

Use the resources on your table to help you answer these questions.

$$2,612 \times 6 =$$

$$2,612 \times 3 =$$

$$1,306 \times 6 =$$

$$1,306 \times 3 =$$



Remember that we always start with the units



Is there a pattern you notice?

RECALL

In today's lesson we are going to draw out the problems to help us answer the questions (like we did on Monday)

$$44 \times 32 =$$

It should be set out like this

100	100	100	100	10	10	10	10
100	100	100	100	10	10	10	10
100	100	100	100	10	10	10	10
10	10	10	10	1	1	1	1
10	10	10	10	1	1	1	1

Make sure set out the headings correctly

What are the advantages of using the grid method?

GUIDED
PRACTICE

LO: multiplying 2 digit by 2 digit numbers using the grid method.

Some will even answer questions out of context.

Some will spot errors in calculations.

Most will use the grid method to find missing numbers in calculations.

All will answer number problems.

LEARNING HABIT DISCIPLINE.

Use the grid method and the counters to help you answer the questions.



$$32 \times 24 =$$

$$25 \times 32 =$$



$$35 \times 32 =$$

$$45 \times 42 =$$



$$52 \times 24 =$$

$$24 \times 34 =$$



Remember to partition the numbers



Do you notice any patterns between the answers.

**INTELLIGENT
PRACTICE.**

Use the place value counters to complete the multiplication grid and sentence.

×	10	10	1	1	1	1	1	1
10	100	100	10	10	10	10	10	10
10	100	100	10	10	10	10	10	10
10	100	100	10	10	10	10	10	10
1	10	10	1	1	1	1	1	1
1	10	10	1	1	1	1	1	1

×	20	6
30		
2		

$$26 \times 32 = \boxed{}$$

$$24 \times \boxed{} = 768$$

Use an area model to find the missing number.



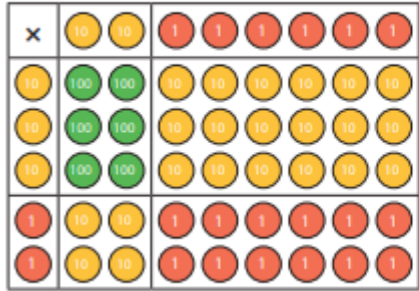
Make sure you set out the second question properly



Explain your working out for the second question.

DIVE DEEPER 1

Use the place value counters to complete the multiplication grid and sentence.



×	20	6
30		
2		

$$26 \times 32 = \boxed{832}$$

$$24 \times \boxed{32} = 768$$

Use an area model to find the missing number.







Make sure you set out the second question properly



Explain your working out for the second question.

DIVE DEEPER 1 ANSWERS

Amir hasn't finished his calculation.
Complete the missing information and
record the calculation with an answer.

×	40	2
40		
6		

Eva says,



To multiply 23 by 57 I just
need to calculate $20 \times$
50 and 3×7 and then
add the totals.

What mistake has Eva made?
Explain your answer.







Make sure you explain properly what mistake Amir has done wrong.



What could Eva do next time to make sure she doesn't make the
same mistake again?

DIVE DEEPER 2

Amir hasn't finished his calculation.
Complete the missing information and
record the calculation with an answer.

×	40	2
40		
6		

Amir needs 8
more hundreds,
 $40 \times 40 = 1,600$
and he only has
800

His calculation is
 $42 \times 46 = 1,932$

Eva says,



To multiply 23 by 57 I just
need to calculate $20 \times$
 50 and 3×7 and then
add the totals.

What mistake has Eva made?
Explain your answer.

Eva's calculation
does not include
 20×7 and $50 \times$
 3
Children can show
this with concrete
or pictorial
representations.



Make sure you explain properly what mistake Amir has done wrong.



What could Eve do next time to make sure she doesn't make the
same mistake again?

DIVE DEEPER 2 ANSWERS

Farmer Ron has a field that measures 53 m long and 25 m wide.

Farmer Annie has a field that measures 52 m long and 26 m wide.

Dora thinks that they will have the same area because the numbers have only changed by one digit each.

Do you agree? Prove it.

Use each digit card once to write a multiplication.



$$\square \times \square = \square$$

How many different answers can you find?

How many products are there between 1,000 and 1,500?



Write or draw out the first problem.



Explain how you got the answers for the second question?

DIVE DEEPER 3

Farmer Ron has a field that measures 53 m long and 25 m wide.

Farmer Annie has a field that measures 52 m long and 26 m wide.

Dora thinks that they will have the same area because the numbers have only changed by one digit each.

Do you agree? Prove it.

Dora is wrong.
Children may
prove this with
concrete or
pictorial
representations.

Use each digit card once to write a multiplication.



$$\square \times \square = \square$$

How many different answers can you find?

How many products are there between 1,000 and 1,500?

Example of answers.

$$23 \times 45 = 1,035$$

$$23 \times 54 = 1,242$$

$$24 \times 35 = 840$$

$$24 \times 54 = 1,296$$

$$25 \times 34 = 850$$

$$25 \times 43 = 1,075$$

$$32 \times 45 = 1,440$$

$$32 \times 54 = 1,728$$

$$34 \times 52 = 1,768$$



Partition the first problem to help you.



Explain how you got the answers for the second question?

DIVE DEEPER 3 ANSWERS