Measuring Capacity: Maths : Year 4 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To know and use the relationship between millilitres and litres	In this first lesson, children will recap on what capacity is, and which units it can be measured in. They will then use their knowledge and understanding of multiplication, division and place value to convert between the different units of measurement, involving numbers with up to two decimal places. Children will apply and consolidate this learning in their independent activities.	• Do children understand what capacity is? • Do children understand the relationship between millilitres and litres? • Can children convert millilitres to litres and vice versa?	• Slides • True or False? Statement Cards (Teaching Input) • Conversion Cards A/B • Worksheet 1A/1B/1C • Drops and Puddles Cards Set 1/2 (FSD? activity only) • Instructions Cards (FSD? activity only)
Lesson 2	To estimate and measure capacity	Children will be reminded of what an estimate is. They will use known capacities of containers to estimate the capacity of other containers. They will then look at how to measure capacity accurately, and learn how to read different scales by calculating what each division represents. In their independent activities, children will complete a carousel of challenges involving estimating, measuring and reading scales.	• Can children give an accurate estimate of a container's capacity? • Can children measure the capacity of a container accurately? • Can children read and interpret scales accurately?	• Slides • Capacity Cards (Teaching Input) • Worksheet 2A/2B/2C • Container Hunt Sheet (FSD? activity only) • Teacher Notes • Measuring jugs, water, clear plastic cups, containers of varying sizes e.g. bottle caps, margarine tubs, yoghurt cartons, water bottles (all with labels removed).
Lesson 3	To order and compare measurements	In this lesson, children will use their knowledge and understanding of converting between different units of measurement to order and compare a range of capacities. Children will apply and consolidate this skill in their independent activities. In the alternative activity, they will compare the capacities of different sets of containers, using inequality signs to complete the picture equations.	• Can children order and compare measurements in millilitres? • Can children order and compare measurements in litres? • Can children order and compare measurements in millilitres and litres by converting them to the same unit?	• Slides • Measurement Cards Set A/B (Teaching Input) • Worksheet 3A/3B/3C • More or Less? Sheet A/B (FSD? activity only) • Container Card A/B (FSD? activity only)
Lesson 4	To use addition and subtraction to solve capacity problems	Children will apply their knowledge and understanding of converting between different units of measurement to solve a variety of capacity problems involving addition and subtraction. In their independent activities, they will be challenged to solve a range of word problems about a given set of measures. In the alternative activity, children will use their knowledge to play a game involving gaining and losing different amounts of water.	• Can children solve capacity problems involving addition and subtraction? • Can children use their knowledge and understanding of conversion to help them solve these problems? • Can children explain their reasoning?	• Slides • Container Conundrum Card A/B/C • Container Conundrum Sheet 4A/4B/4C • A Bucketful of Fun! Game Board A/B (FSD? activity only) • A Bucketful of Fun! Card Set A/B/C/D (FSD? activity only) • A Bucketful of Fun! Instructions A/B (FSD? activity only) • Recording Sheet (FSD? activity only)
Lesson 5	To solve capacity problems involving money	In this final lesson, children will combine their knowledge and understanding of measuring capacity, as well as their multiplication, division and addition skills to solve a variety of two- and multi-step problems involving money. In their independent activities they will work out the cost of different health drinks, or in the alternative activity, design and cost their own drinks based on given criteria.	• Can children use their multiplication knowledge to solve capacity problems involving money? • Can children use their division knowledge to solve capacity problems involving money? • Can children explain how to solve a multi-step problem?	• Slides • Ingredients Price List • Recipe Cards A/B/C • Worksheet 5A/5B/5C • Gulp! Challenge Cards (FSD? activity only)

NB: 'FSD? activity only' refers to the alternative 'Fancy Something Different...?' activity within the lesson plan