














Multiplication and Division:








Short Multiplication with Two-Digit Numbers

Aim: Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. I can use the short method of multiplication to multiply two-digit numbers by one-digit numbers.	Success Criteria: I can set my calculation out correctly. I start at the right-hand side when calculating, multiplying the ones and then the tens. I can regroup tens and hundreds and record this in the next column.	Resources: Lesson Pack Whiteboards and pens - class set
	Key/New Words: Partition, multiply, expanded multiplication, tens, ones, calculation, regroup.	Preparation: Differentiated Short Multiplication Activity Sheets - one per child Multiplication Squares - as required

Prior Learning: It will be helpful if the children know the multiplication and division facts up to 12×12 and can multiply numbers using expanded multiplication (covered in Expanded Multiplication (1): Expanded Multiplication with Two-Digit Numbers, and Expanded Multiplication (2): Expanded Multiplication with Three-Digit Numbers).

Learning Sequence

	Tables Tourer: Choose a child to be the 'Tables Tourer'. This child goes and stands behind another child's chair. Call out a multiplication tables question. Both children must try to call out the correct answer first. If the child on the chair wins then they stand up, go and stand behind another child's chair and become the 'Tables Tourer.' The previous 'Tables Tourer' then sits in the chair. You could have a class record for 'Top Tables Tourer' - the child who has answered the most questions correctly therefore has had the longest tour round the room.				
	Expanded Multiplication: Using the demonstration on the Lesson Presentation , remind children of the expanded method of multiplication, asking children what they like and dislike about the method.				
	Short Multiplication: Explain that the children are going to learn how to multiply two-digit numbers by one-digit numbers using a faster method. Model the method using the example on the Lesson Presentation . Next, work through some examples as a class with children working on individual whiteboards.				
	Regrouping: Looking at the Lesson Presentation , model an example where the children need to regroup ones into tens and record this under the line in the next column. Next, children work in pairs to complete some calculations with regrouping, working on individual whiteboards.				
	Short Multiplication Activities: Children complete the differentiated Short Multiplication Activity Sheets , using the short method of multiplication to multiply two-digit numbers by one-digit numbers.				
	Children practise multiplying two-digit numbers by one-digit numbers using the short multiplication method, with no regrouping. Provide a Multiplication Square for support if required.		Children practise multiplying two-digit numbers by one-digit numbers using the short multiplication method with regrouping. Provide a Multiplication Square for support if required.		Children practise multiplying two-digit numbers by one-digit numbers using the short multiplication method with regrouping.

	<p>Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.</p> <p> Children complete fluency activities connecting models and images with the expanded and short multiplication formal method used for multiplying 2-digit numbers by 1-digit numbers.</p> <p> Children discuss why a statement about the multiplication of a 2-digit number by a 1-digit number may be true or false. They are given the opportunity to use their reasoning skills to spot which is the odd one out and explain why. They apply their problem-solving skills to identify errors in the calculation procedure and explain what is incorrect.</p> <p> Children apply their knowledge of multiplying 2-digit numbers by a 1-digit number to complete problem-solving tasks to identify missing numbers in calculations. They identify which numbers are represented by each letter in a calculation.</p>	
	<p>Spot the Mistake: Children work in pairs to check the calculations on the Lesson Presentation, identifying the errors in calculations and then working out the correct answer.</p>	

Exploreit

Practiseit: Children complete the [Multiplication and Division PowerPoint Quiz](#) to practise their times tables.

Applyit: Children play the [BBC game Conveyor Belt Multiplication](#) to practise solving real-life money multiplication problems.

Fixit: Children mark their partners work, using a calculator and use a highlighter to identify errors. The children then work together to correct the mistakes.