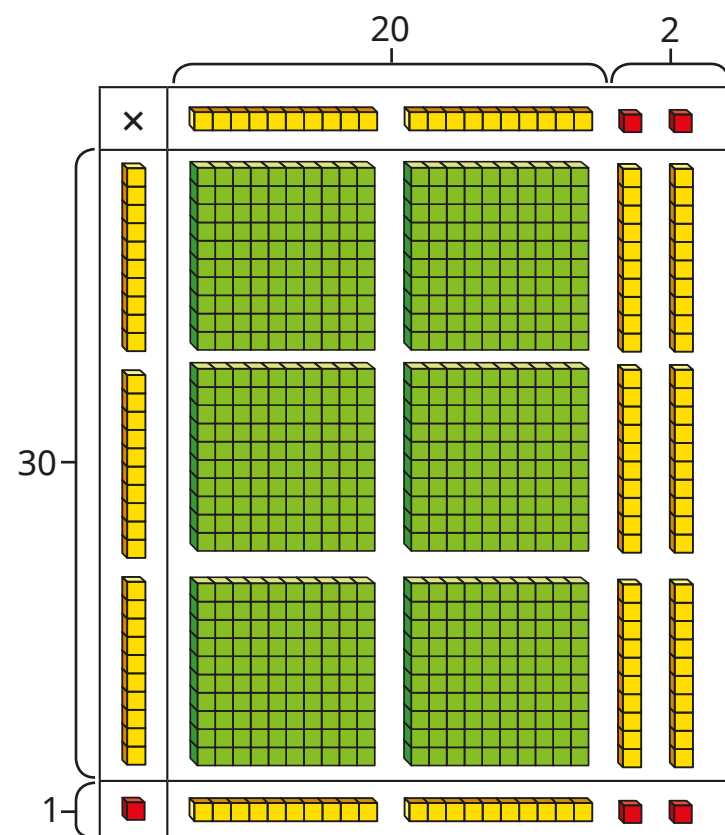


# Multiply a 2-digit number by a 2-digit number (area model)



- 1 Kim is using base 10 to work out  $31 \times 22$   
Use Kim's model to help you complete the sentences.



There are  ones altogether.

There are  tens altogether.

There are  hundreds altogether.

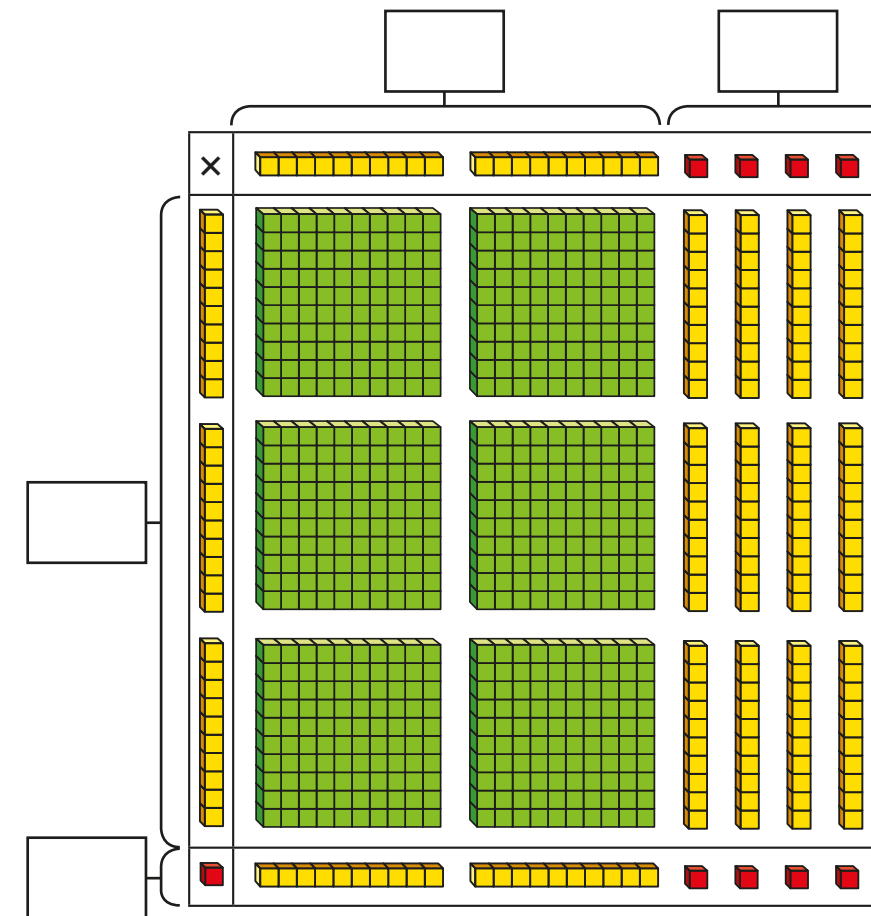
$31 \times 22 =$

- 2 Use base 10 to work out the multiplications.

a)  $12 \times 14 =$

b)  $23 \times 13 =$

- 3 The base 10 represents  $31 \times 24$   
Add the missing information to the area model and complete the sentences.



+  +  +  =

So  $31 \times 24 =$

- 4 Use base 10 to work out the multiplications.

a)  $25 \times 15 =$

b)  $36 \times 12 =$

c)  $43 \times 26 =$

d)  $23 \times 34 =$



- 5 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		

$$26 \times 32 = \boxed{\phantom{000}}$$

- 6 Use an area model to help you complete each multiplication.

a)  $28 \times 14 = \boxed{\phantom{000}}$

×	20	8
10		
4		

c)  $35 \times 22 = \boxed{\phantom{000}}$

b)  $27 \times 16 = \boxed{\phantom{000}}$

×		

d)  $45 \times 36 = \boxed{\phantom{000}}$

7  $24 \times \boxed{\phantom{00}} = 768$

Complete the area model to find the missing number.

×	
30	
2	

- 8 Use each digit card once to write a 2-digit by 2-digit multiplication.

2	3	4	5
		×	

List all the different answers that you can find.

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

