

The Grid Method



Aim

- I can solve multiplication problems using the grid method.

Success Criteria

- I can draw multiplications as arrays.
- I can partition the numbers into tens and ones.
- I can use a grid to solve more difficult problems.

Let's Count in 5s!



How could we work out 15×5 ?

Apples Galore!

We know that $10 \times 2 = 20$



and $4 \times 2 = 8$



So how could we work out 14×2 ?

Apples Galore!

How could we work out 16×2 ?



10×2 add 6×2

Apples Galore!

How could we work out 17×4 ?



10×4 add 7×4

Apples Galore!

How could we work out 18×8 ?



10×8 add 8×8

The Grid Method

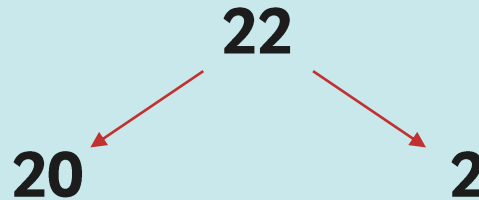
There is a quicker way to solve large multiplications.
This is called the **Grid Method**.

The Grid Method

Look at the problem.

$$22 \times 4 = ?$$

Partition the large number into tens and ones.



Draw a grid.

\times	20	2
4		



The Grid Method

Fill in the grid by solving 20×4 , then 2×4 .

×	20	2
4		

How did we work out 20×4 ?

- Draw the wizard's hat to find the multiplication facts.
- Calculate the answer.
- Count the number of zeros in the question.
- Put the zeros back onto your answer.



The Grid Method

After you have solved the calculations add the two answers together.

This gives you the answer to the problem.

×	20		2	
4	80	+	8	= 88

$$20 \times 4 = 80$$

$$2 \times 4 = 8$$

$$80 + 8 = 88$$

$$22 \times 4 = 88$$

The Grid Method

- Look at the problem.
- Partition the large number.
- Draw a grid.
- Write the numbers into the grid.
- Solve the calculations.
- Add the answers together.
- Write this number at the end of the problem to finish answering the question.

Example Answer

×	20		2
4	80	+	8

$$22 \times 4 = 88$$

Grid Method Activity



The Grid Method

I can multiply using the grid method.

A

1. $13 \times 4 = \underline{\quad}$

10×4 add 3×4

2. $20 \times 4 = \underline{\quad}$

10×4 add 10×4

3. $16 \times 8 = \underline{\quad}$

x	10	6
8		

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The Grid Method

10	9

Grids to solve these problems:

2. 20×8

4. 30×8

6. 21×4

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Tell Me How



Choose one of these calculations and explain to a partner how you would solve it.



$$13 \times 4 =$$



$$27 \times 8 =$$



$$46 \times 8 =$$

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