Exploring Subtraction: Maths : Year 4 : Autumn Term

PlanBee

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To know how to use the constant difference method for subtraction	The lesson will begin with some quick-fire questions involving subtracting multiples of ten from two- and three-digit numbers. Children will then learn about the constant difference method, and how this can be used to make calculations easier, allowing them to be solved mentally. In their independent activities, children will apply this knowledge to sort and solve subtraction number sentences mentally.	• Do children understand what the constant difference method is? • Can children use the constant difference method to solve subtraction number sentences? • Can children explain this method and justify their reasoning?	• Slides • Worksheet 1A/1B/1C • Sort 'n' Solve Cards A/B • Sorting Sheet A/B • Carry On Subtracting! Example Sheet (FSD? activity only) • Carry On Subtracting! Challenge Cards A/B (FSD? activity only)
Lesson 2	To know how to use the decomposition method for subtraction	Children will first recap on their partitioning skills, before applying them in order to solve subtraction problems using the decomposition method. They will learn how to solve number sentences involving one and two exchanges. In their independent activities, children will race against a partner to solve questions quickly and accurately. Alternatively, they will play a game where they are rewarded points according to the number of exchanges in the sentences they solve.	• Do children understand the decomposition method for subtraction? • Can children successfully use the decomposition method to solve subtraction number sentences without exchanging? • Can children successfully use the decomposition method to solve subtraction number sentences with exchanging?	• Slides • Match Up! Sheet A/B/C • Calculation Cards A/B/C • Exchange Rates Game (FSD? activity only) • Exchange Rates Game Instructions (FSD? activity only) • Solved it! Cards (FSD? activity only) • Recording Sheet (FSD? activity only) • Dice, coloured counters, Blu-Tack (FSD? activity only)
Lesson 3	To know how to use the expanded column method for subtraction	In this lesson, children will look at the expanded column method for subtraction. They will briefly compare it with the decomposition method, before using it to solve subtractions involving one and two exchanges. Children will also spot mistakes in expanded column subtractions where the method has been used incorrectly. In their independent activities, children will match up the different parts of given expanded column method solutions. In the FSD? activity, they will be challenged to find what two numbers could be used to result in a given difference, according to set criteria.	• Do children understand the expanded column method for subtraction? • Can children use the expanded column method to solve subtraction number sentences without exchanging? • Can children use the expanded column method to solve subtraction number sentences with exchanging?	• Slides • Worksheet 3A/3B/3C • Jigsaw Puzzle Pieces A/B/C • Blank Jigsaw Sheet • Challenge Cards (FSD? activity only)
Lesson 4	To know how to use the formal column method for subtraction	Children will compare the expanded column method with the formal column method. They will use the formal method to look at how to solve subtraction number sentences involving no exchanges, one exchange and finally two exchanges. Children will then use their knowledge of this method to complete column subtractions by placing missing digits in the correct row and column in order to give a specific difference. Alternatively, children are each given a unique three-digit number, then pair up with other children to make and solve subtractions with their numbers.	• Do children understand the formal column method of subtraction? • Can children use the formal column method to solve subtraction problems involving exchanging? • Can children use the formal column method to solve subtraction problems including zeros?	• Slides • Worksheet 4A/B/C • Pair Up! Cards (FSD? activity only) • Pair Up! Recording Sheet (FSD? activity only)
Lesson 5	To know how to solve subtraction problems involving zeros using the formal column method	In this final lesson, children will focus on column subtractions that involve one or more zeros. They will learn how to exchange across them in order to complete the calculation. They will look at column subtractions involving three-digit and then four-digit numbers. In their independent activities, children will choose and solve subtractions of varying levels of difficulty.	• Do children know how to solve a column subtraction which includes a zero? • Do children know how to solve a column subtraction which includes more than one zero? • Can children identify and correct errors in column subtractions?	• Slides • Pick 'n' Mix Questions Sheet • Worksheet 5A/5B/5C • Calculation Cards A/B (FSD? activity only) • Points Poster A/B (FSD? activity only)