

Factors and Multiples: Maths : Year 5 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To be able to find all factor pairs of a number.	Children will identify what a factor is and learn how to find all the factor pairs for a given number using a methodical process. Children will express factor pairs using arrays, or alternatively 'factor rainbows'.	<ul style="list-style-type: none"> • Do children know what a factor is? • Can children find factors of numbers? • Can children work methodically to find all factor pairs of a number? 	<ul style="list-style-type: none"> • Slides • Worksheet 1A • Challenge Cards 1A/1B/1C • Factor Rainbows sheet (FSD? activity only)
Lesson 2	To be able to find common factors of two numbers.	Children will learn how to identify common factors of two-digit numbers. They will sort numbers into Venn diagrams to identify common factors in two or more numbers. They can also play a game to identify greatest common factors.	<ul style="list-style-type: none"> • Do children understand what a common factor is? • Can children identify common factors of two numbers? • Can children identify common factors of three numbers? 	<ul style="list-style-type: none"> • Slides • Worksheet 2A/2B/2C • Multiplication Grid • Game Board 2A/2B (FSD? activity only) • Game Cards 2A/2B (FSD? activity only)
Lesson 3	To be able to solve problems involving factors and multiples.	Children will identify the difference between factors and multiples. They will sort numbers into Carroll diagrams according to various criteria. They will also solve puzzles for which will encourage a greater understanding of the relationship between factors and multiples.	<ul style="list-style-type: none"> • Can children describe what factors and multiples are? • Can children use their knowledge of factors and multiples to sort numbers? • Can children use their knowledge of factors and multiples to solve problems? 	<ul style="list-style-type: none"> • Slides • Worksheet 3A/3B/3C • Challenge Cards 3A/3B (FSD? activity only)
Lesson 4	To be able to double and halve multiples of 10 to 1000 and multiples of 100 to 10,000.	Children will learn some strategies for doubling and halving multiples of 10 and 100. Children are encouraged to solve calculations mentally wherever possible, using their understanding of factors and multiples to help them.	<ul style="list-style-type: none"> • Can children double and halve three-digit multiples of ten? • Can children double and halve four-digit multiples of ten? • Can they double and halve multiples of 100 to 10,000? 	<ul style="list-style-type: none"> • Slides • Game Sheet 4A/4B/4C • Spinner 4A/4B/4C • Number Cards 4A/4B (FSD? activity only) • Blank Number Cards (FSD? activity only)
Lesson 5	To be able to multiply by factors of 100.	Children will practise multiplying by factors of 100, namely 25, 50 and 75. Children are taught a variety of strategies to help them do this. They are encouraged to solve problems mentally wherever possible.	<ul style="list-style-type: none"> • Can the children multiply by 50 by multiplying by 100 and halving? • Can they multiply by 25 by multiplying by 100 and dividing by 4 using jottings? • Can they multiply by 25 by multiplying by 100 and dividing by 4 mentally? 	<ul style="list-style-type: none"> • Slides • Worksheet 5A • Calculation Cards 5A/5B • Multiplication Webs 5A/5B/5C (FSD? activity only)