## Measurement: Measuring Capacity

Aim: Measure and begin to record capacity and volume. To measure capacity.	Success Criteria: I can use non-standard units to measure capacity. I can describe measurements of capacity. I can reason about capacity.	Resources: Lesson Pack Water or sand trays A variety of containers Units to measure with: spoons, yoghurt pots, bottle tops, small jars A 1 litre container or bottle
	<b>Key/New Words:</b> Capacity, more, less, most, least, greatest, smallest, measure, unit, full capacity, fill, explain.	Preparation:   Differentiated Measuring Capacity   Activity Sheets – one per child   Diving into Mastery Activity Cards   – as required

**Prior Learning:** 

It will be helpful if children are familiar with the language of comparing and describing capacity. The following lesson has been prepared to support this learning: <u>Understanding Capacity</u>

## Learning Sequence

	<b>Remember It:</b> The Lesson Presentation revisits the vocabulary used to describe capacity. Each slide shows two containers to compare using the terms: more, less, most, least, greatest capacity and smallest capacity. Children identify the correct answer and explain how they know. The last part of this challenge invites the children to use the vocabulary to share facts about the capacity of two containers.		
A Minis Class	<b>Measuring Capacity:</b> Remind children what capacity means and that full capacity is when something holds as much as it can. The Lesson Presentation introduces different ways to measure capacity. Objects are used as units and counted into containers until they show a full capacity. Then smaller vessels such as spoons or cups are filled with liquids and emptied into larger containers to measure the capacity. The slides also include errors to discuss, including overfilled and underfilled containers. Can the children describe measurements of capacity? Can the children reason about capacity?		
	<b>Measure It:</b> Children work with talk partners to predict how many beakers of water will fill the containers shown on the Lesson Presentation. They count the units as the capacity is measured and use this to inform their next prediction. Can the children reason about capacity?		
	<b>Measuring Capacity:</b> These differentiated <b>Measuring Capacity Activity Sheets</b> guide children through practical investigations. Children use different units to measure the capacity of containers and answer questions about their discoveries. Please provide water or sand and a variety of containers for children to use. Can the children use non-standard units to measure capacity? Can the children describe measurements of capacity? Can the children reason about capacity?		
	Children use cups and spoons to measure the capacity of containers. They record the number of units used on the table. Children then explain which holds the fewest units, using the information on the table to prove it. Children tenes and which holds the fewest units, using the information on the table to prove it. Children use cups of containers. They record the number of units used on the table. The children are asked whether they used more cups or spoonfuls to fill the containers and to explain why. Children use cups of containers and to explain why. Children select one smaller and one larger container to investigate. They choose different units to measure the capacity. Children record the number of units used on the table. They are asked which unit was the most suitable to measure the capacity of the larger containers, which worked well with the smaller containers and to explain why.		



	<b>Diving into Mastery:</b> Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.		
	Children use spoons to measure the capacity of a container. They then choose a different unit to measure the capacity of the same container and compare the amount of units used. They reason about which units of measure would be better to measure different containers.		
	Children apply their reasoning skills to solve capacity challenges. This includes working out which statement is correct. They also investigate if two containers have the same capacity after being measured with different units of measures.		
	Children apply their problem-solving skills to work out how many units would fill different quantities of containers. Children then use this information to complete a capacity challenge with more than one step.		
	<b>Check It:</b> The Lesson Presentation shows a scenario where the capacity of a container has been measured inaccurately. Children spot the error and suggest how these can be amended. Children then reason how a container can have two different capacities (they should come to the conclusion that different units of measure can be used.) Can the children reason about capacity?		
Whole Class X	<b>Litre:</b> The Lesson Presentation introduces the term 'litre'. Show the children a real container that holds exactly one litre (there will also be one represented on the slide). Work as a class to sort the images of containers into a Venn diagram: holding less than a litre, more than a litre and the same as a litre. Extend this activity by also providing real-life objects to sort into these groups.		
Exploreit			
	Give children jugs of water and a variety of different cups and glasses. How can they make sure everyone gets the same amount?		
Estimateit:	Hold daily competitions to guess the number of marbles in a jar, cubes in a container, glasses of water in a basin, sweets in a bag, etc. The winner gets to measure and adjudicate tomorrow!		
Learnit:	Children will find this visually exciting Knowledge Organiser a useful tool to support their understanding of weight, mass, capacity and volume.		

