

Factors Multiples and Primes : Maths : Year 6 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To use factors and number facts to solve problems.	Children will use mathematical terms to explain what factors, products, multiples and integers are. They will then find and record factors and multiples of numbers. The lesson concludes by challenging the children to share what they know about a given number.	<ul style="list-style-type: none"> • Can children explain what factors and products are? • Can children explain what multiples and integers are? • Are children able to explain how they know something? 	<ul style="list-style-type: none"> • Slides • Sieve of Eratosthenes Video (Starter only) • Worksheet 1A/1B/1C • Game Sheet (FSD...? activity only) • Help Sheet (FSD...? activity only)
Lesson 2	To make and use prime factor trees.	Children will explain what prime numbers and composite numbers are, as well as giving examples of them. They will become familiar with and use a prime factors multiplication grid while creating and completing prime factor trees.	<ul style="list-style-type: none"> • Can children identify prime numbers? • Can children use division to find factors? • Can children apply number facts to find prime factors? 	<ul style="list-style-type: none"> • Slides • Prime Factors Multiplication Grid A/B • Worksheet 2A/2B • Missing Numbers Prime Factors Multiplication Grid • Incomplete Prime Factor Trees A/B (FSD...? activity only)
Lesson 3	To use divisibility tests to find large prime numbers.	Children will explain what prime numbers and composite numbers are, as well as giving examples of them. They will be reminded of divisibility tests and apply them to solve problems and find prime numbers by a process of elimination.	<ul style="list-style-type: none"> • Can children identify large prime numbers? • Can children use divisibility tests to answer questions? • Can children work methodically? 	<ul style="list-style-type: none"> • Slides • Divisibility Rules (starter only) • Number Cards Set A/B • Worksheet 3A • Challenge Cards (FSD...? activity only)
Lesson 4	To solve problems involving common multiples.	Children will find lowest common multiples of numbers using either a formula or the grid method. They will be challenged to apply their knowledge of factors and multiples in this lesson when finding the highest common factor and the lowest common multiple.	<ul style="list-style-type: none"> • Can children use multiplication to solve problems? • Can children use division to solve problems? • Can children apply number facts to solve problems? 	<ul style="list-style-type: none"> • Slides • Worksheet 4A/4B/4C • Multiples Grids A/B (FSD...? activity only) • Blank Multiples Grid (FSD...? activity only)
Lesson 5	To show what we know about numbers.	Children will look at a range of numbers and share what they know about them. They will be challenged to apply their knowledge of prime numbers, composite numbers, factors, multiples, multiplication and division.	<ul style="list-style-type: none"> • Can children identify prime numbers? • Can children use multiplication to solve problems? • Can children use division to solve problems? 	<ul style="list-style-type: none"> • Slides • Number Cards (Starter only) • Worksheet 5A/5B/5C • Worksheet 5D (FSD...? activity only) • Sorting Numbers and Categories (FSD...? activity only) • Factors and Multiplication Game Sheet (Plenary only)