

Multiplication Problems: Maths : Year 3 : Summer Term

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To recognise and use multiples of three, four and eight.	In this lesson the children will use their knowledge of multiples to investigate and predict different patterns involving the three, four and eight times tables. After refreshing their memories of multiples for each number, the children are asked to spot similarities between multiples and begin to use this understanding to label larger numbers as multiples of other numbers i.e. multiples of two are always even, therefore 246 is a multiple of two.	<ul style="list-style-type: none"> • Can children recall multiples of three? • Can children recall multiples of four and eight? • Can children recognise similarities between multiples i.e. all multiples of four are even? 	<ul style="list-style-type: none"> • Slides • Challenge Cards 1A/1B/1C • Plain paper • Felt tips • Coloured counters • Spinner (FSD? activity only) • Game Board (FSD? activity only) • Game Instructions (FSD? activity only) • Paper clips (FSD? activity only)
Lesson 2	To use the expanded short multiplication method.	Using previous knowledge of the grid method the children begin to progress into the use of formal written methods by learning the expanded short multiplication method. They compare the two methods and identify similarities between the two. The children also have the opportunity to evaluate each method and say which they prefer before using the methods to work out ticket sales at the aquarium.	<ul style="list-style-type: none"> • Can children compare the grid method and the expanded method to find any similarities or differences? • Can children describe the process of using the expanded method? • Can children use the expanded method to solve TO x O calculations? 	<ul style="list-style-type: none"> • Slides • Worksheets 2A/2B/2C • Multiplication Squares • Worksheet 2D (FSD? activity only) • Challenge Cards 2A (FSD? activity only) • Calculation Cards 2A/2B/2C
Lesson 3	To use systematic and logical methods to solve correspondence problems.	In this lesson the children will be challenged to develop their problem-solving skills when approaching a problem which requires them to think logically and systematically. They must find all the possible combinations of objects from a set, responding to required criteria. They apply these skills to finding solutions to real-life problems based around running an aquarium.	<ul style="list-style-type: none"> • Can children identify one possible combination within a set of objects? • Can children use a systematic and logical method to solve correspondence problems? • Are children able to find all possible combinations within a set of objects? 	<ul style="list-style-type: none"> • Slides • Worksheets 3A/3B/3C • Counters • Hundred squares • Sticky notes • Challenge Cards 3A/3B/3C (FSD? activity only) • Combination Cards (FSD? activity only)
Lesson 4	To use known multiplication strategies to solve scaling problems.	This lesson challenges the children to use the language of scaling when solving multiplication problems. They need to use the systematic and logical approaches from previous lessons to solve scaling questions with more than one possible answer.	<ul style="list-style-type: none"> • Can children recognise which multiplication to use when solving a scaling problem? • Are children able to employ a systematic and logical approach to solving scaling problems? • Are children able to use reasoning to back up their decisions when working through a scaling problem? 	<ul style="list-style-type: none"> • Slides • Worksheets 4A/4B/4C/4D • Worksheets 4E/4F/4G (FSD? activity only)
Lesson 5	To use multiplying by 10 and 100 to solve a multi-step problem.	In this final lesson the children bring together the learning they have done over the week to solve a larger problem based around the deca-anemone. The children will work in groups to produce representations of the problem as well as having the opportunity to pose their own 'What if...?' questions regarding the previous problem.	<ul style="list-style-type: none"> • Can children multiply by 10 and 100? • Can children produce a logical thought process when solving a problem? • Can children use their understanding of the four operations to solve a multi-step problem? 	<ul style="list-style-type: none"> • Slides • Game Board • Dice • Coloured counters • Dienes set or objects to model problem. • Large paper • Felt tips