

# Talk About Weight and Capacity

## Planning Ideas

### Introduction

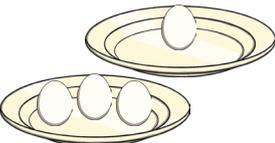
The Talk About Weight and Capacity PowerPoint, Poster and Activity aim to encourage children to learn about weight and capacity and how they are measured, compared and used in the 'real world'. The baking scene contains several representations of weight and capacity, and there are opportunities for talking about weighing and measuring, comparing weights and capacities, talking about how and why we weigh and measure capacity and looking at some of the types of equipment that may be used.

When using these Talk About resources, begin by encouraging the children to look at the scene and talk about what they see, using full sentences. You may then wish to focus on key elements of the picture for further discussion to encourage children to develop their understanding of weight and capacity.

### Questions and Prompts

Below are some questions you may like to use when focusing on different aspects of the PowerPoint or Poster.

- Look carefully at the picture, what can you tell me about it?
- What do you think this picture is telling us about?
- Where can you see things being weighed or measured in this picture? What different ways can you see?
- Why do we need to weigh or measure things?

	<p>What do we call this piece of equipment? What is it showing us?</p> <p>Which cake is heavier? How do you know?</p> <p>Which cake is lighter? How do you know?</p> <p>How could we make the scale balance?</p> <p>What would happen if we took the pink cake off the scale pan?</p> <p>What would happen if we took the chocolate cake off the scale pan? You may like to use this opportunity to explore a balance scale with the children. Can they find two objects that are different weights? How can they find out which one is heavier?</p>
	<p>How many eggs are on each plate?</p> <p>If we weighed the two plates of eggs, which one would be heavier? How do you know?</p> <p>If we put the plates on a balance scale, which side would go down? Can you explain why?</p> <p>Explain what we could do to make the two plates weigh the same.</p> <p>How could we find out how many bricks weigh the same as one egg?</p> <p>Do all eggs weigh the same? How could we find out?</p>



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?

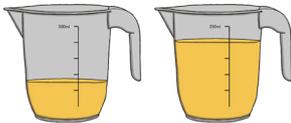
How could we say for sure which is heavier?



Is there a heavier amount of butter or sugar on the scales? Explain how you know.

The recipe says to use the same amount of butter and sugar. What does the boy need to do?

How will he know he has the same amount of butter and sugar?



Is the jug full, half-full or empty? How do you know?

Would all the milk in the jug fit into the glass? How do you know?

How many times do you think we could fill the glass from the jug? How could we check?

You may like to use opportunity to explore capacity by encouraging children to explore filling a cup using a jug of water.

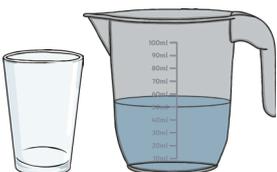


Which holds more, the jug or the bottle?

Can you explain why you think this?

What is the best way to find out for sure? How could we test our ideas?

You may like to use opportunity to explore capacity by encouraging children to explore filling a jug and a bottle.



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.

How many marbles do you think would fit in each jug? How many beads? Would there be more or fewer? How could we find out? You may like to use this opportunity to encourage children to explore capacity by filling two identical jugs with different items to compare the number they hold.

## Adult-Led Activity Ideas

Use the Talk About Weight and Capacity PowerPoint or Poster to talk about weighing and measuring, comparing weights and capacities, talking about how and why we weigh and measure capacity and looking at some of the types of equipment that may be used. Then, try these adult-led activities to encourage children to deepen their understanding of weight and capacity. These adult-led activities could be used with small groups to promote further discussion about these aspects of measure.

### Human Balance Scales

- Ask the children to be human balance scales. With arms extended, they place an item in each hand and tip their arms to show which is heavier.
- Alternatively, give them a bag or a bucket to hold in each hand and place items inside to feel which has the stronger downward pull.
- Provide some objects which are large but light, or small but heavy, to challenge the assumption that bigger always means heavier.

### How Many Cubes?

- Ask the children to 'weigh' different items on a balance scale using interlocking cubes or building bricks.
- When they have weighed each item, they could count the number of bricks that it took to balance the scale. If there is a large number of bricks, provide ten-frames to help with counting.
- Children could also record their findings on a simple chart.
- Challenge the children to arrange the items from lightest to heaviest.

### More or Less?

- Provide a selection of containers and ask the children to investigate which holds the most. They could do this by pouring directly from container to container, or by using a smaller container to fill the larger ones, counting how many cupfuls each container holds.
- Encourage the children to record their findings using their own method of recording.
- Instead of using sand or water, children could measure how many beads or bricks a container holds and could use a ten-frame to help them count the items.

## Enhancements for Continuous Provision

Below are some suggestions of ways to enhance your continuous provision to encourage further exploration of this concept:

- Set up a Post Office in the role play area. Provide a selection of parcels of different weights for the children to weigh and find out which is heaviest, and which is lightest. Encourage them to find out whether big parcels are always heavy.
- Put a balance scale in the malleable area and encourage children to compare the weight of different playdough balls. You could also provide loose parts such as bricks or beads for measuring the weight of the playdough balls.
- Provide a balance scale and a selection of loose parts for the children to explore. Encourage them to use the correct mathematical language of 'heavy, heavier, heaviest', 'light, lighter, lightest'.
- In the outside area, provide buckets with strong elastic bands attached to the handles. Encourage the children to observe how the band stretches when they pick up the bucket, and how this stretch changes when they put different items in the buckets. What do they notice when they add a heavy item? What about a light item?
- Provide sets of similar items of different sizes, such as sets of nesting bowls or boxes. Provide a selection of loose parts and invite children to compare and order the containers and see how many of each different item they will hold. Alternatively, place the containers in your water or sand area.
- Place a selection of bowls, spoons, cups and pans in the mud kitchen or sand area. Provide laminated recipe cards and encourage the children to measure out the ingredients. They could also design their own recipes.
- Provide children with a matchbox or similar small container and challenge them to find as many objects as they can which fit inside. Alternatively, challenge them to find the prettiest leaf, the smallest stone, the largest object, something yellow, the softest item and so on.
- In the water tray, provide a selection of bottles of different shapes and sizes, cups, jugs and funnels for children to use to mix and make magic potions. Encourage them to use mathematical language to describe each bottle, such as full, empty, nearly full, nearly empty or half full.

