

Calculating Fractions and Decimals: Maths : Year 6 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to identify fraction and decimal equivalents, and simplify fractions.	Children will recap what they already know about fractions, including identifying fraction and decimal equivalents. They will then go on to explore how to simplify fractions using common factors, thinking about why simplifying fractions can be useful. In their independent learning they can either answer questions to crack a code, or solve a variety of challenges relating to fractions and decimals.	<ul style="list-style-type: none"> • Can children recall and use equivalences between simple fractions and decimals? • Can children use common factors to simplify fractions? • Can children order and compare fractions and decimals? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • Challenge Sheet 1A/1B/1C (FSD? activity only) • Challenge Cards (FSD? activity only)
Lesson 2	To be able to add and subtract fractions whose denominators are multiples of the same number, and simplify the answers.	Children will start by recapping how to add and subtract fractions with common denominators before looking at how fractions with denominators that are multiples of the same number can be added or subtracted. They will be challenged to use their knowledge of factors and multiples to solve problems, as well as simplifying answers where appropriate.	<ul style="list-style-type: none"> • Can children add and subtract fractions where the denominators are multiples of the same number? • Can children add and subtract mixed number fractions? • Can children simplify fractions using their knowledge of factors? 	<ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Challenge Cards 2A/2B (FSD? activity only)
Lesson 3	To be able to add and subtract fractions where the denominators are not multiples of the same number.	Children will extend their understanding of adding and subtracting fractions by looking at how to convert fractions whose denominators aren't multiples of the same number in order to complete the calculation. They will be shown several ways to do this, including finding the lowest common multiple of the two denominators. Mixed number calculations are also included.	<ul style="list-style-type: none"> • Can children add fractions where the denominators are not multiples of the same number? • Can children subtract fractions where the denominators are not multiples of the same number? • Can children discuss and explain their reasoning and methods? 	<ul style="list-style-type: none"> • Slides • Challenge Cards 3A/3B/3C • Butterfly Method sheet (FSD? activity only)
Lesson 4	To be able to multiply simple fractions.	Children will use arrays to explore what happens when proper fractions are multiplied together. They will then use this to identify the algorithm for multiplying fractions, and be challenged to simplify answers to calculations where appropriate.	<ul style="list-style-type: none"> • Do children understand the process of what happens when two fractions are multiplied? • Can children multiply two fractions together? • Do children recognise that multiplying proper fractions makes the product smaller than the multiplier and multiplicand? 	<ul style="list-style-type: none"> • Slides • Domino Cards 4A/4B • Fraction Cards • Game Sheet
Lesson 5	To be able to divide proper fractions by whole numbers.	After recapping how to multiply fractions, children will find out how to divide proper fractions by whole numbers. They will use diagrams to help them visualise problems before using an algorithm to solve fraction division problems. They are then challenged to solve a variety of problems, drawing on the learning they have done throughout the week.	<ul style="list-style-type: none"> • Do children understand what is happening to a fraction when it is divided by a whole number? • Can children divide proper fractions by whole numbers using an algorithm? • Can children solve problems in context? 	<ul style="list-style-type: none"> • Slides • Game Board 5A/5B/5C • Game Cards 5A/5B • Help Sheet • Calculation Cards (FSD? activity only) • Target Cards (FSD? activity only)