

Merseyside Consultants Cluster Group

Unit 5 Measure

Three daily lessons

Year 1 Summer Term

Unit Objectives

Year 1

- Understand and use the vocabulary related to capacity.
- **Compare two, then more, capacities using direct comparison**
- **Measure capacity using uniform non-standard units or standard units (litre).**

Pages 72 and 78

p. 72

p.74,76

This Unit Plan is designed to guide your teaching.

You will need to adapt it to meet the needs of your class.

Resources needed to teach this unit:

- Resource sheet 5.1
- Resource sheet 5.2
- Activity sheet 5.3
- Sets of containers labelled.
- Variety of containers
- Rice, peas, sand or water
- Funnels
- Identical cups or mugs(one per group)
- Paper cups, egg cups, lids for measures

Foundation

- Use language such as **more or less....** to compare **two quantities**, then more than two, by filling and emptying containers.

Link Objectives

Year 2

- **Estimate, measure and compare capacities, using standard units (litre); suggest suitable units and equipment for such measurements.**
- **Read a simple scale to the nearest labelled division**

(Key objectives in bold)

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Planning sheet		Day One	Unit 5 <i>Measure</i>	Term: <i>Summer</i>	Year Group: <i>1</i>
Oral and Mental		Main Teaching			Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/ Focus Questions	
VOCABULARY		<p>Use and begin to read the vocabulary related to capacity.</p> <p>VOCABULARY</p> <p>Container, fills, holds as much, same, less, more, empty, almost, capacity</p> <p>RESOURCES</p> <p>Sets of containers labelled A,B,C, etc. Rice, peas or sand Funnels and identical cups or mugs(one per group) Resource sheet 5.1</p>	<p>Choose containers of different sizes.</p> <p>Ask :</p> <p>Q What can you tell me about these containers?</p> <p>Encourage the children to describe each container, including shape and size, what it might have held. Ensure the discussion establishes the idea that the containers held liquids or other substances.</p> <p>Ask the children to order the containers according to size: tallest to shortest, then widest to narrowest.</p> <p>Ask:</p> <p>Q Which container will hold the most? Why?</p> <p>Explain the word capacity means how much a container holds or the amount that fits inside. Establish that one container is bigger if it holds more.</p> <p>Ask:</p> <p>Q Which container will hold the least? Why?</p> <p>Ask;</p> <p>Q Can we sort the containers by how much they hold?</p> <p>Choose two different sized containers e.g. a cup and a bottle.</p> <p>Ask:</p> <p>Q Does the bottle hold more than the cup, less than the cup or the same as the cup?</p> <p>Repeat discussion for different containers compared to the cup. Establish the difficulty of comparing different sized and shaped containers by eye. Ask the children to give suggestions for better ways to measure them, to include filling the cup and pouring it into the container. Ask a volunteer to help to demonstrate pouring carefully. Emphasise filling the container to the top and pouring without spilling.</p> <p>Give each group sets of labelled containers , rice ,peas or sand and funnels and a cup. The children should compare each container to the cup to find out which containers hold more, less or the same as the cup. They should record their measurements by writing the letters of the containers under the headings on Resource sheet 5.1.</p>	<p>Compare the containers that held more than the cup using words like taller, fatter, wider etc. than the cup. Repeat with the same as and the containers that held less than the cup. Encourage observations that include a taller container that is narrow can hold the same as a shorter, fatter container.</p> <p>HOMEWORK:</p> <p>Ask the children to look at different containers at home and think about what we could do to put them in order of how much they hold for tomorrow's lesson.</p> <p>By the end of the lesson, children should be able to:</p> <ul style="list-style-type: none"> Understand and use the vocabulary of capacity <p>(Refer to supplement of examples, section 5, page 78)</p>	

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Planning sheet	Day Two	Unit 5 <i>Measure</i>	Term: <i>Summer</i>	Year Group: <i>1</i>
Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/ Focus Questions
VOCABULARY		<p>Understand and use the vocabulary related to capacity. Compare two, then more, capacities using direct comparison.</p> <p>VOCABULARY Container, full, half full, nearly full, left over fills, holds as much, same, less, least, more, empty, almost, capacity</p> <p>RESOURCES Sets of containers for each group, Rice, peas, sand or water Funnels Resource sheet 5.2</p>	<ul style="list-style-type: none"> Display two containers of different sizes. Ask: Q Which container holds the most? How do you know? <p>Encourage children to include in their responses the need to compare them, e.g. to fill one container and pour it into the other.</p> <p>Ask: Q What do you think will happen?</p> <p>Discuss predictions using vocabulary full, half full, nearly full, left over etc. Invite two volunteers to fill one of the containers and pour it carefully into the other. (using a funnel if necessary). Discuss results. Ask: Q Which container holds more?</p> <p>Repeat with two different containers. Remind the children of their homework activity. Ask: Q What could you do to put the containers in order of size by how much they hold?</p> <p>Take suggestions that include measuring the capacities by filling and pouring.</p> <p>Provide the children with sets of mixed containers, about five per group, and a funnel. Set the children the challenge to order the containers by capacity from smallest to largest. Encourage them to estimate first.</p> <ul style="list-style-type: none"> Record by placing the containers on the table and using labels from Resource sheet 5.2 to show the greatest and least capacity. 	<ul style="list-style-type: none"> Work through the children's findings with the whole class. Ask: Q Which container held the most? Q? Which container held the least? <p>Ask if their estimates were close or if they were surprised by some of the results. Ask: Q Do tall containers always hold more than short ones? Why not? Do narrow containers always hold less than wide ones? Why not?</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>By the end of the lesson, children should be able to:</p> <ul style="list-style-type: none"> Compare two, then more, lengths using direct comparison Understand and use the vocabulary related to length <p>(Refer to supplement of examples, section 5, page 72.)</p> </div>

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Planning sheet		Day Three	Unit 5 <i>Measure</i>	Term: <i>Summer</i>	Year Group: 1
Oral and Mental		Main Teaching			Plenary
Objectives and Vocabulary	Teaching Activities	Objectives and Vocabulary	Teaching Activities	Teaching Activities/ Focus Questions	
<p>VOCABULARY</p> <p>RESOURCES</p>		<p>Understand and use the vocabulary related to capacity.</p> <p>Measure capacity using uniform non-standard units</p> <p>VOCABULARY Container, full, half full, nearly full, left over, fills, holds as much, same, less, least, more, empty, almost, capacity measure, compare,</p> <p>RESOURCES Paper cups, egg cups, lids, variety of containers to measure, funnels</p>	<ul style="list-style-type: none"> Hold up two containers of similar shape and size. .Ask: <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">Q Which container holds the most? How could you find out without pouring from one container to the other?</div> <p>Take feedback. Ensure the response includes using another smaller container to fill and pour and count how many. Ask for suggestions. Provide an egg cup, paper cup or lid for the children to select from after the discussion.</p> <p>Invite two volunteers to demonstrate filling and pouring, using a funnel if necessary. Record a tally of the measures for the two containers.</p> <p>Ask: <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">Q Which container holds the most? How do you know?</div> </p> <p>Hold up a smaller measure e.g. egg cup, and ask: <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">Q What will happen if we use this measure? How do you know?</div> </p> <p>Repeat the measuring activity with the smaller measure keeping a tally. Compare the results with the children and ask: <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">Q Why did it take more egg cups than paper cups to fill each container?</div> </p> <ul style="list-style-type: none"> Provide each group with a different measure and a few containers (similar containers for each group if possible). Ask them to measure and tally to find out which container holds the most. Encourage children to use the vocabulary of capacity and to estimate first. Use Activity sheet 5.3 to record findings. 	<p>Ask some of the children to display their findings. Hold up two of the containers similar in capacity. Ask:</p> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">Q How many egg cups did this take to fill? How many lids did the other one take to fill?</div> <p>Record on the board. Ask:</p> <div style="border: 1px solid black; padding: 2px; margin: 5px 0;">Q Can we tell which holds more? Why not?</div> <p>Discuss the importance of needing to use the same unit of measure if we are going to compare capacities and the need to state the unit used.</p> <ul style="list-style-type: none"> Hold up the largest container and ask the children to select the most suitable unit to measure it. Repeat for the smallest container. <p>Discuss the suitability of the size of the units used.</p> <ul style="list-style-type: none"> Hold up a middle sized container and ask the children to estimate how many paper cups it would take to fill. <p>Demonstrate pouring from the full container carefully into a number of paper cups until the container is empty as an alternative method of pouring and filling. Count the number of paper cups and check with their estimates.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>By the end of the lesson, children should be able to:</p> <ul style="list-style-type: none"> Use vocabulary related to capacity Measure capacities using uniform non-standard units. <p>(Refer to supplement of examples, section 5, page 72.)</p> </div>	

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Year 1 Unit 5 (Summer term) Resource sheet 5.1

holds more than	holds the same as	holds less than

holds the most

holds the least

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Year 1 Unit 5 (Summer term) Activity sheet 5.3

my estimate	my tally	capacity
.....	
.....	
.....	
.....	