Doubling and Halving : Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to double two-digit numbers with totals of more than 100.	Children will learn how to use partitioning to help them double two-digit numbers with totals up to and over a hundred. Children will practise doubling numbers with increased fluency.	• Can the children double two-digit numbers, answers below 100? • Can they double two-digit numbers using a written method? • Can they double two-digit numbers mentally?	• Slides • Worksheet 1A/1B/1C/1D
Lesson 2	To be able to double two-digit numbers that total more than 100.	Children will practise doubling two-digit numbers. Children are challenged to double numbers as many times as they can before matching a number to its double. There is also the opportunity for an investigation into the effects of doubling a two-digit number.	• Can the children double two-digit numbers, answers below 100? • Can they double two-digit numbers using a written method? • Can they double two-digit numbers mentally?	• Slides • Worksheet 2A/2B/2C • Challenge Card (FSD? activity only)
Lesson 3	To understand the relationship between doubling and halving and to know doubles and halves of numbers from 1 to 20.	After some quick recall of doubling facts, children will explore the relationship between doubling and halving. They will start by halving even numbers before finding out how to halve odd numbers.	• Can the children double by heart all numbers to 10? • Can they double by heart all numbers to 20? • Can they double and halve all numbers to 20?	• Slides • Number Cards A/B
Lesson 4	To be able to rapidly recall doubles and halves.	The focus of this lesson is rapid recall of doubling and halving facts. Plenty of opportunities are provided in the form of games and activities to allow to children to recall doubling and halving facts for two- and three-digit numbers.	• Can children recall doubles of whole numbers? • Can children halve even numbers? • Can children halve odd numbers?	• Slides • Spinner 4A/4B/4C • Game Card 4A/4B/4C • Paperclips and pencils • Calculation Grids 4A/4B/4C (FSD? activity only) • Stopwatches - optional (FSD? activity only)
Lesson 5	To understand the relationship between doubling and halving and to double and halve numbers that total more than 100.	Children are challenged to work out what the input and output numbers on a function would be when the operation is set to 'double' of 'half'.	• Can the children double and halve whole numbers (below 200)? • Can the children double two-digit numbers (crossing the 100 boundary)? • Can the children double any two-digit numbers mentally?	• Slides • Worksheet 5A/5B/5C/5D/5E

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