

Year 5 Multiplication and Division – Area Model

Lesson Guidance

Learning Outcomes and Glossary

Learning Objective

- Your child will learn how to multiply a 2-digit number by a 2-digit number using an area model.

Glossary

- **Area model** – Throughout this resource the method used to multiply two 2-digit numbers together is an area model. An area model is a rectangular grid that is used to partition numbers into tens and ones to allow for easier multiplication or division. This method is fully explained step-by-step in the video for this lesson.
- **Partition** – To partition a number means to divide or split a number into its parts. For example, 27 can be partitioned into 20 and 7 because it is made up of two tens (20) and seven ones (7).
- **Place value counters** – Place value counters are a pictorial representation to show the values of a partitioned number.

Learn

Video – Multiply 2 Digits (Area Model)

- The aim of this video is to show how to multiply two 2-digit numbers together using an area model.
- It might be helpful for children to draw an area model and follow Jade as she calculates each multiplication. Objects such as cereal, marbles or counters could be used instead of place value counters. Hundred squares, tens and ones can be drawn or objects such as Lego used instead.
- Pause the video when the question asks you to partition the numbers, answer the multiplication, solve the addition and complete the area model. You could practise more examples of this kind of multiplication too.

Practise

Worksheet

- Complete the worksheet using the area models provided, or draw your own. You could use counters or other objects to represent the digits.

Interactive Game

- Answer the questions in the interactive game and practise the skills you have learned to calculate the multiplications using an area model.