

# Using Division and Multiplication: Maths : Year 3 : Spring Term

	Learning Objective	Overview	Assessment Questions	Resources
<b>Lesson 1</b>	To know how to multiply numbers by multiples of 10 and 100 using known facts	Children will first recap on how to multiply by 10 and 100. They will be encouraged to explain what happens to the digits in each number. Children will then learn how to apply this to multiply numbers by multiples of 10 and 100. In their independent activities, children will use this knowledge and understanding to solve tarsia puzzles. Alternatively they will be challenged to find what other number facts they know based on one given number sentence.	<ul style="list-style-type: none"> <li>• Can children multiply and divide numbers using a multiple of 10?</li> <li>• Can children multiply and divide numbers using a multiple of 100?</li> <li>• Can children explain how they reached their answer and how they know it is correct?</li> </ul>	<ul style="list-style-type: none"> <li>• Slides</li> <li>• Tarsia Puzzle Sheet A/B/C</li> <li>• Number Sentence List (FSD? activity)</li> <li>• Reasoning Sheet (FSD? activity only)</li> </ul>
<b>Lesson 2</b>	To be able to multiply numbers using partitioning and repeated addition	Children will use their knowledge of partitioning and repeated addition to multiply two- and three-digit numbers by a one-digit number. They will start to use the column method for adding numbers. Children will be encouraged to explain the different steps needed when using this strategy. In their independent activities, they will use spinners to generate and then solve their own number sentences, or alternatively they will identify calculations which contain errors, and correct them.	<ul style="list-style-type: none"> <li>• Can children partition two- and three-digit numbers?</li> <li>• Do children understand how to use repeated addition for multiplication?</li> <li>• Can children explain how they used this method to multiply two- and three-digit numbers by a one-digit number?</li> </ul>	<ul style="list-style-type: none"> <li>• Slides</li> <li>• Number Generator Spinner Set A/B/C</li> <li>• Worksheet 2A/2B/2C</li> <li>• Right or Wrong? Sheet A/B (FSD? activity only)</li> <li>• Corrections Sheet (FSD? activity only)</li> </ul>
<b>Lesson 3</b>	To know how to use the grid method for multiplication	Children will be introduced to the grid method for multiplication. They will learn what each box in the grid is for, and how to enter the information from the number sentence that they are solving. They will learn where each separate multiplications should go, and how to recombine using addition to find the final answer.	<ul style="list-style-type: none"> <li>• Do children understand how to use the grid method to solve multiplication number sentences?</li> <li>• Can children explain how to use the grid method?</li> <li>• Can children use the grid method to solve and check answers to number sentences?</li> </ul>	<ul style="list-style-type: none"> <li>• Slides</li> <li>• Grid Method Cards A/B/C</li> <li>• Grid Method Investigation Sheet (FSD? activity only)</li> </ul>
<b>Lesson 4</b>	To know how to solve division number sentences with repeated subtraction	Children will recap on how to use repeated subtraction on a number line to solve number sentences where they are dividing two- and three-digit numbers by a one-digit number. They will be encouraged to think about where mistakes could be made when using this method, and discuss how they can ensure that they themselves do not make these errors.	<ul style="list-style-type: none"> <li>• Can children solve a division number sentence using repeated subtraction on a number line?</li> <li>• Can children explain how to solve a division sentence using repeated subtraction?</li> <li>• Can children identify and correct errors in the number sentences which have been incorrectly solved using the repeated subtraction method?</li> </ul>	<ul style="list-style-type: none"> <li>• Slides</li> <li>• Worksheet 4A/4B/4C</li> <li>• Blank Number Line Strips Sheet (FSD? activity only)</li> <li>• Instruction Cards A/B/C (FSD? activity only)</li> </ul>
<b>Lesson 5</b>	To know how to solve missing number problems	Children will recap on the methods they have used for multiplication and division over the last few lessons. They will then compare and contrast two methods for finding a missing number in a sentence – trial and improvement, and using the inverse operation. In their independent activities, children will be encouraged to use the inverse operation when playing the What's Missing? board game, or in the alternate activity, they will use the trial and improvement method to find missing numbers.	<ul style="list-style-type: none"> <li>• Do children understand what an inverse operation is?</li> <li>• Can children use the inverse operation to solve missing number problems involving multiplication and division?</li> <li>• Can children explain their methods and reasoning?</li> </ul>	<ul style="list-style-type: none"> <li>• Slides</li> <li>• What's Missing? Game A/B/C</li> <li>• What's Missing? Instructions Card</li> <li>• Dice, different coloured counters</li> <li>• Blank Number Lines Sheet</li> <li>• Blank Grid Method Boxes Sheet</li> <li>• Challenge Cards A/B (FSD? activity only)</li> </ul>