National Curriculum Objectives:

Mathematics Year 5: (5C6a) Multiply and divide numbers mentally drawing upon known facts
Mathematics Year 5: (5C6b) Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000
Mathematics Year 5: (5C7a) Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers

About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More Year 5 Multiplication and Division resources.

Did you like this resource? Don't forget to review it on our website.

Multiply 2 Digits by 2 Digits

1. Complete the calculation using the digit cards below. You may use each digit more than once.

Digit cards: 1, 3, 9, 4, 5

		☐	☐
x		☐	☐
	☐	☐	5
	☐	☐	0
	☐	8	☐

Investigate the options if the answer were a 4-digit number.

2. You and your partner each need a grid, as below. Take turns to roll a dice and place the digit you roll on a calculation grid. You may place the digit on your calculation grid or your partner's.

Once you each have two 2-digit numbers on your grid, calculate your answers. Whoever has the biggest number, wins.
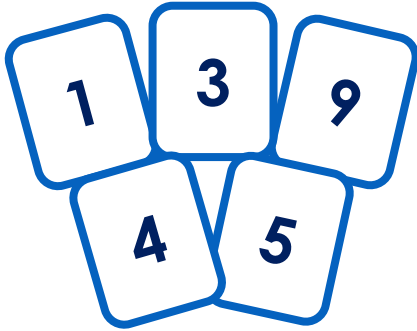
		☐	☐
x		☐	☐

		☐	☐
x		☐	☐

Play again, this time playing to create the smallest number. Try to be strategic!

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Discussion Problems – Multiply 2 Digits by 2 Digits – Year 5

Multiply 2 Digits by 2 Digits

1. Complete the calculation using the digit cards below. You may use each digit more than once.

1 3 9 4 5

x			
			5
			0
		8	

Various answers, for example: 15 x 39 = 585; 45 x 13 = 585
Investigate the options if the answer were a 4-digit number.
Various answers, for example: 35 x 91 = 3,185; 45 x 44 = 1,980

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2. You and your partner each need a grid, as below. Take turns to roll a dice and place the digit you roll on a calculation grid. You may place the digit on your calculation grid or your partner's.

Once you each have two 2-digit numbers on your grid, calculate your answers. Whoever has the biggest number, wins.

Play again, this time playing to create the smallest number. Try to be strategic!
Various outcomes, for example:
Pupils may discuss their strategies, such as placing a 1 in their partner's tens column if playing for the largest number.

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Discussion Problems – Multiply 2 Digits by 2 Digits – Year 5 **ANSWERS**