

## Maths activities w/b 4.5.20

This week in maths we will be looking at measures including length, weight and capacity. We will also focus on a number a week to help with recognition, ordering, counting and number formation.

There are 4 sessions this week – these do not need to be completed daily. We would however, suggest that you complete these in order.

In Reception the focus with measures is on children being able to use the language linked to size, weight and capacity, showing understating of the different measures and making comparisons between these. We begin to measure using non-standard equipment such as cubes to solve problems linked to how long or how heavy an object is.

Follow up activities are added to allow you to explore the learning activities further if you wish to.

### Session 1 – Measuring and comparing length

Stand with your child and look in the mirror together. Discuss some of the things that are different about you. Ask them 'are we the same size?' You could discuss together how grown-ups are often taller and children are often shorter. Is there anything else that are different sizes? Hands, feet, arms, legs, length of hair etc?

Choose a couple of favourite items / toys. Can you discuss any differences in size between these? Which one is taller, which one is shorter? Are they any other differences?

Can you help your child to draw round and then cut out their footprint. Can your child find objects that are longer and shorter than their footprint and sort these into groups of objects that are longer and objects that are shorter.

Next you could look at the items that are in each of the groups. Can you then order the objects by length (start with 3 objects) from shortest to longest. Make sure that when you compare the objects you measure from the same point e.g. the edge of a table.

Can your child explain what they have found out using their maths language e.g.  
'my toy is longer than a lego brick'  
'the pipe cleaner is longer than the lego brick but shorter than my toy'

You could also use playdough to explore longer and shorter as well as thin and thick (wide).

Can you make a snake than is longer / wider than a pencil?

Can you make a snake that is shorter than your finger?

Can you make 3 (or more) snakes that are different lengths of widths and order these?

(A link for a playdough recipe is included in the 'Follow up activities' below.)

### Session 2 – Measuring and comparing weight

Today we are going to look at weight. Discuss with your child why we might weigh something (to find out how heavy it is) and when we might do this? E.g. weighing ourselves or measuring out ingredients for a recipe.

Choose a few favourite objects at home (with differing weights) and ask your child which one they think is heavier? Encourage them to hold one object in each hand and see if they can tell which is heavier. (If you have 2 small buckets (e.g. sandcastle buckets and elastic bands then you may be able to wrap the band around the handle, place the objects in each bucket and then see which stretches the band the most to show which is heavier). Repeat with different objects and encourage your child to talk about what they have found out. E.g.

'The apple is heavier than the lego brick'

'The cup is lighter than the car'

You could add a challenge to this by choosing an object and then asking your child to find something that is heavier or lighter than this. You could repeat this a few times. Each time encourage them to talk to you about what they have found out.

There are some recipe ideas in the follow up activities below that you might like to do together to explore measuring together.

### Session 3 – Measuring and comparing capacity

Today we are going to look at capacity – the amount of liquid that a container holds.

Using a large (empty) cup and (full) jug of water. Ask your child what they notice about the two containers (draw out language full and empty.)

Using the jug of water, demonstrate how a cup can be half full, nearly full and nearly empty as well as full and empty. Let your child explore this by pouring water into the cup – can they fill the cup so that it is half full, nearly full? Can they show you the cup when it is nearly empty and then empty?

Display containers of different sizes. Ask your child to estimate how many cups they think will fill the container. Test out their guesses – were they right?

Did they all hold the same amount of liquid? Which one held more? Is that what they expected? (Try to have containers that challenge the assumption that the tallest will hold the most).

Give your child time to explore this themselves – how many cups does it take for them to fill each container – was it the same as when you did it together? How many half full cups does it take to fill the containers? Again, encourage your child to talk through their learning with you. E.g.

‘Container A held 5 cups of water’

‘Container C is taller but held 3 cups of water’

‘The capacity of container A is more than container C’

‘Container C held less water than container A’

‘Container B held 4 full cups of water and 8 half cups of water’

#### Session 4 – Number of the week

As an introduction, you could watch this counting song to 20.

<https://www.youtube.com/watch?v=0VLxWIHRD4E>

This week we are practicing the number 18.

Can you count to 18 forwards and backwards?

Can you recognise number 18 using your number cards?

Can you order your number cards from 1-18 to create a number line?

Ext: Can you choose 5 numbers between 1-18 and put these in order from smallest to largest. Repeat with other cards.

Ext: Can you order some of the cards largest to smallest?

Which number comes before 18 and after 18 on a number line?

What is 1 more than 18? (How do you know?) (Ext: 2 more, 3 more?)

What is 1 less than 18? (How do you know?) (Ext 2 less, 3 less?)

Can you count out 18 objects? (remember to move objects into a line and touch each one as you count, if this helps)

Can you find 2 numbers that you can add together to make 18?

How many different ways can you make 18?

Ext: Can you record these number sentences using + and =

Can you write the number 18?

(remember that the 1 must come first as 18 is made of 1 ten and 8 ones)

Can you find the number 18 anywhere around your house?

## Follow up activities

Please find below some recipes that you could have a go at together.

### No cook playdough recipe

Follow the instructions on this sheet to make your own playdough  
– no cooking or hot water required!



## No-Cook Playdough

### Ingredients

- 2 cups plain flour
- 1 cup salt
- 1 tbsp oil
- 1 cup cold water
- 2 drops liquid food colouring – any colour of your choosing

### Method

1. Mix the flour and salt together in a large mixing bowl.
2. Add the cold water, oil and drops of food colouring and mix together.
3. When your ingredients are well mixed, take them out of your bowl and place your dough onto a flat surface, such as greaseproof paper.
4. Knead vigorously for a few minutes, until your dough feels like playdough and all of the stickiness has gone.

### What is kneading?

This is when you press, massage, squeeze and fold your dough.

If your dough is too wet, add a little extra flour and carry on kneading.

If your dough is too dry and crumbly, add an extra drop of cold water and carry on kneading.

Make sure you add any extra ingredients a little bit at a time.



## Banana and Raisin Bread recipe



### Banana and Raisin Bread



Use this recipe to practise measuring.  
Ask an adult to help you.

**1. Measure out:**

|                                                                                                        |                                                                                                           |                                                                                                                |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
|  75 g<br>plain flour  |  75 g<br>wholemeal flour |  1 tsp<br>bicarbonate of soda |
|  100 g<br>soft butter |  100 g<br>castor sugar   |  2 bananas<br>(chopped up)   |
|  2 eggs              |  75 ml<br>warm water    |  1 cup<br>raisins            |

**2.** Mix in a bowl until there are no lumps. Spoon into a baking tin.



**3.** Ask an adult to bake it at 180°C for one hour, or until golden brown.



Measure out and mix ingredients in a recipe

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## Fruit muffins recipe



# Fruit Muffins



Use this recipe to practise measuring.  
Ask an adult to help you.

Makes 12 Muffins

1.



225 g

self-raising flour



1 tsp

baking powder



50g

brown sugar



175 ml

milk



75 g

butter (melted)



1 egg



Mix in a bowl until there are no lumps.

2.



200g fruit (chopped)



Mix in the fruit.  
Spoon into muffin tins.

4.

Ask an adult to bake at 200°C for 15-20 minutes until golden brown.



Measure out and mix ingredients in a recipe

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To link with our Literacy learning of 'Goldilocks and The Three Bears, there is also a recipe for porridge below.



## Porridge

### Ingredients

2  $\frac{2}{3}$  cups of water

1 cup porridge oats

milk

honey or brown sugar

sultanas or fresh fruit

### Equipment

microwaveable bowl or  
a small saucepan

wooden spoon

1 bowl for each child

spoons

knife

chopping board to cut  
fruit up

### Saucepan Method

1. Put the water and porridge into the saucepan and put on the stove.
2. Heat on full power, stirring all the time, until mixture boils.
3. Lower the heat and simmer for 4 minutes until thick.
4. Spoon the porridge into the bowls.
5. Top with milk and sugar or honey.
6. Sprinkle on some sultanas or fresh fruit.

### Microwave Method

1. Mix the oats and water and put into the bowl (with no lid).
2. Microwave for 1 minute then stir well.
3. Cook again for 1 minute.
4. Spoon the porridge into the bowls.
5. Top with milk and sugar or honey.
6. Sprinkle on some sultanas or fresh fruit.



Finally, an activity to explore capacity further.

## Capacity

### Sand

Provide each child with a bowl or cup and a selection of different sized spoons and ladles. Ask them to investigate how many small spoons it takes to fill their container. How many large spoons? How many ladles? Which sized spoon was the best? Why?

We would love it if you could share any of your learning with us on Google Classroom.

Thank you