

Discussion Problems

Step 2: Multiply 2 Digits 1

National Curriculum Objectives:

Mathematics Year 5: (5C6a) [Multiply and divide numbers mentally drawing upon known facts](#)

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.

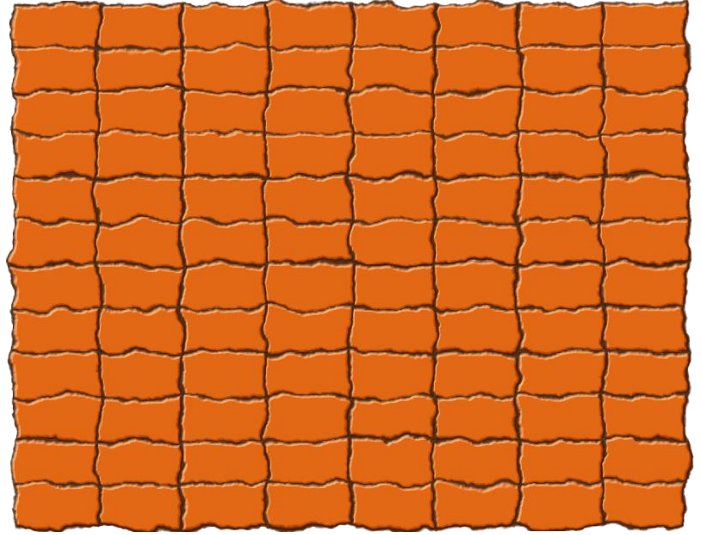
More [Year 5 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Multiply 2 Digits 1

1. Maintenance Mick is painting one wall on the outside of the school. He has ordered paint which will cover 500m^2 . He knows that the wall is between 15m and 17m high. When Mick has finished, he has less than one tenth of the pot left.

Colour: red
Coverage: 500m^2



Explore the possible dimensions and area of the wall, using an area model.

DP

2. Jed says,



I have multiplied 27 by a 2-digit number. One digit of my number is double the other digit. The digit sum of the answer is 18.

$$\boxed{27} \times \boxed{\begin{array}{|c|c|} \hline ? & ? \\ \hline \end{array}} = \boxed{?}$$

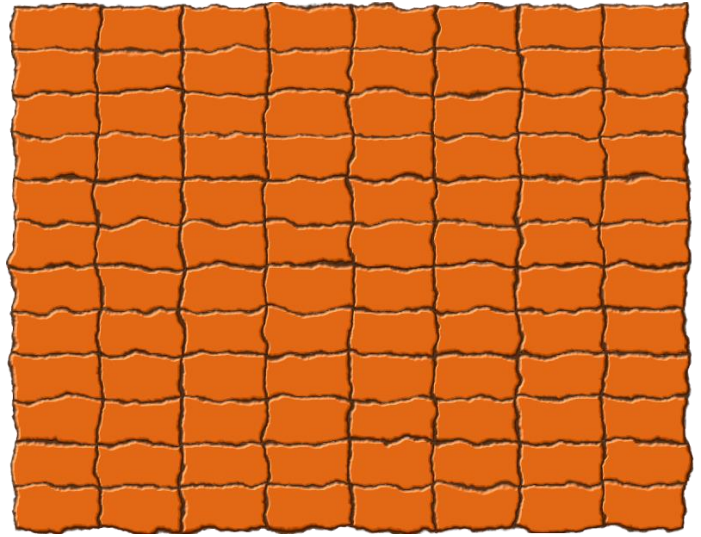
Find all of the possibilities.
Prove it using an area model.

DP

Multiply 2 Digits 1

1. Maintenance Mick is painting one wall on the outside of the school. He has ordered paint which will cover 500m^2 . He knows that the wall is between 15m and 17m high. When Mick has finished, he has less than one tenth of the pot left.

Colour: red
Coverage: 500m^2



Explore the possible dimensions and area of the wall, using an area model.

Various answers, for example:
 $15\text{m} \times 31\text{m} = 465\text{m}^2$

DP

2. Jed says,



I have multiplied 27 by a 2-digit number. One digit of my number is double the other digit. The digit sum of the answer is 18.

$$\boxed{27} \times \boxed{\begin{array}{|c|c|} \hline ? & ? \\ \hline \end{array}} = \boxed{?}$$

Find all of the possibilities.
Prove it using an area model.

$27 \times 24 = 648$, $27 \times 36 = 972$, $27 \times 48 = 1,296$.

DP