. You may want to do this activity outside, in the sink or over the bath. Now you are going to fill each container in turn using cups full of water. First you need to estimate (guess) how many it will hold. Write your guess on your chart. Now put 1 cupful in at a time and count them as you do until the container is full to the top. How many did you put in? Was your estimate close? Write the number in you chart. If you can't print the chart out you can draw it.

Container	Estimate	Amount



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Independent Tasks

Challenge 1

Finish the activity we started measuring the capacity of all 3 containers. Which holds the most cups of water. Which container should Captain black beard use for his drink and why?

Challenge 2

Finish the activity we started measuring the capacity of all 3 containers. Which holds the most cups of water. Which container should Captain black beard use for his drink?

Now collect 3 different shaped boxes (not too big) and items that are the same size; for example Lego bricks, cotton wool balls or counters then draw the on the chart below. You are going to do the same as the water activity but this time it's handfuls you'll count not cups. Don't forget to estimate before you do it. Which box should Captain Black Beard use for his food and why?

Box	Estimate	Amount

Challenge 3

Complete challenge 2 and then explain to Captain Black Beard which container and box he should use and why. You could write this as a letter to him or a member of your family could write it for you but you need to tell them what to write.

Lesson 4		
Learning Intention: WALT measure weight	Key Vocabulary: Scales Weight Balance Heavier than Lighter than Heaviest/lightest Estimate - guess	What you will need: A computer, tablet or phone Paper + Pencil Video: Maths Lesson 4 Scales – balance – bought or homemade (see below) 3 different items
Starter		
Watch this short clip which introduces us to different types of scales for all types of measuring. Do you recognise any of them? https://www.bbc.co.uk/bitesize/clips/zdw7tfr		
Main Teaching		
<p>Today we are going to learn about measuring weight. To do this we need to use some scales. We are going to use balancing scales to find treasure that is 'heavier than', 'lighter than' or that balance so they weigh the same. The pirates from Captain Black Beard's ship are all different strengths some have lots of muscles and can carry heavy items but some can only carry light items. We are now going to weigh a range of items on our scales and order them from heaviest to lightest. You need a balance scales or you can make one using a clothes hanger and bags like the picture below...</p>		
<p>Collect 3 items. Estimate (guess) which you think is the heaviest and lightest. We're now going to put them in order from 'heaviest' to 'lightest'. Get a member of your family to write 'heaviest' on one piece of paper and 'lightest' on another. Put the word 'heaviest' on the left and the word 'lightest' on the right. Take two of the items and put one in one side of the scales and one in the other side of the scales. What happens? Which side went down and which side went up? If it goes down it is heavier, if it goes up it is lighter. Now take the heaviest item out and put it next to the word 'heaviest'. Now put your third item into the pot on the scales which has nothing in. Which is the lightest? (remember the lightest is the side that goes up) Take this out and put it next to the word 'lightest'. Finally take the last object out and put it in between the 'heaviest' and the 'lightest' objects as it is neither the heaviest or the lightest. You have now ordered you items by weight from heaviest to lightest. Were you right in your estimation?</p>		
Independent Tasks		
Challenge 1		
You need to collect 3 different items and order them by weight using the method we have just done. Don't forget to estimate before you weight them.		
Challenge 2		
You need to collect 5 items to order by weight using the same method. This is a bit trickier; a tip to help you is to find the heaviest then the next heaviest and so on until you get to the lightest.		
Challenge 3		
You need to collect 10 items to order by weight using the same method. This is a bit trickier; a tip to help you is to find the heaviest then the next heaviest and so on until you get to the lightest.		
Challenge X		
Draw you items that you weighed in order from 'heaviest' to 'lightest'		



Lesson 5

<p>Learning Intention: WALT measure time</p>	<p>Key Vocabulary: Seconds Time/ timer/ timing Full/ fill Quickest/ fastest/ slowest Handful</p>	<p>What you will need: A computer, tablet or phone Paper + Pencil Video: Maths Lesson 5 Timer – stopwatch or phone or online stopwatch (see link below) 3 different sized containers Treasure – small toys/ pebbles/ cotton wool Print out or drawing of chart</p>
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Starter

How many jumps do you think you can do in 30 seconds? Estimate (guess) and then get an adult to time you. Do the same for claps, taps on the shoulders, touching your toes and star jumps remembering to estimate each time!

Main Teaching

Today we are going to measure using time. You will need a timer you can use the link here to a stopwatch or you can get someone in your family to use a watch or phone.

<https://www.online-stopwatch.com/>

Captain Black Beard is trying to escape with as much treasure as he can, as quickly as he can so we're going to time ourselves trying different ways of filling up our treasure chest to see which is the quickest way. Collect a small container and some treasure, for example small toys, pebbles or cotton wool balls. Draw your container in the chart below. Now estimate (guess) how many seconds it will take you to fill your treasure chest (container) by putting your treasure in the chest 1 at a time. Now carry do this, don't forget to start your timer! How did you get on? Were you close in your estimate? Write how long it took in your chart below.

Container	Time with 1 item at a time	Time with 1 handful at a time

Independent Tasks

Challenge 1

Find 2 more containers and time yourself filling them up in the same way we have just done. Don't forget estimate first and to fill in your chart!



Challenge 2

Do challenge 1 and then time yourself filling up the containers putting a handful of treasure in 1 at a time. What happens? Is it quicker or slower to fill up in this way? Remember to estimate and fill in your chart!

Challenge 3

Complete challenge 2 and then time yourself using both your hands to fill the containers. What happens? Is it quicker or slower to fill up in this way? Remember to estimate and fill in your chart!

Container	Time with 1 item at a time	Time with 1 handful at a time	Time using both hands at a time

Review

So this week we have been learning all about measuring. For our review I'd like you to try and list what we were trying to find out. Think back to what we were measuring. In lesson 1 and 2 we measured using hands and feet and items of the same size. What were trying to find out? In lesson 3 we filled containers up, what were we trying to find out. In lesson four we used balancing scales, what were we trying to find out? Finally in today's lesson we used timers, what were we trying to find out?

These are what we were trying to measure...

- *Height and length*
- *Capacity (how much a container will hold)*
- *Weight*
- *Time*