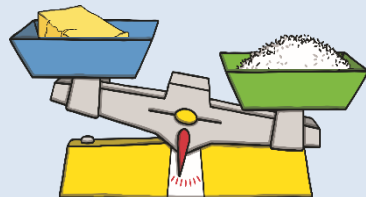


Home Learning Activities - Maths

Mass and Capacity

All activities set out in this PowerPoint have been planned to support your child to develop and extend their mathematical skills. There are 5 different slides with activities for each day of the week - each slide is clearly labelled with the date in the bottom left hand corner.

You are welcome to adapt any of these activities to suit your child's needs. If your child is struggling to complete these activities independently please support them.



Mass and Capacity

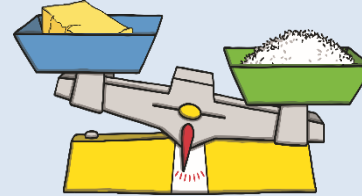
In maths this week we are learning about mass and capacity.

- **Mass:** Encourage your child to make direct comparisons when holding items to estimate which feels the heaviest/lightest then use the balance scales to check. Prompt them to use the language of heavy, heavier than, heaviest, light, lighter than, lightest to compare items, starting with items which have an obvious difference in weight.
- **Capacity:** Encourage your child to build on their understanding of full and empty to show half full, nearly full and nearly empty. Provide opportunities to explore capacity using different materials such as water, sand, rice and beads. Provide different sized and shaped containers to investigate. Prompt them to use the language of tall, thin, narrow, wide and shallow.

If your child is struggling to understand these concepts at any point please show them practically – using objects, scales, measuring equipment etc. to help them understand.

Today we are going to be learning about mass.

Maths starter activity:
What can you tell me about the picture on the right?



Heavier or Lighter?

Gather some objects from around the house, such as toys, books, tins and packets.

Try to find a range of different sizes and weights, and find a couple of objects which are large but light or small but heavy.

Ask your child to choose two objects and hold them in their hands while they stretch their arms out to the sides, as if they were a balance scale.



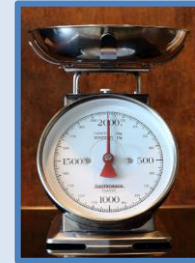
Talk to your child about which object feels heavier and which feels lighter.

Repeat with different objects.

Today we are going to be learning about mass.

Maths starter activity:
Look around your home.

What objects can you find that can be used to measure weight?



Challenging misconceptions

Fill two shopping bags, one with many small items and the other one with two larger empty/light boxes. Do not tell your child that the boxes are empty.

Show your child the bags and ask them to look inside without touching.

Ask your child to predict which bag they think will be the heaviest and why.

Allow your child to pick up the two shopping bags and ask them to show you which bag is heaviest.



Are large things always heavy?

Are small things always light?

Can you think of an example of a small heavy object?

What have we found out today?

Today we are going to be learning about capacity.

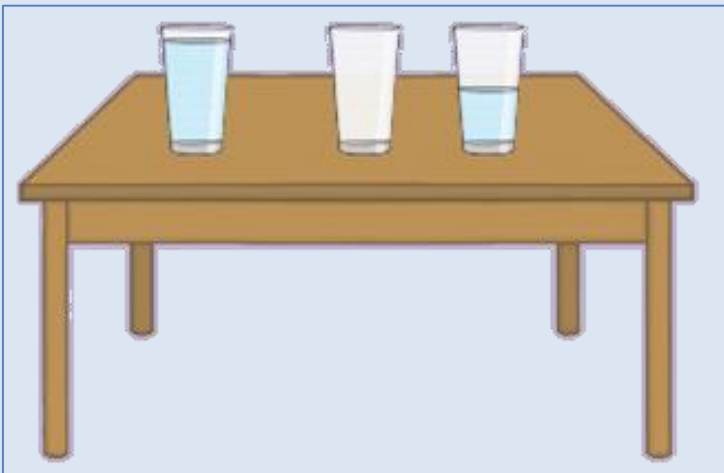
Ordering Cups

We are learning to use vocabulary to describe how much a container holds, such as half full, empty, full, nearly full, nearly empty.

How to set up the challenge:

Find five cups that are the same.

Provide some water in a bottle or a jug for your child to pour.



- Can you fill up a cup so that it is full?
- Can you fill up a cup so that it is half full?
- Can you leave a cup empty?
- Can you order the cups from empty to full?
- Can you add in 2 other cups?
- Can you order all 5 cups correctly now?

Today we are going to be learning about capacity.

Which holds more?

Provide a range of containers (different shapes and sizes). You will also need some loose parts such as corks, cubes etc.

Show the containers to your child and encourage them to use different descriptive vocabulary (such as tall, wide, shallow).

Show your child the loose parts and tell them they are going to fill the containers with these to find out their capacity.

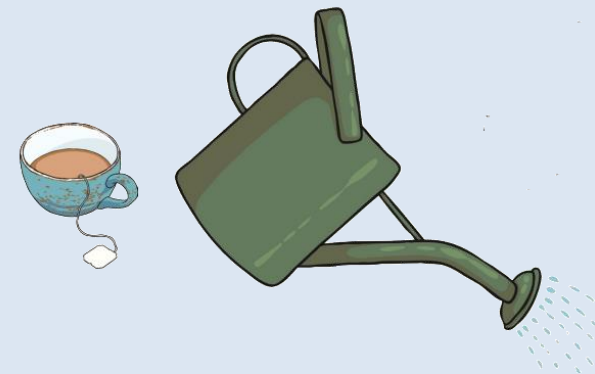
Ask the children to predict which container will hold the most and which will hold the least.

Can you use the words to describe each bottle?

full	nearly full	empty	nearly empty	half full
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Which container holds the least amount of liquid?



Today we are going to be revising mass and capacity.

Let's talk about mass and capacity...



Question prompts on the next slide...

Question prompts...



What do we call this piece of equipment? What is it showing us?

Which cake is heavier? How do you know?

Which cake is lighter? How do you know?

How could we make the scale balance?

What would happen if we took the pink cake off the scale pan?

What would happen if we took the chocolate cake off the scale pan?



Which holds more, the jug or the bottle?

Can you explain why you think this?

What is the best way to find out for sure?

How could we test our ideas?



Which packet of flour do you think is heavier?

Which do you think is lighter? Can you explain why you think this?

What if the big packet was nearly empty and the small packet was full?

How could we say for sure which is heavier?



Which jug is nearly empty? Can you describe how full the other jug is?

Do you think one of the jugs holds more than the other, or do they both hold the same amount? Explain why you think this.

Useful Resources

Websites to support your child's mathematical skills:

Topmarks – Website

<https://www.topmarks.co.uk/maths-games/5-7-years/counting>

Lots of great interactive maths games.

Mathematics Mastery – Website

<https://www.mathematicsmastery.org/free-resources>

Learning packs for parents/guardians to guide daily 15-20 minute sessions for young learners.

Numberblocks – Website

<https://www.bbc.co.uk/cbeebies/shows/numberblocks>

Sing along and learn all about numbers with the Numberblocks!

White Rose Maths – Website

<https://whiterosemaths.com/homelearning/early-years/>

White Rose Maths have completed a series of exciting lesson plans containing a whole section dedicated to Early Years.

Nrich – Website

<https://nrich.maths.org/>

A great range of activities. Some are interactive and some are to be completed offline.