

Mon: To multiply a 2-digit number by a 2-digit number (area model)

Tues: To multiply a 2-digit number by a 2-digit number

Weds: To multiply a 3-digit number by a 2-digit number

Thurs : To multiply a 4-digit number by a 2-digit number

Fri -Mental maths revision

Tues: units of measure

Weds: times tables practice $\times 4 \times 8$

Thurs: shape properties

Fri: Key skills

Spring 1 2024 Week 3

White Rose
MATHS

LO: To multiply a 2-digit number by a 2-digit number (area model)

LO: To multiply a 2-digit number by a 2-digit number

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Mon 22.1.24

LO: To multiply a 2-digit number by a 2-digit number (area model)

Thousands	Hundreds	Tens	Ones
			
			
			

1) $2,123 \times 3 =$

2) $2,123 \times 4 =$

3) $2,124 \times 3 =$

Do now- stick in books

Thousands	Hundreds	Tens	Ones
			
			
			

1) $2,123 \times 3 =$

2) $2,123 \times 4 =$

3) $2,124 \times 3 =$

Thousands	Hundreds	Tens	Ones
			
			
			

1) $2,123 \times 3 =$

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Mon

Thousands	Hundreds	Tens	Ones
			
			
			

1) $2,123 \times 3 =$

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Thousands	Hundreds	Tens	Ones
			
			
			

1) $2,123 \times 3 =$

2) $2,123 \times 4 =$

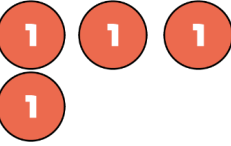
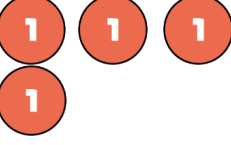
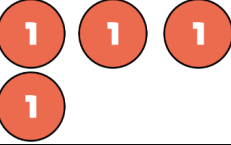
3) $2,124 \times 3 =$

Thousands	Hundreds	Tens	Ones
			
			
			

1) $2,123 \times 3 =$

2) $2,123 \times 4 =$

3) $2,124 \times 3 =$

Thousands	Hundreds	Tens	Ones
			
			
			

$$1) 2,123 \times 3 = 6,369$$

$$2) 2,123 \times 4 = 6,369 + 2,123 = 8,492$$

$$3) 2,124 \times 3 = 6,369 + 3 = 6,372$$



Term Spring 1 Week beginning 23.1.23

Block Multiplication and division (B)

Key vocabulary

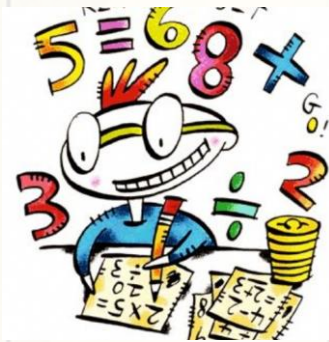
Multiplication, division, digit, method, place holder, place value, remainder, partition, links to addition/subtraction, estimate, exchange

	WT	EX	S
Multiply up to a 4-digit number by a 1-digit number			
Multiply a 2-digit number by a 2-digit number			
Multiply a 3-digit number by a 2-digit number			
Multiply a 4-digit number by a 2-digit number			
Solve problems with multiplication			
Short division			
Divide a 4-digit number by a 1-digit number			
Divide with remainders			
Efficient division			
Solve problems with multiplication and division			

Stem sentences

- First, I multiply ___ by ___ ones. Then I multiply ___ by ___ tens. Finally, I add together ___ and ___.
- To calculate $\text{___} \times 24$, I can do $\text{___} \times \text{___} \times \text{___}$
- To calculate $9,999 \times \text{___}$, I can do $10,000 \times \text{___} - \text{___}$
- The most efficient strategy to calculate $\text{___} \times \text{___}$ is ...
- ___ hundreds divided by ___ is equal to ___ hundreds with a remainder of ___
- Exchange the remainder, then ___ tens divided by ___ is equal to ___ tens with a remainder of ___
- Exchange the remainder, then ___ ones divided by ___ is equal to ___ ones

Maths Three Repeating Golden Threads



Mastery

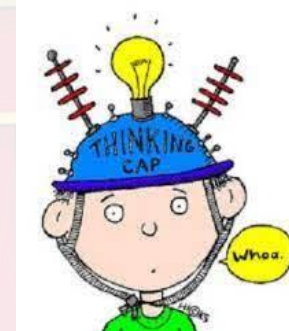
Pupils acquire a deep, long-term, secure adaptable understanding

Fluency

Quick and. efficient recall of facts and procedures

Application

The use of maths everyday in the real world, outside the classroom.



Crucial Vocab...

multiply
exchange
column
digit

Mon

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exchange
column
digit

multiply
exchange
column
digit

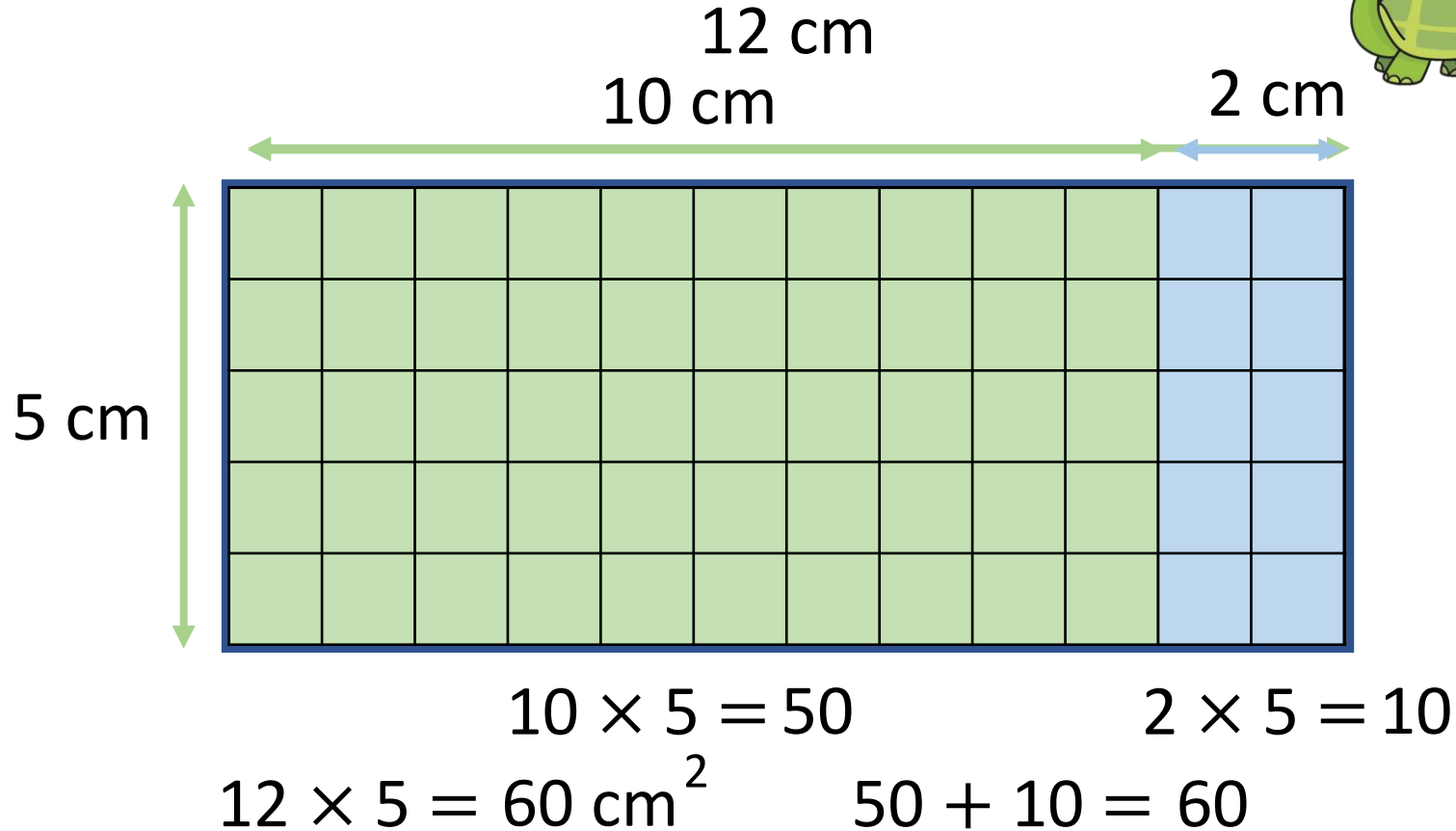
multiply
exchange
column
digit

multiply
exchange
column
digit

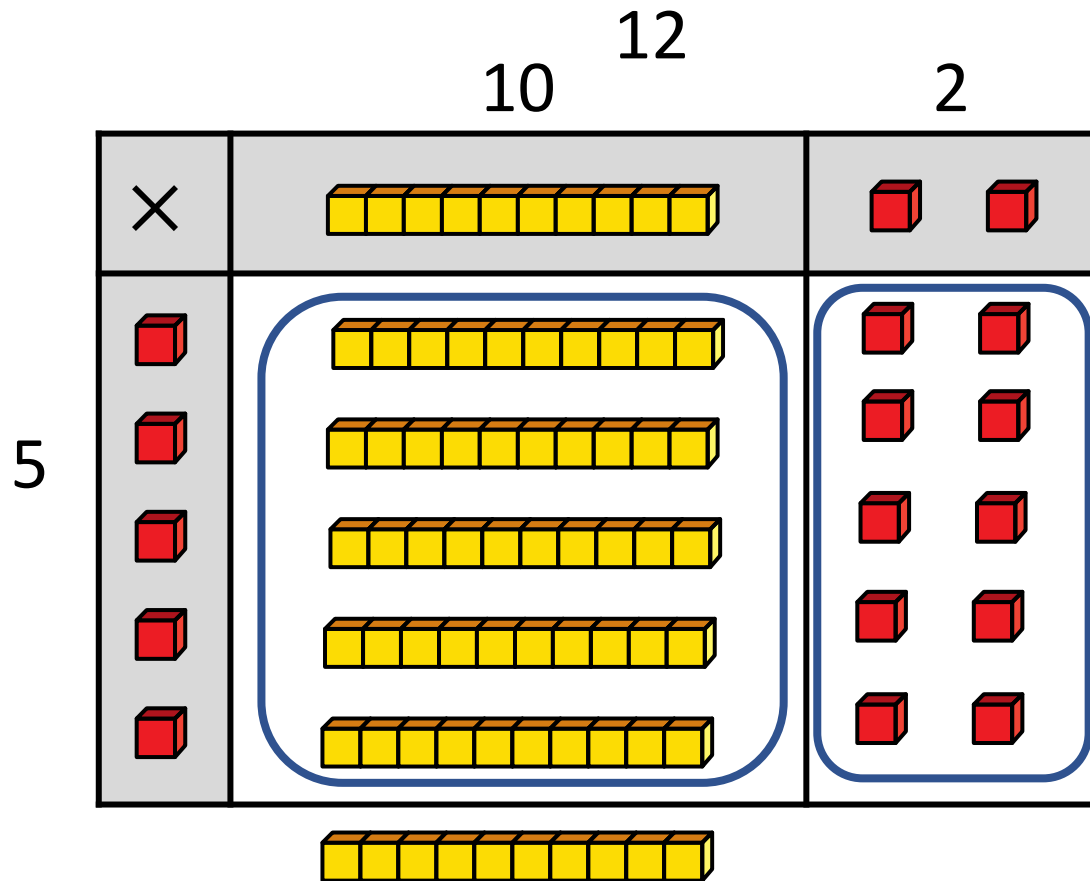
multiply
exchange
column
digit

multiply
exchange
column
digit

Tiny is calculating the area of this rectangle.



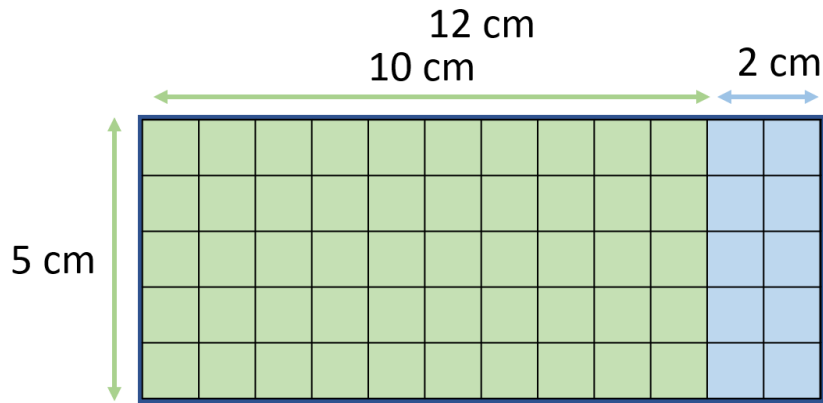
What do you notice?



There are 10 ones altogether.

There are 6 tens altogether.

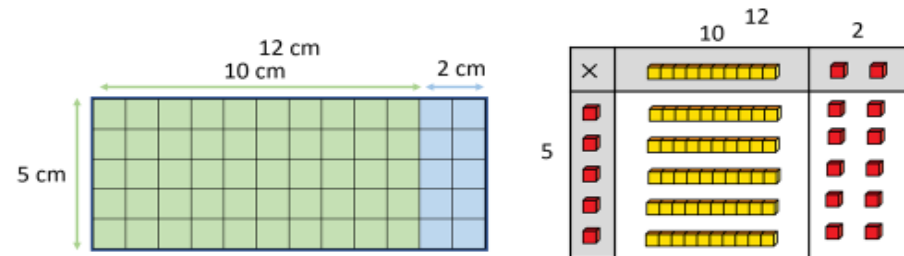
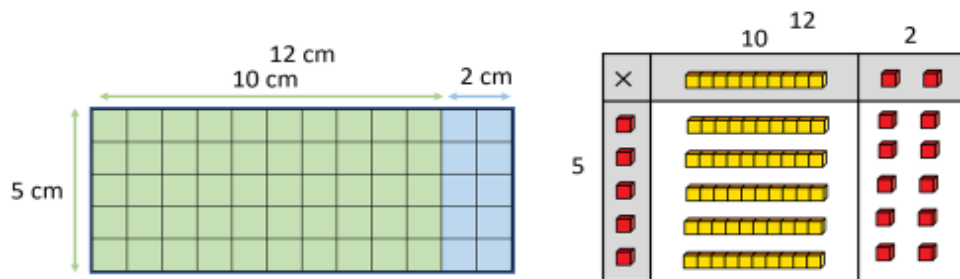
60



		10	12	2									
×													
5													

What is the
same?

What is
different?

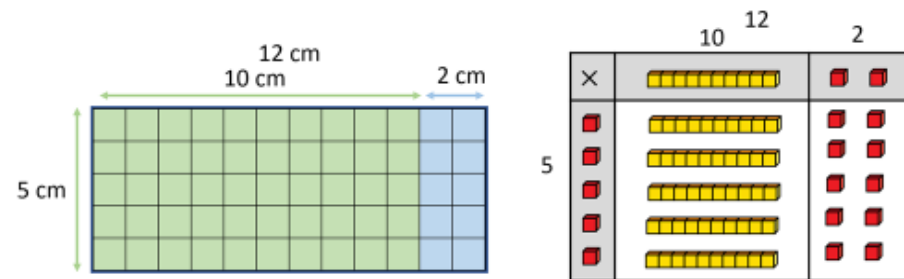
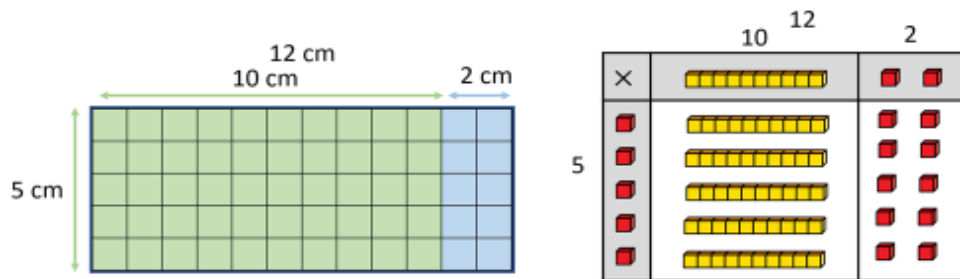


What is the same?

What is different?

What is the same?

What is different?

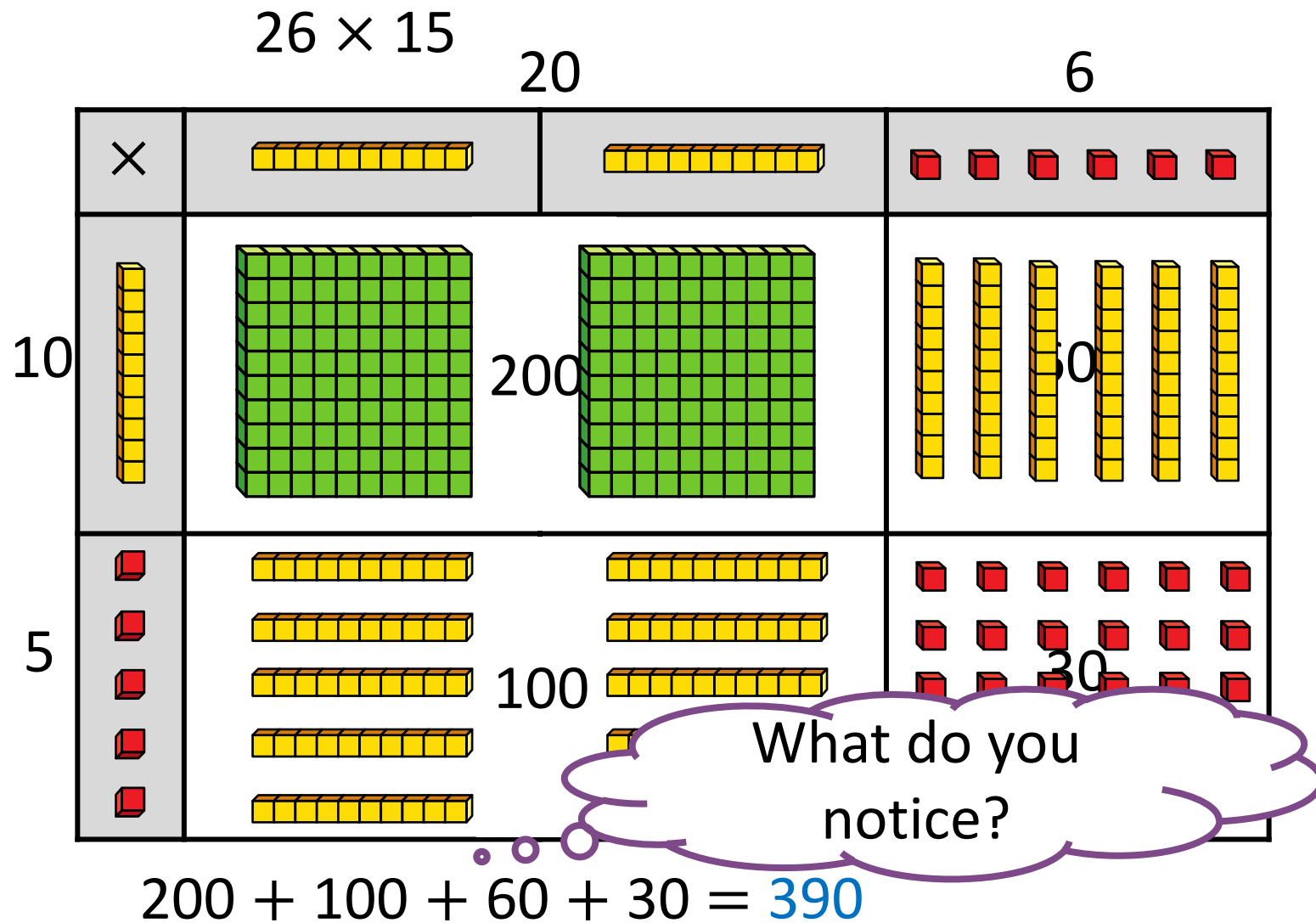


What is the same?

What is different?

What is the same?

What is different?



$$14 \times 21 = 294$$

Have a think



		20	1
×			
10			
4			

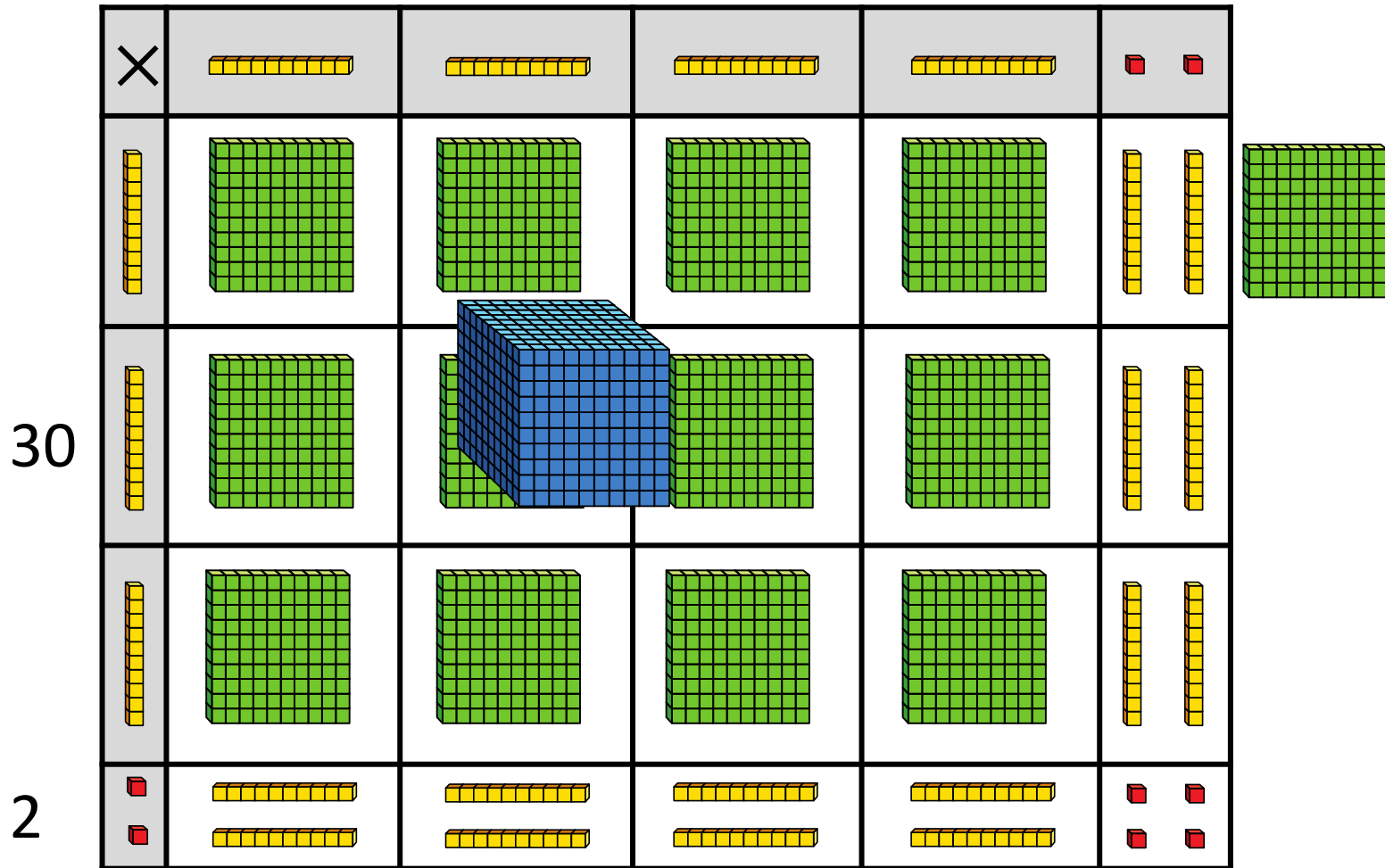
$$42 \times 32 = 1,344$$

Have a think

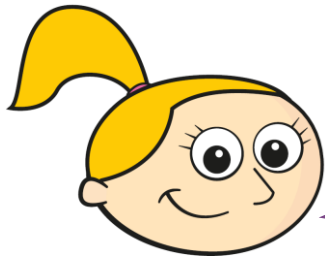


40

2



Eva is calculating $23 \times 57 =$



To multiply 23 by 57, I just need to calculate 20×50 and 3×7 and then add the products.

What mistake has Eva made?

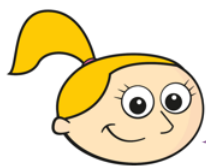
Explain your answer.

Have a think



Eva's calculation does not include 20×7 and 50×3

Eva is calculating $23 \times 57 =$

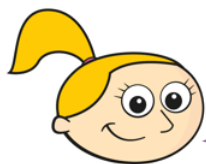


To multiply 23 by 57, I just need to calculate 20×50 and 3×7 and then add the products.

What mistake has Eva made?
Explain your answer.

Mon

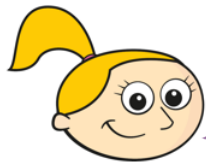
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Explain your answer.

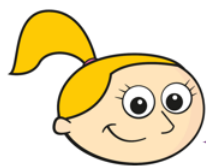
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Explain your answer.

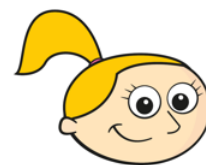
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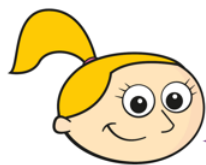
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What mistake has Eva made?
Explain your answer.

Eva is calculating $23 \times 57 =$



To multiply 23 by 57, I just need to calculate 20×50 and 3×7 and then add the products.

What mistake has Eva made?
Explain your answer.



Guided....

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

- 1 Kim is using base 10 to work out 31×22

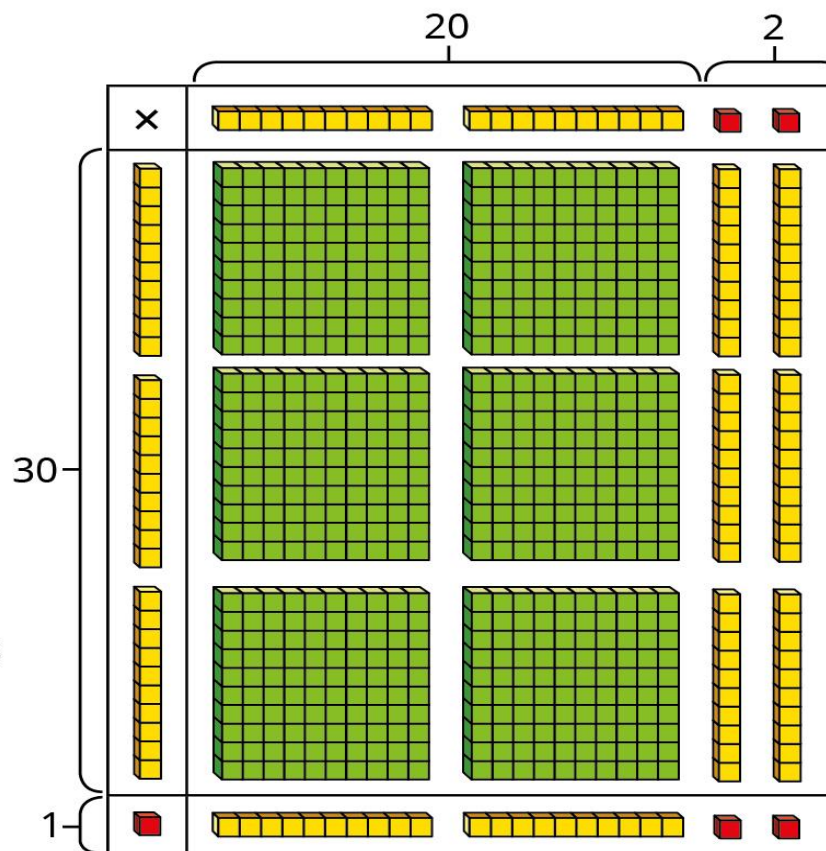
Use Kim's model to help you complete the sentences.

There are ones altogether.

There are tens altogether.

There are hundreds altogether.

$$31 \times 22 = \boxed{}$$





Guided....

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

- 1 Kim is using base 10 to work out 31×22

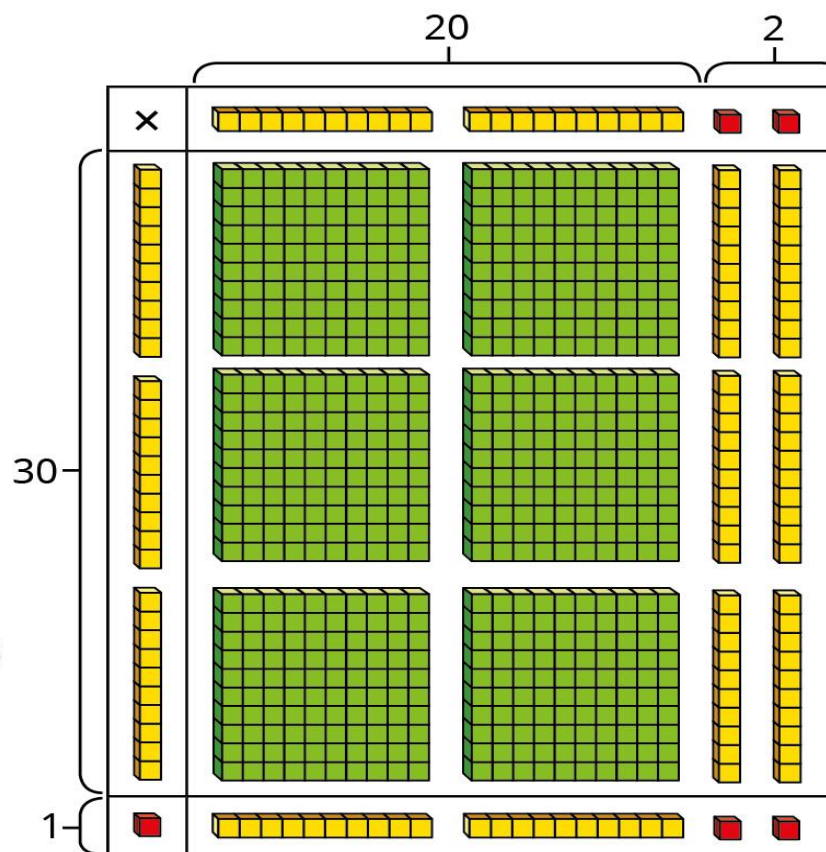
Use Kim's model to help you complete the sentences.

There are ones altogether.

There are tens altogether.

There are hundreds altogether.

$$31 \times 22 = \boxed{}$$





2

Use base 10 to work out the multiplications.

a) $12 \times 14 =$

b) $23 \times 13 =$

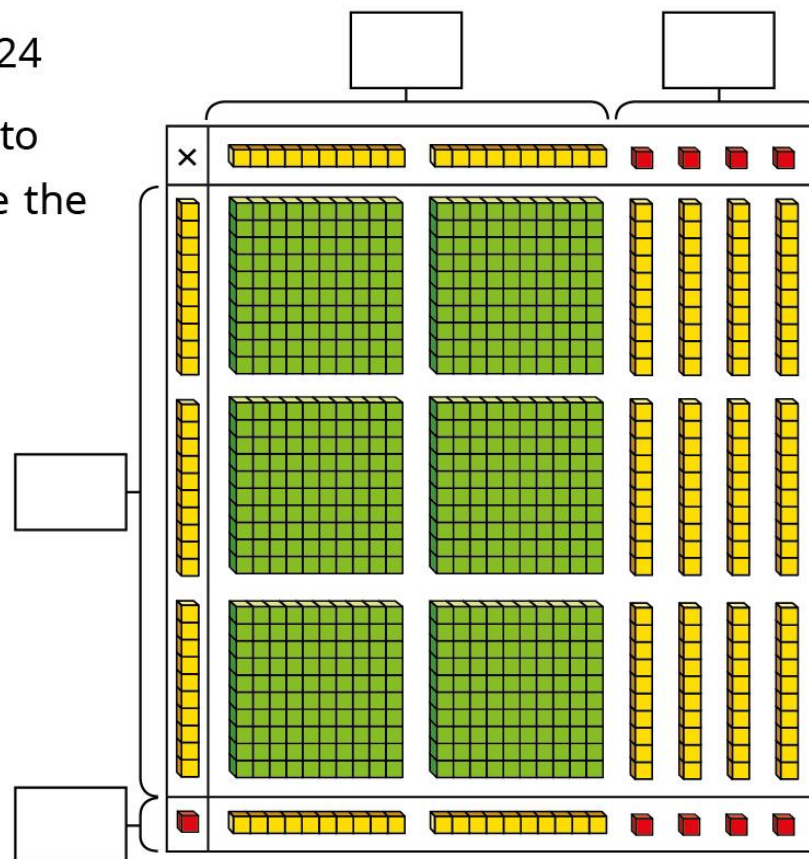
Over to you...



3

The base 10 represents 31×24

Add the missing information to the area model and complete the sentences.

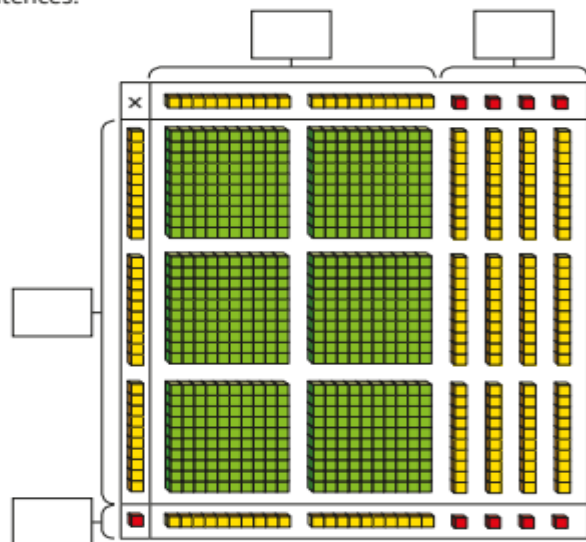


$$\boxed{} + \boxed{} + \boxed{} + \boxed{} = \boxed{}$$

So $31 \times 24 = \boxed{}$

3 The base 10 represents 31×24

Add the missing information to the area model and complete the sentences.

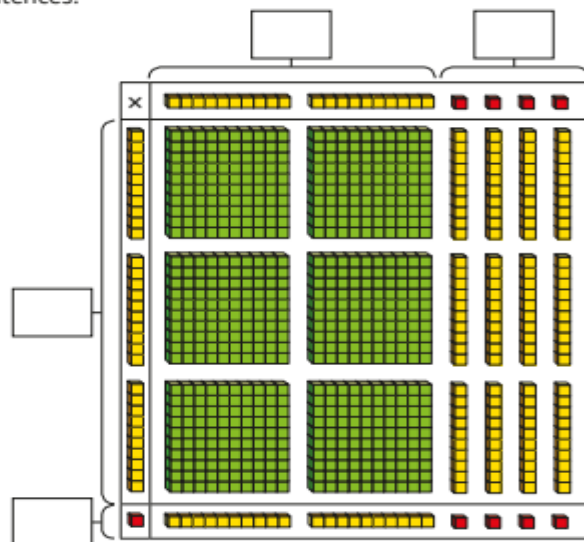


$$\square + \square + \square + \square = \square$$

So $31 \times 24 = \square$

3 The base 10 represents 31×24

Add the missing information to the area model and complete the sentences.



$$\square + \square + \square + \square = \square$$

So $31 \times 24 = \square$



4

Use base 10 to work out the multiplications.

a) $25 \times 15 =$

b) $36 \times 12 =$

c) $43 \times 26 =$

d) $23 \times 34 =$

S group use equipment on large paper

$$21 \times 12 = 252$$

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

×	20	1
10	200	10
2	40	2

$$200 + 40 + 10 + 2 = 252$$

What is the same?

What is different?

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		

$26 \times 32 =$





6

Use an area model to help you complete each multiplication.

a) $28 \times 14 =$

$\times$	20	8
10		
4		

c) $35 \times 22 =$

b) $27 \times 16 =$

$\times$		

d) $45 \times 36 =$



$$34 \times 23 = 782$$

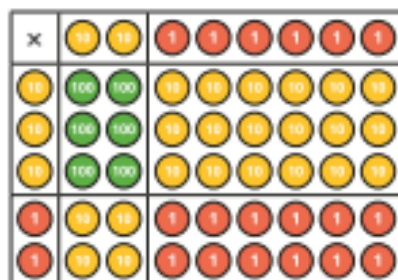
Have a think



×	30	4
20	600	80
3	90	12

$$600 + 90 + 80 + 12 = 782$$

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



×	20	6
30		
2		

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

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

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

×	20	8
10		
4		

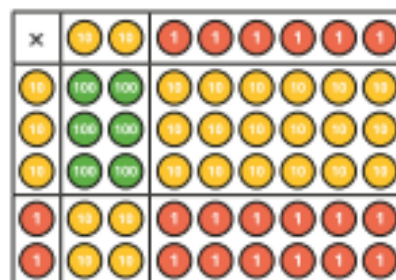
c) $35 \times 22 = \boxed{}$

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

×		

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

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



×	20	6
30		
2		

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

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

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

×	20	8
10		
4		

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

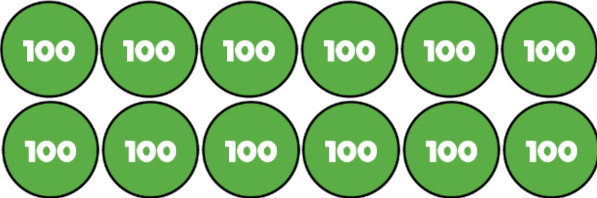
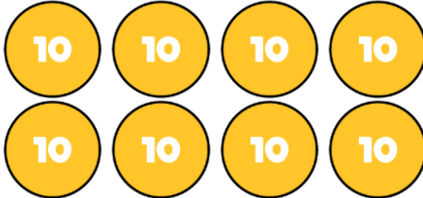
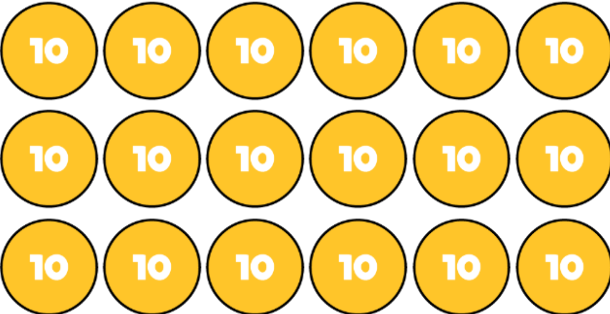
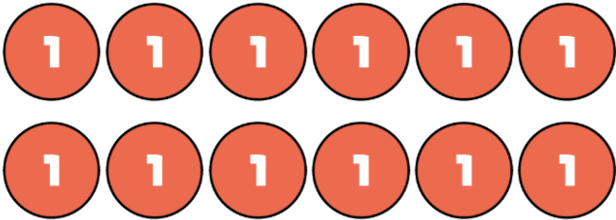
b) $27 \times 16 = \boxed{}$

×		

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

Amir has not finished his calculation.

Fill in the missing information and write the calculation with an answer.

×	30	2
40		
6		

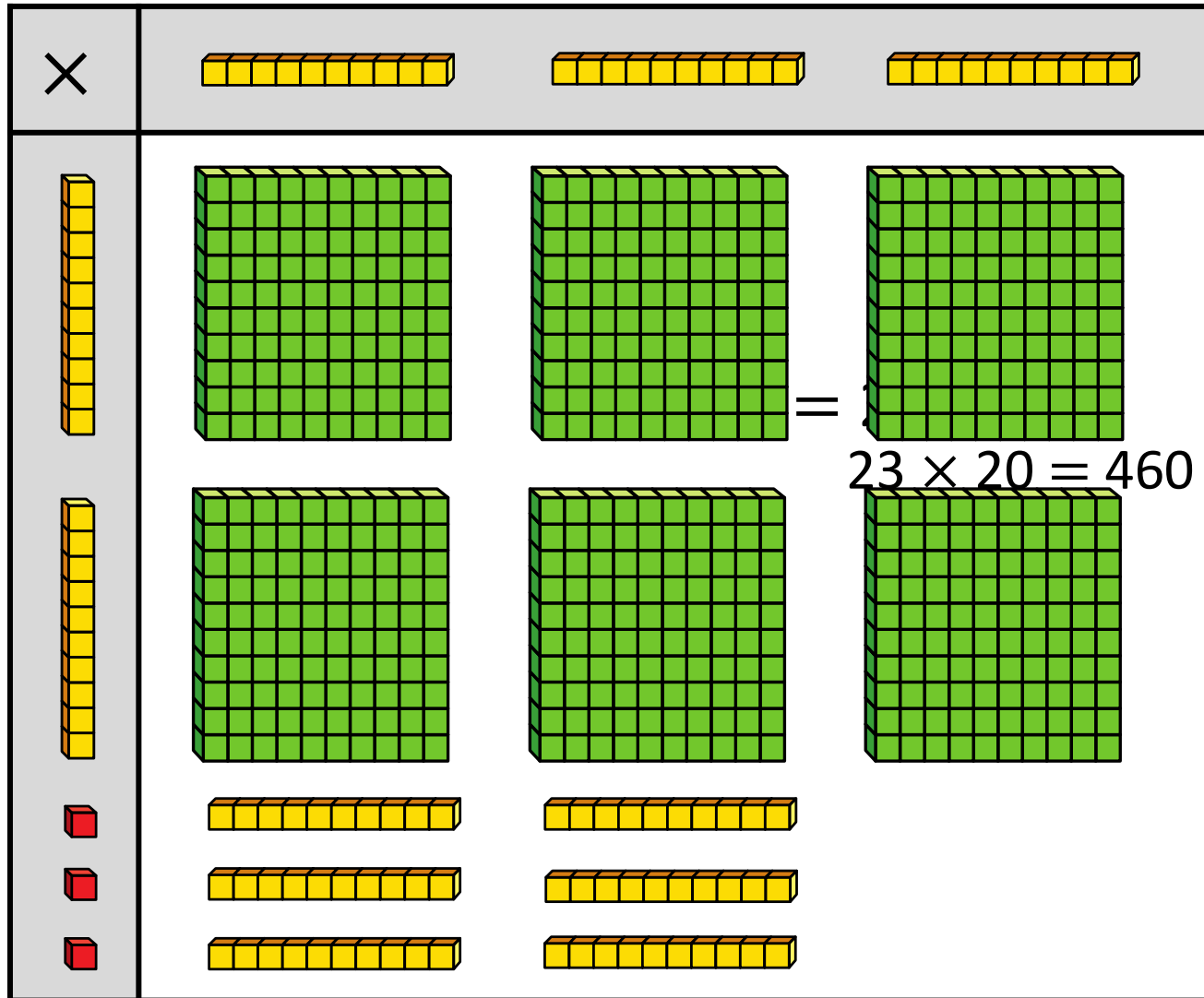
$$32 \times 46 = 1,472$$

Have a think

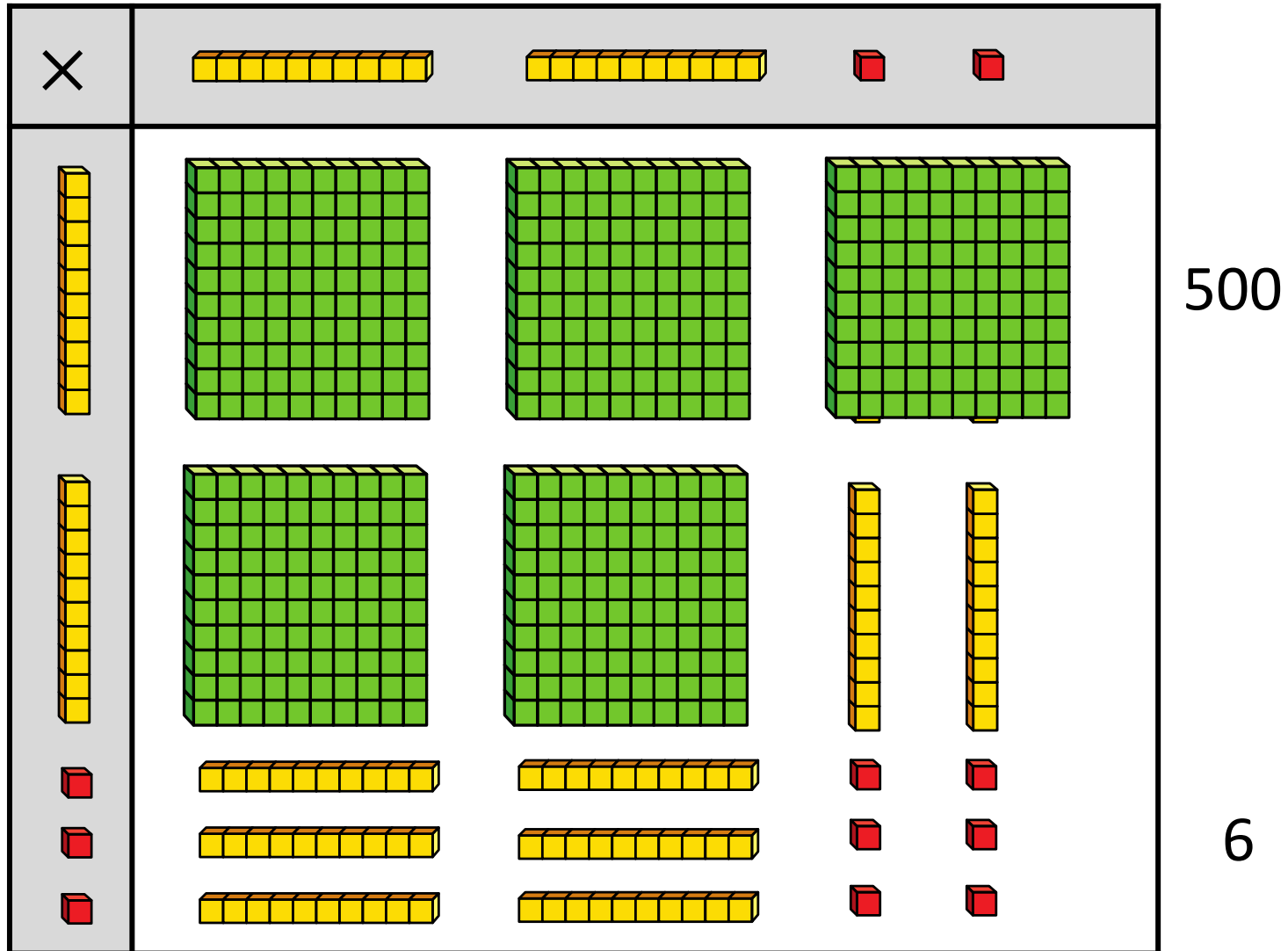


$$23 \times \square = 506$$

Have a think



$$23 \times \boxed{22} = 506$$



Maths Meeting-Mon

Key skills test



Tue

23.1.24 LO: To multiply a 2 -digit by a 2-digit number

1) $3 \times 8 =$

$30 \times 8 =$

2) $6 \times 7 =$

$6 \times \square = 420$

3) $22 \times 13 =$

4) $22 \times 14 =$

$\times$		

Whiteboards!

$$1) 3 \times 8 = 24$$

$$30 \times 8 = 240$$

$$2) 6 \times 7 = 42$$

$$6 \times \boxed{70} = 420$$

$$3) 22 \times 13 = 286$$

$$4) 22 \times 14 = 308$$

$\times$	20	2
10	200	20
3	60	6

Term Spring 1 Week beginning 23.1.23

Block Multiplication and division (B)

Key vocabulary

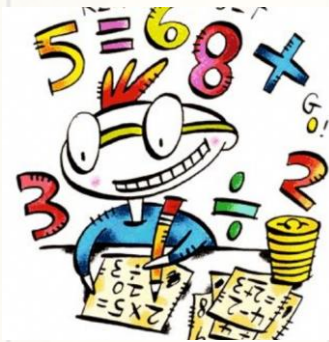
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Multiply a 2-digit number by a 2-digit number			
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Stem sentences

- First, I multiply ___ by ___ ones. Then I multiply ___ by ___ tens. Finally, I add together ___ and ___.
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- To calculate $9,999 \times \text{___}$, I can do $10,000 \times \text{___} - \text{___}$
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- ___ hundreds divided by ___ is equal to ___ hundreds with a remainder of ___
- Exchange the remainder, then ___ tens divided by ___ is equal to ___ tens with a remainder of ___
- Exchange the remainder, then ___ ones divided by ___ is equal to ___ ones

Maths Three Repeating Golden Threads



Mastery

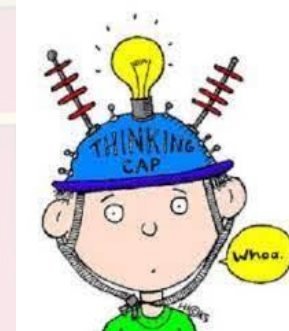
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multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

Tues

$$23 \times 31$$

×	20	3
30	600	90
1	20	3

$$600 + 90 + 20 + 3 = 713$$

	H	T	O	
		2	3	
×		3	1	
			3	

$$23 \times 31$$

×	20	3
30	600	90
1	20	3

$$600 + 90 + 20 + 3 = 713$$

	H	T	O	
		2	3	
×		3	1	
		2	3	

$$23 \times 31$$

×	20	3
30	600	90
1	20	3

$$600 + 90 + 20 + 3 = 713$$

	H	T	O	
		2	3	
×		3	1	
		2	3	
		9	0	

$$23 \times 31$$

×	20	3
30	600	90
1	20	3

	H	T	O	
		2	3	
×		3	1	
		2	3	
	6	9	0	

$$600 + 90 + 20 + 3 = 713$$

$$23 \times 31$$

×	20	3
30	600	90
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$$600 + 90 + 20 + 3 = 713$$

	H	T	O	
		2	3	
×		3	1	
		2	3	
+	6	9	0	
	7	1	3	

$$23 \times 31$$

×	20	3
30	600	90
1	20	3

$$600 + 90 + 20 + 3 = 713$$

	H	T	O	
		2	3	
×		3	1	
		2	3	
+	6	9	0	
	7	1	3	

1

What is the
same?

What is
different?



S group guided

2 Scott is working out 23×14

Use the area model to help complete Scott's workings.

$\times$	10	4
20	200	80
3	30	12

$$200 + 30 + 80 + 12 = 322$$

			2	3	
	$\times$		1	4	

(23×4)

(23×10)

Over to you...

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(23×4)

(23×10)

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$\times$	10	4
20	200	80
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			2	3	
	$\times$		1	4	

(23×4)

(23×10)

$$200 + 30 + 80 + 12 = 322$$

$$23 \times 31$$

	H	T	O	
		2	3	
×		3	1	
		2	3	
+	6	9	0	
	7	1	3	
	1			

$$(23 \times 1)$$

$$(23 \times 30)$$

$$23 \times 31 = (23 \times 1) + (23 \times 30)$$

$$41 \times 26$$

	Th	H	T	O	
			4	1	
×			2	6	
		2	4	6	
+					

What are you
multiplying 41
by first?

$$(41 \times 6)$$

$$41 \times 26$$

	Th	H	T	O	
			4	1	
×			2	6	
		2	4	6	
+		8	2	0	
	1	0	6	6	

What do you do
after you have
multiplied both
numbers?

$$(41 \times 6)$$

$$(41 \times 20)$$

$$41 \times 26 = 1,066$$

3 Fill in the missing numbers.

a)

			4	3	
	x		1	3	
		1	2	9	(43 × 3)
		4	3	0	(43 × 10)

c)

	x				
		1	0	5	(21 × 5)
		4	2	0	(21 × 20)

b)

			2	1	
	x		1	6	
		1	2	6	(×)
		2	1	0	(×)

3 Fill in the missing numbers.

a)

			4	3	
	x		1	3	
		1	2	9	(43 × 3)
		4	3	0	(43 × 10)

c)

	x				
		1	0	5	(21 × 5)
		4	2	0	(21 × 20)

b)

			2	1	
	x		1	6	
		1	2	6	(×)
		2	1	0	(×)

Tues

3 Fill in the missing numbers.

a)

			4	3	
	×		1	3	
		1	2	9	(43 × 3)
		4	3	0	(43 × 10)



3

b)

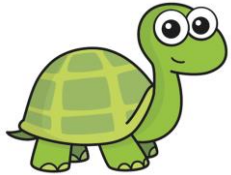
			2	1	
	×		1	6	
		1	2	6	
		2	1	0	

$$\left(\begin{array}{|c|} \hline \\ \hline \end{array} \right) \times \left(\begin{array}{|c|} \hline \\ \hline \end{array} \right)$$

$$\left(\begin{array}{|c|} \hline \\ \hline \end{array} \right) \times \left(\begin{array}{|c|} \hline \\ \hline \end{array} \right)$$



$$32 \times 46 = 320$$



Do you agree with Tiny?

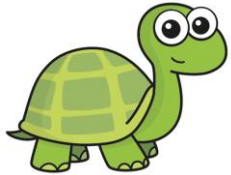
Have a think



	Th	H	T	O	
			3	2	
×			4	6	
		1	9	2	
+		1	2	8	
		3	2	0	
		1	1		

Discuss

$$32 \times 46 = 320$$



$$32 \times 46 = 1,472$$

	Th	H	T	O	
			3	2	
×			4	6	
		1	9	2	
+		1	2	0	
	1	4	7	2	

1

$$(32 \times 6) \checkmark$$

$$(32 \times 40)$$

4 Tiny is calculating 34×23

Here are Tiny's workings.

$$\begin{array}{r}
 3 4 \\
 \times 2 3 \\
 \hline
 1_1 0_1 2 \\
 6 8 \\
 \hline
 1 7_1 0 \\
 \hline
 \end{array}$$

- a) What mistake has Tiny made?
- b) What is the correct answer?



Tues

- 4 Tiny is calculating 34×23

Here are Tiny's workings.

$$\begin{array}{r}
 3 4 \\
 \times 2 3 \\
 \hline
 1_1 0_1 2 \\
 6 8 \\
 \hline
 1 7_1 0
 \end{array}$$

- a) What mistake has Tiny made?
b) What is the correct answer?

- 4 Tiny is calculating 34×23

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$$\begin{array}{r}
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 \times 2 3 \\
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 1_1 0_1 2 \\
 6 8 \\
 \hline
 1 7_1 0
 \end{array}$$

- a) What mistake has Tiny made?
b) What is the correct answer?

- 4 Tiny is calculating 34×23

Here are Tiny's workings.

$$\begin{array}{r}
 3 4 \\
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 \hline
 1_1 0_1 2 \\
 6 8 \\
 \hline
 1 7_1 0
 \end{array}$$

- a) What mistake has Tiny made?
b) What is the correct answer?

- 4 Tiny is calculating 34×23

Here are Tiny's workings.

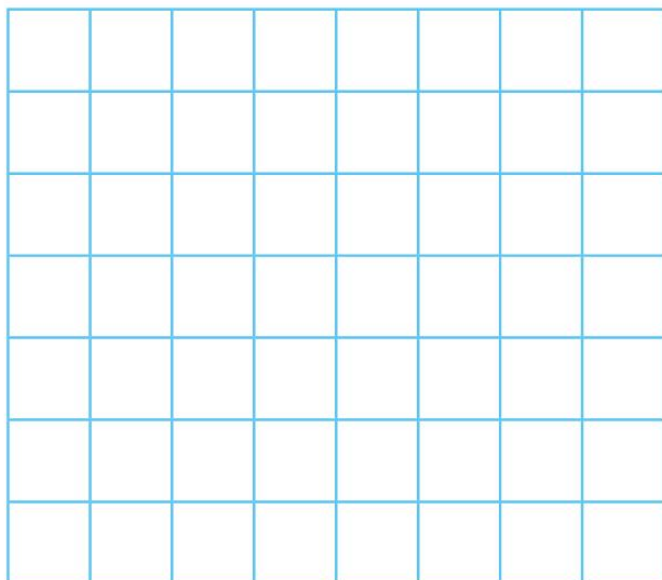
$$\begin{array}{r}
 3 4 \\
 \times 2 3 \\
 \hline
 1_1 0_1 2 \\
 6 8 \\
 \hline
 1 7_1 0
 \end{array}$$

- a) What mistake has Tiny made?
b) What is the correct answer?

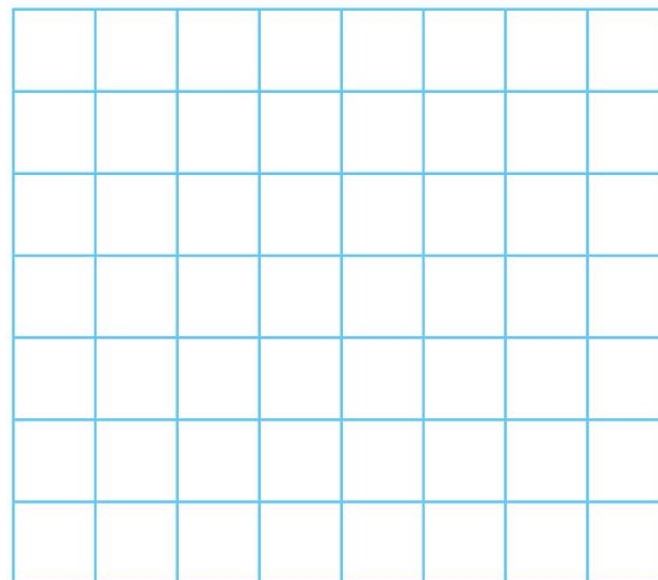
5

Work out the multiplications.

a) $52 \times 34 =$

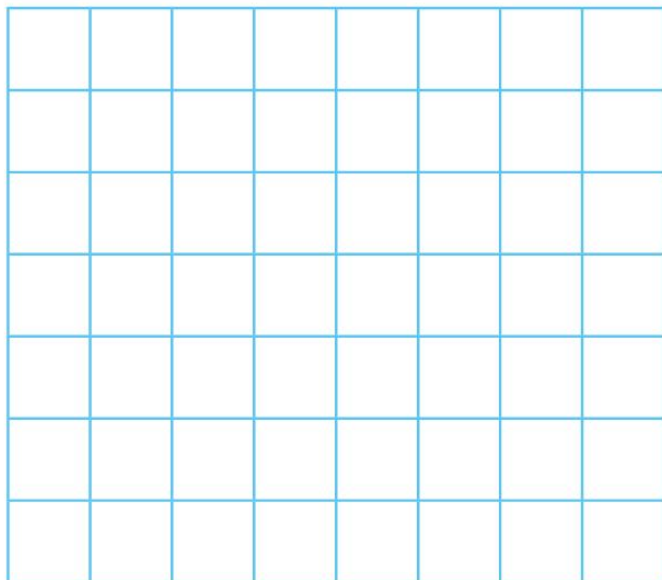


b) $22 \times 56 =$

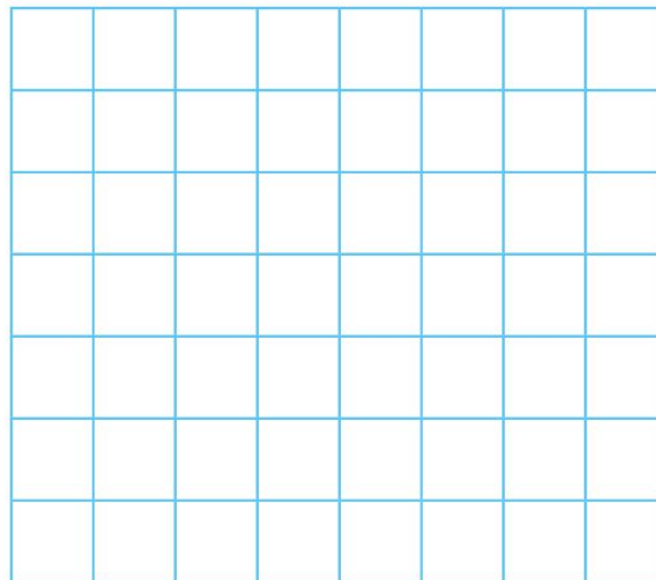


5

c) $46 \times 64 =$



d) $47 \times 63 =$



Maths Meeting- Tue

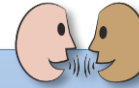
Time revision- time differences



Day 1: Calculate time intervals using the 24-hour clock.

A P.E. lesson **starts at 13:30** and **ends at 14:45**.

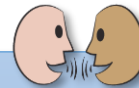
How long does it last?
Sketch a time number line to represent this on your whiteboard.



Compare your timeline with your partner's.

A singing lesson **starts at 11:50** and **ends at 12:35**.

How long does it last?
Sketch a time number line to represent this on your whiteboard.



Compare your timeline with your partner's.

LO: To multiply a 3-digit number by a 2-digit number

True or False ?

Multiply up to 4-digits
by 1-digit

When using column multiplication, always start with the greatest place value column.

	1	2	3	4
×				5

Whiteboards- get ready to share

True or False?

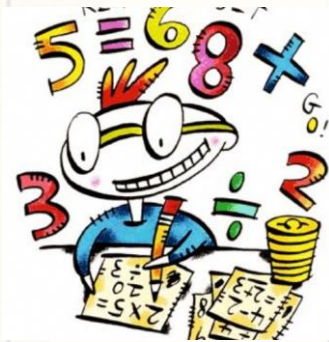
Multiply up to 4-digits
by 1-digit

False

Start with the smallest place value column in case an exchange is needed.

	1	2	3	4
×				5

Maths Three Repeating Golden Threads



Mastery

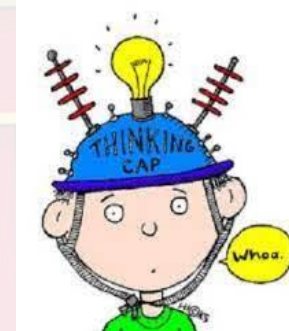
Pupils acquire a deep, long-term, secure adaptable understanding

Fluency

Quick and. efficient recall of facts and procedures

Application

The use of maths everyday in the real world, outside the classroom.



Term Spring 1 Week beginning 23.1.23

Block Multiplication and division (B)

Key vocabulary

Multiplication, division, digit, method, place holder, place value, remainder, partition, links to addition/subtraction, estimate, exchange

	WT	EX	S
Multiply up to a 4-digit number by a 1-digit number			
Multiply a 2-digit number by a 2-digit number			
Multiply a 3-digit number by a 2-digit number			
Multiply a 4-digit number by a 2-digit number			
Solve problems with multiplication			
Short division			
Divide a 4-digit number by a 1-digit number			
Divide with remainders			
Efficient division			
Solve problems with multiplication and division			

Stem sentences

- First, I multiply ___ by ___ ones. Then I multiply ___ by ___ tens. Finally, I add together ___ and ___.
- To calculate $\text{___} \times 24$, I can do $\text{___} \times \text{___} \times \text{___}$
- To calculate $9,999 \times \text{___}$, I can do $10,000 \times \text{___} - \text{___}$
- The most efficient strategy to calculate $\text{___} \times \text{___}$ is ...
- ___ hundreds divided by ___ is equal to ___ hundreds with a remainder of ___
- Exchange the remainder, then ___ tens divided by ___ is equal to ___ tens with a remainder of ___
- Exchange the remainder, then ___ ones divided by ___ is equal to ___ ones

Crucial Vocab...

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

Weds

$$1) 12 \times 4 =$$

$$2) 12 \times 40 =$$

$$3) 206 \times 3 =$$

$$4) 206 \times 30 =$$

$$1) 12 \times 4 = 48$$

$$2) 12 \times 40 = 480$$

$$3) 206 \times 3 = 618$$

$$4) 206 \times 30 = 6,180$$

Complete the calculation to work out 123×23

		1	2	3	
×			2	3	
		3	6	9	
	2	4	6	0	
	2	8	2	9	
		1			

(123×3)

(123×20)

Why is there a 0 in the
ones column when
multiplying by 20?



ink



$$132 \times 23$$

	Th	H	T	O	
		1	3	2	
×			2	3	
		3	9	6	
+					

$$(132 \times 3)$$

$$132 \times 23$$

	Th	H	T	O	
		1	3	2	
×			2	3	
		3	9	6	
+	2	6	4	0	
	3	0	3	6	
	1	1			

$$(132 \times 3)$$

$$(132 \times 20)$$

$$132 \times 23$$

	Th	H	T	O	
		1	3	2	
×			2	3	
		3	9	6	
+	2	6	4	0	
	3	0	3	6	

1 1

$$(132 \times 3)$$

$$(132 \times 20)$$

$$23 \times 31$$

	H	T	O	
		2	3	
×		3	1	
		2	3	
+	6	9	0	
	7	1	3	

1

$$(23 \times 1)$$

$$(23 \times 30)$$

What is the
same?

What is
different?

$$326 \times 32$$

Have a think



	Th	H	T	O	
		3	2	6	
×			3	2	
		6	5	2	
+					

$$(326 \times 2)$$

Guided – into books



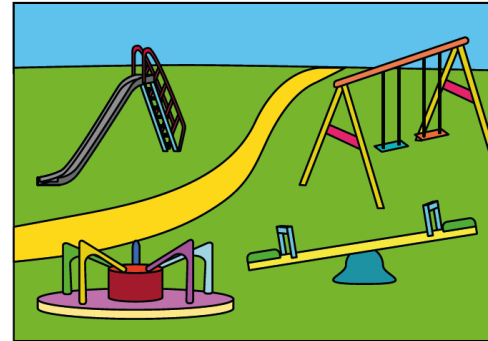
$$326 \times 32 = 10,432$$

	Th	H	T	O	
		3	2	6	
×			3	2	
		6	5 ₁	2	(326 × 2)
+	9	7 ₁	8	0	(326 × 30)
1	0	4	3	2	
	1	1			

A playground is 128 m by 73 m.

Work out the area of the playground. **9,344 m²**

		1	2	8	
×			7	3	
		3	8 ₂	4	
	8 ₁	9 ₅	6	0	
	9	3	4	4	
	1	1			



$$(128 \times 3)$$

$$(128 \times 20)$$



A playground is 128 m by 73 m.
 Work out the area of the playground.

A playground is 128 m by 73 m.
 Work out the area of the playground.

A playground is 128 m by 73 m.
 Work out the area of the playground.

A playground is 128 m by 73 m.
 Work out the area of the playground.

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 Work out the area of the playground.

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 Work out the area of the playground.

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 Work out the area of the playground.

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 Work out the area of the playground.

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 Work out the area of the playground.

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 Work out the area of the playground.

A playground is 128 m by 73 m.
 Work out the area of the playground.

A playground is 128 m by 73 m.
 Work out the area of the playground.



Your turn



Multiply a 3-digit number by a 2-digit number

1 Complete the multiplications.

a) $13 \times 3 =$

$13 \times 30 =$

b) $130 \times 2 =$

$130 \times 20 =$

c) $25 \times 4 =$

$25 \times 40 =$

d) $204 \times 4 =$

$204 \times 40 =$

S group- Guided

2 Complete the multiplications.

a)

			2	3	1	
	×			1	3	
			6	9	3	
		2	3	1	0	

$$(231 \times 3)$$

$$(231 \times 10)$$

S group- Guided

2

Complete the multiplications.

a)

			2	3	1	
	x			1	3	
			6	9	3	
			2	3	1	0

(231×3)

(231×10)

b)

			5	1	2	
	x			2	4	
			2 ₂	0	4	8
			1 ₁	0	2	4

$(\square \times \square)$

$(\square \times \square)$

2

Complete the multiplications.

a)

			2	3	1	
	x			1	3	
			6	9	3	
			2	3	1	0

(231×3)

(231×10)

b)

				5	1	2	
	x				2	4	
			2 ₂	0	4	8	
			1 ₁	0	2	4	0

$(\square \times \square)$

$(\square \times \square)$



2 b)

				5	1	2	
	×				2	4	
			2 ₂	0	4	8	
		1 ₁	0	2	4	0	

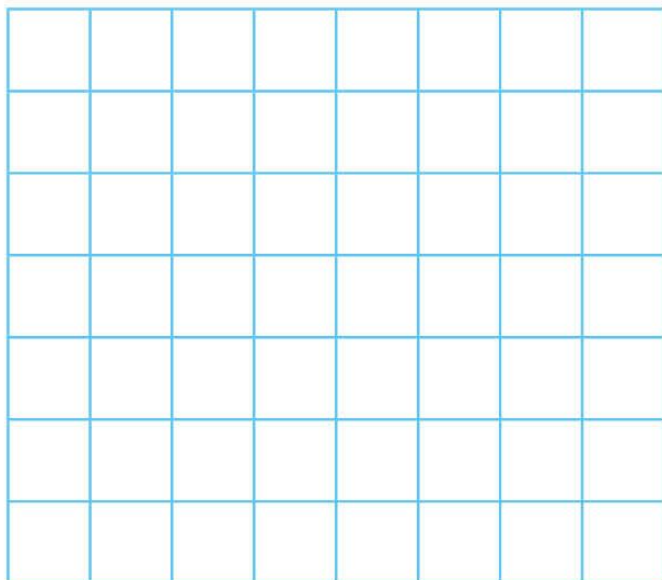
$$\left(\begin{array}{|c|} \hline \\ \hline \end{array} \right) \times \left(\begin{array}{|c|} \hline \\ \hline \end{array} \right)$$

$$\left(\begin{array}{|c|} \hline \\ \hline \end{array} \right) \times \left(\begin{array}{|c|} \hline \\ \hline \end{array} \right)$$

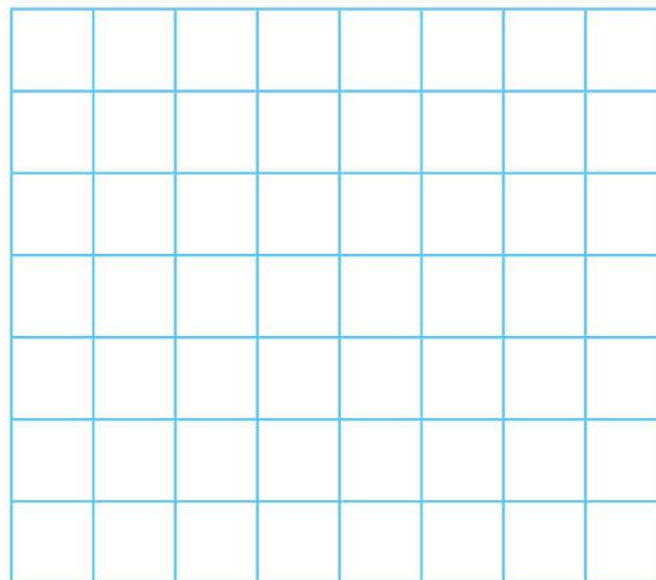


4 Complete the multiplications.

a) $142 \times 31 =$

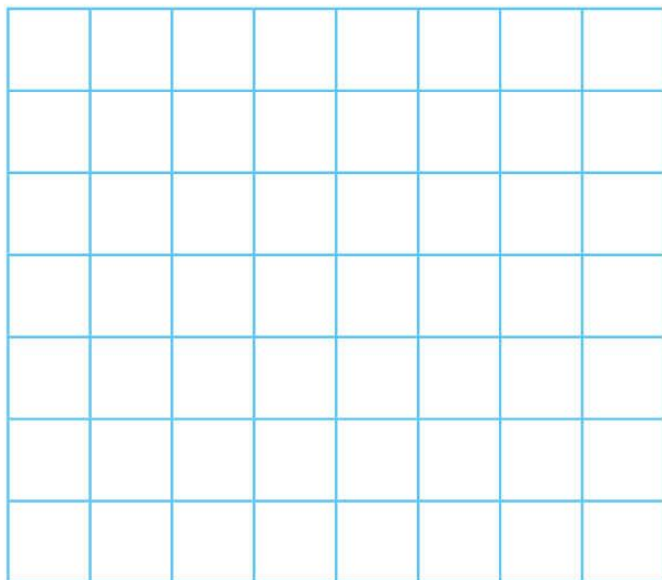


b) $337 \times 46 =$

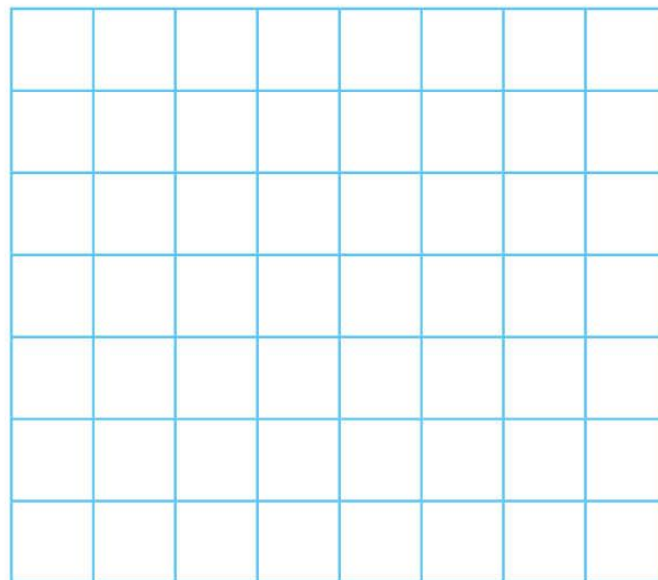


4

c) $214 \times 53 =$



d) $24 \times 183 =$



Dora, Alex and Teddy have worked out 248×21

Dora



2,978

Alex



5,208

Teddy



7,688

How can we use estimating to help us check who is correct?

$$248 \times 21$$

$$250 \times 20$$

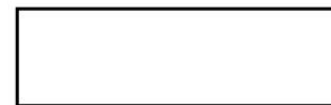
$$25 \times 2 = 50$$

$$250 \times 20 = 5,000$$

Discuss

6 A football pitch is 128 m long and 52 m wide.

a) What is the area of the pitch?



b) A field is $25,000 \text{ m}^2$

How many football pitches could fit on it?



6

A football pitch is 128 m long and 52 m wide.

a) What is the area of the pitch?

b) A field is 25,000 m²

How many football pitches could fit on it?



Weds

6

A football pitch is 128 m long and 52 m wide.

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A football pitch is 128 m long and 52 m wide.

a) What is the area of the pitch?



b) A field is 25,000 m²

How many football pitches could fit on it?

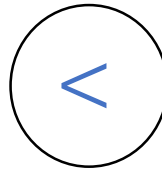


Estimate each side of the equation and write $<$, $>$ or $=$ to complete the statement.

Have a think



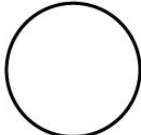
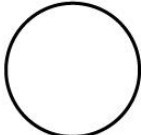
$$\begin{array}{r} 181 \times 24 \\ 200 \times 20 \\ 4,000 \end{array}$$



$$\begin{array}{r} 112 \times 63 \\ 100 \times 60 \\ 6,000 \end{array}$$

Discuss

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64  164×46 **b)** 135×53  153×35

What do you notice?

Does this always happen?



7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64

164×46

b) 135×53

153×35

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64

164×46

b) 135×53

153×35

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64

164×46

b) 135×53

153×35

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64

164×46

b) 135×53

153×35

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64

164×46

b) 135×53

153×35

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64

164×46

b) 135×53

153×35

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64

164×46

b) 135×53

153×35

7 Write $>$, $<$ or $=$ to complete each statement.

a) 146×64

164×46

b) 135×53

153×35



8

Miss Rose is ordering some pencils.

She orders 17 of pack A, 14 of pack B and 4 of pack C.

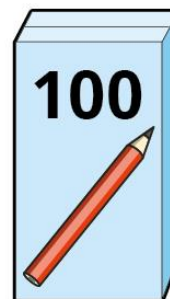
Pack A



Pack B



Pack C



a) How many pencils does Miss Rose order?

b) Each pencil costs 16p.

How much does Miss Rose spend on pencils?

Maths Meeting-Weds
Times tables practise- quick fire
practise!



1

$$3 \times 8 =$$



2

$$80 \div 8 =$$



3

$$2 \times 8 =$$



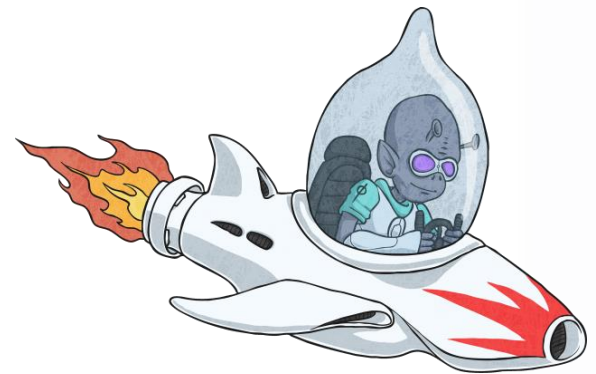
4

$$96 \div 8 =$$



5

$$4 \times 8 =$$



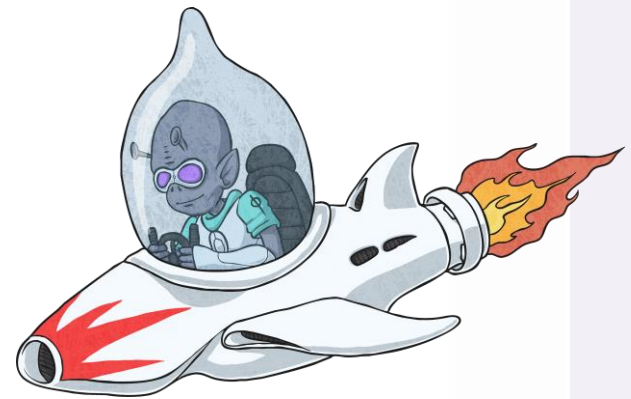
6

$$64 \div 8 =$$



7

$$8 \times 9 =$$



8

$$40 \div 8 =$$



9

$$8 \times 11 =$$



10

$$56 \div 8 =$$



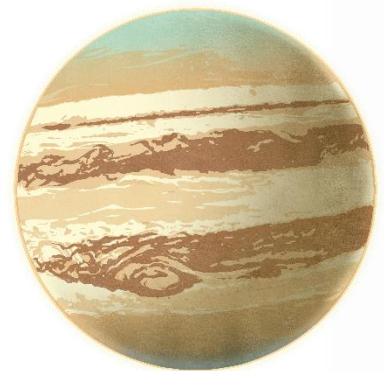


$$8 \div 1 =$$



12

$$6 \times 8 =$$



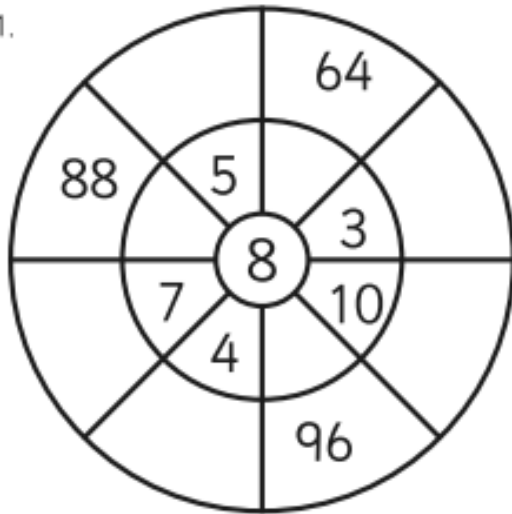
Answers

1. $3 \times 8 = 24$
2. $80 \div 8 = 10$
3. $2 \times 8 = 16$
4. $96 \div 8 = 12$
5. $4 \times 8 = 32$
6. $64 \div 8 = 8$

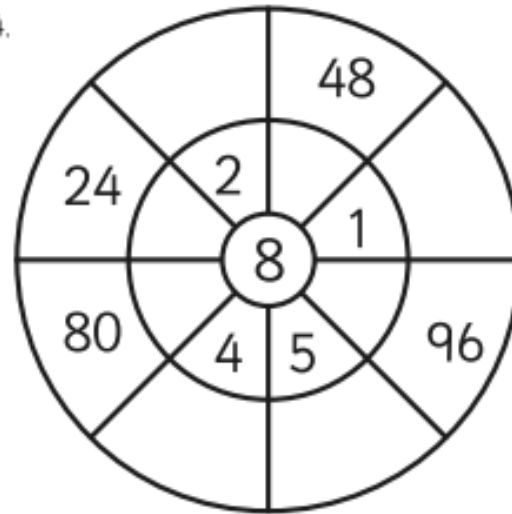
7. $8 \times 9 = 72$
8. $40 \div 8 = 5$
9. $8 \times 11 = 88$
10. $56 \div 8 = 7$
11. $8 \div 1 = 8$
12. $6 \times 8 = 48$

Stick in books and complete

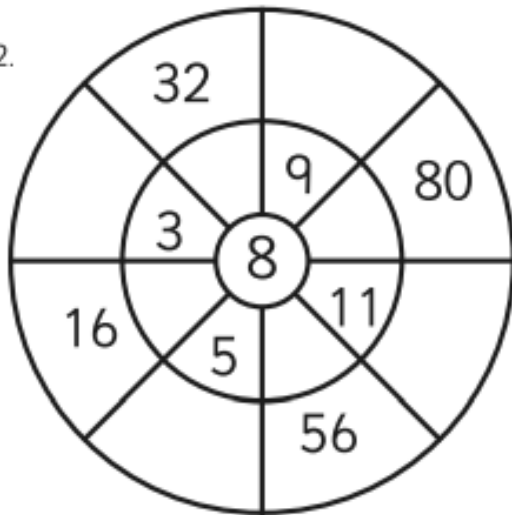
1.



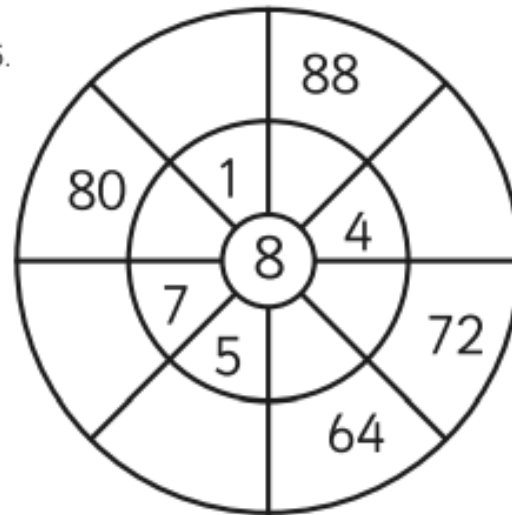
4.

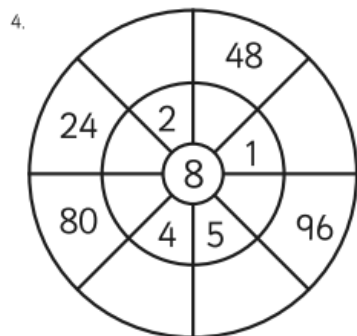
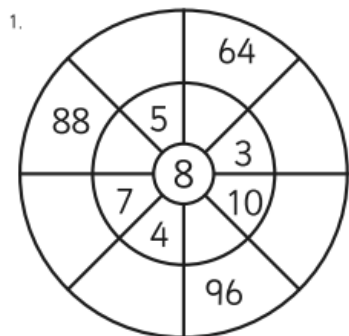


2.

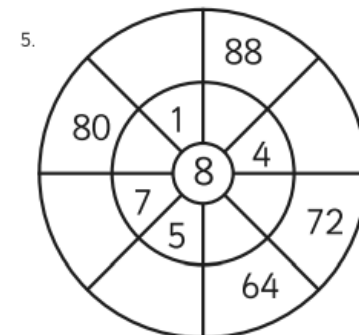
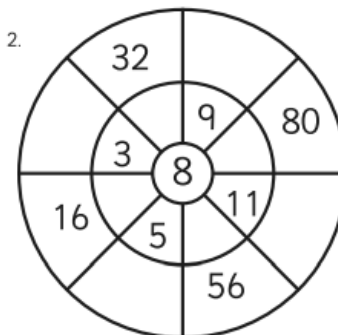
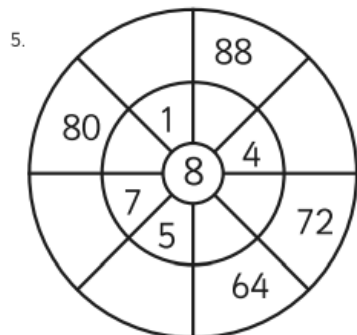
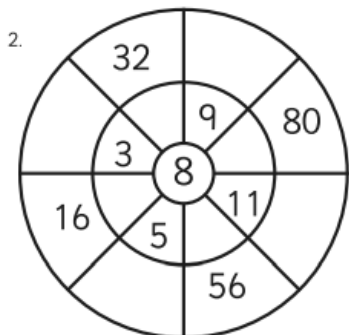
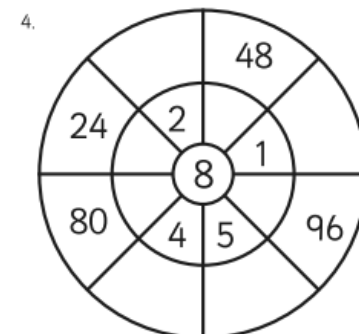
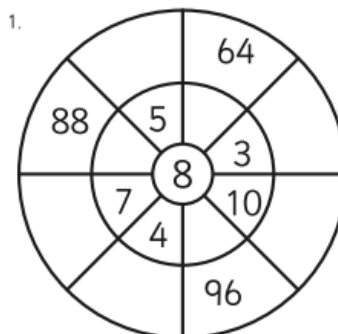
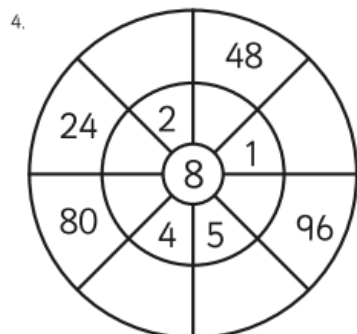
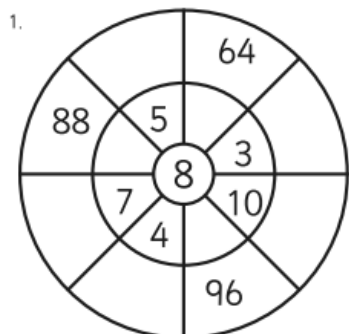
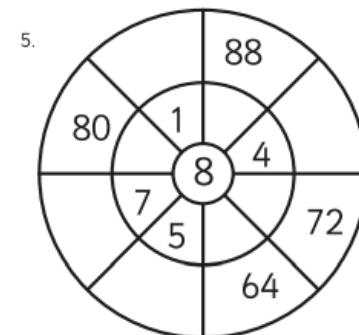
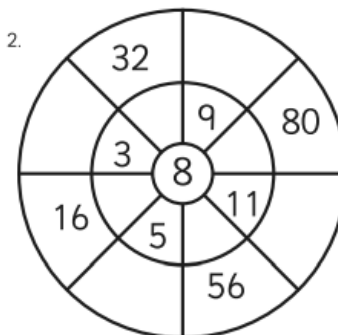
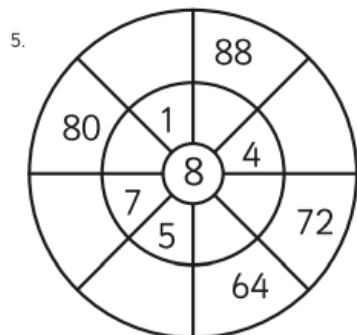
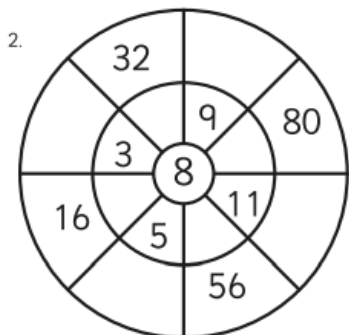
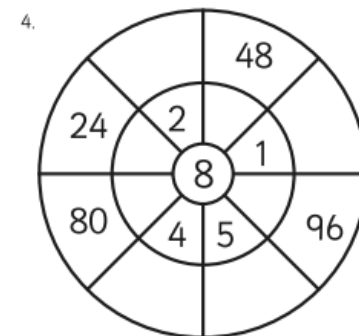
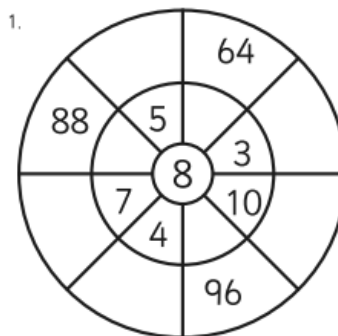


5.





Weds



Thurs 25.1.24

LO: To multiply a 4-digit number by a 2 digit number

Answers in
maths books

1) $1 \times 415 =$

2) $100 \times 415 =$

3) $200 \times 415 =$

4) $415 \times 201 =$

1) $1 \times 415 =$

2) $100 \times 415 =$

3) $200 \times 415 =$

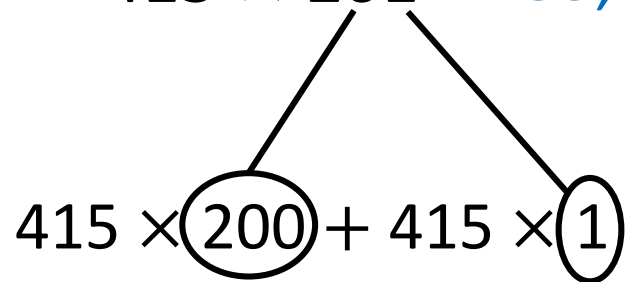
4) $415 \times 201 =$

1) $1 \times 415 = 415$

2) $100 \times 415 = 41,500$

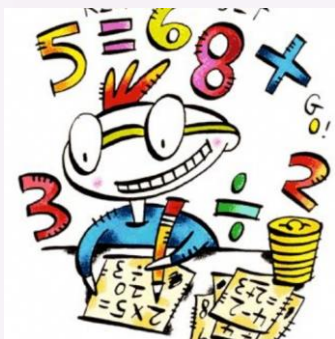
3) $200 \times 415 = 83,000$

4) $415 \times 201 = 83,415$

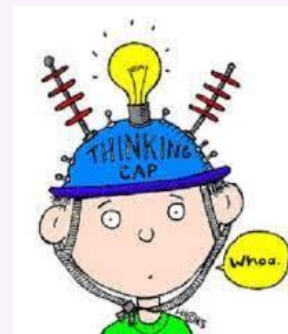


$415 \times (200) + 415 \times (1)$

Maths Three Repeating Golden Threads



Quick and. efficient recall of facts and procedures



Mastery

Pupils acquire a deep,
long-term, secure
adaptable understanding

Fluency

Application

The use of maths everyday in the real world, outside the classroom.



Term Spring 1 Week beginning 23.1.23

Block Multiplication and division (B)

Key vocabulary

Multiplication, division, digit, method, place holder, place value, remainder, partition, links to addition/subtraction, estimate, exchange

	WT	EX	S
Multiply up to a 4-digit number by a 1-digit number			
Multiply a 2-digit number by a 2-digit number			
Multiply a 3-digit number by a 2-digit number			
Multiply a 4-digit number by a 2-digit number			
Solve problems with multiplication			
Short division			
Divide a 4-digit number by a 1-digit number			
Divide with remainders			
Efficient division			
Solve problems with multiplication and division			

Stem sentences

- First, I multiply ___ by ___ ones. Then I multiply ___ by ___ tens. Finally, I add together ___ and ___.
- To calculate $\text{___} \times 24$, I can do $\text{___} \times \text{___} \times \text{___}$
- To calculate $9,999 \times \text{___}$, I can do $10,000 \times \text{___} - \text{___}$
- The most efficient strategy to calculate $\text{___} \times \text{___}$ is ...
- ___ hundreds divided by ___ is equal to ___ hundreds with a remainder of ___
- Exchange the remainder, then ___ tens divided by ___ is equal to ___ tens with a remainder of ___
- Exchange the remainder, then ___ ones divided by ___ is equal to ___ ones

Crucial Vocab...

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

multiply
exchange
column
digit

Thurs

Complete the calculation.

Have a think



	TTh	Th	H	T	O
		2	3	4	2
×				2	1
		2	3	4	2
+	4	6	8	4	0
	4	9	1	8	2

1

What do you
do to
complete the
calculation?

Model

$$2,313 \times 32 =$$

Have a think



	TTh	Th	H	T	O
		2	3	1	3
×				3	2
		4	6	2	6
+					

$$(\underline{2,313} \times \underline{2})$$

$$(\underline{\quad} \times \underline{\quad})$$

Guided- into books

$$2,313 \times 32 = 74,016$$

	TTh	Th	H	T	O
		2	3	1	3
×				3	2
		4	6	2	6
+	6	9	3	9	0
	7	4	0	1	6
	1	1	1		

$$(\underline{2,313} \times \underline{2})$$

$$(\underline{2,313} \times \underline{30})$$

$$6,324 \times 33 = 208,692$$

Have a think



	HTh	TTh	Th	H	T	O
			6	3	2	4
×					3	3
		1	8	9	7	2
+	1	8	9	7	2	0
	2	0	8	6	9	2
	1	1	1			

$$(\underline{6,324} \times \underline{3})$$

$$(\underline{6,324} \times \underline{30})$$

Guided- into books

$$4,145 \times 52 = 215,540$$

Have a think



		Hth	TTh	Th	H	T	O
				4	1	4	5
×						5	2
				8	2	9	0
+		2	0	7	2	5	0
		2	1	5	5	4	0

$$(\underline{4,145} \times \underline{2})$$

$$(\underline{4,145} \times \underline{50})$$

1

1

Guided- into books

Can you spot the three errors?

Have a think



	HTh	TTh	Th	H	T	O
			5	4	0	2
×					2	4
		2	1	6	0	8
+		1	0	0	2	0
	1	3	9	6	7	8

$$(\underline{5,402} \times \underline{4})$$

$$(\underline{5,402} \times \underline{20})$$



Can you spot the three errors?

$$\begin{array}{r} \underline{(5,402 \times 4)} \\ \underline{(5,402 \times 20)} \end{array}$$

Can you spot the three errors?

$$\begin{array}{r} \underline{(5,402 \times 4)} \\ \underline{(5,402 \times 20)} \end{array}$$

Can you spot the three errors?

$$(\underline{5,402} \times \underline{20})$$

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$$(\underline{5,402} \times \underline{20})$$

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Can you spot the three errors?

$$(\underline{5,402} \times \underline{20})$$

Can you spot the three errors?

$$\begin{array}{r} \underline{(5,402 \times 4)} \\ \underline{(5,402 \times 20)} \end{array}$$



Your turn



Multiply a 4-digit number by a 2-digit number

1 Complete the multiplication.

			1	2	3	4	
	×				2	1	
			1	2	3	4	
		2	4	6	8	0	

$$(1,234 \times \boxed{})$$

$$(1,234 \times \boxed{})$$

2 Tommy is calculating $1,234 \times 26$

a) Complete his workings.

			1	2	3	4	
	×				2	6	
			7 ₁	4 ₂	0 ₂	4	
		2	4	6	8	0	

$$\begin{array}{l} (\quad \times \quad) \\ (\quad \times \quad) \end{array}$$



2

- b)** Fill in the grid to check Tommy's workings are accurate.
You may use place value counters to help.

×	1,000	200	30	4
20				
6				

- 1 Complete the multiplication.

			1	2	3	4
	x				2	1
			1	2	3	4
			2	4	6	8

$$(1,234 \times \square)$$

$$(1,234 \times \square)$$

- 2 Tommy is calculating $1,234 \times 26$

- a) Complete his workings.

			1	2	3	4
	x				2	6
			7	4	0	4
			2	4	6	8

$$(\square \times \square)$$

$$(\square \times \square)$$

- b) Fill in the grid to check Tommy's workings are accurate.

You may use place value counters to help.

x	1,000	200	30	4
20				
6				

- 1 Complete the multiplication.

			1	2	3	4
	x				2	1
			1	2	3	4
			2	4	6	8

$$(1,234 \times \square)$$

$$(1,234 \times \square)$$

- 2 Tommy is calculating $1,234 \times 26$

- a) Complete his workings.

			1	2	3	4
	x				2	6
			7	4	0	4
			2	4	6	8

$$(\square \times \square)$$

$$(\square \times \square)$$

- b) Fill in the grid to check Tommy's workings are accurate.

You may use place value counters to help.

x	1,000	200	30	4
20				
6				

I do

a) $4,284 \times 23$

You do

b) $2,142 \times 46$





3

Tiny is calculating $2,541 \times 42$

Here are Tiny's workings.



	2	5	4	1	
×			4	2	
	4 ₁	0	8	2	(2,541 × 2)
	8 ₂	0 ₁	6	4	(2,541 × 40)
	1 ₁	2	1 ₁	4	6

a) Tiny has made two mistakes. What are they?

b) What is the correct answer?



3 Tiny is calculating $2,541 \times 42$

Here are Tiny's workings.



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×		4	2	
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4 ₁	0	8	2	(2,541 × 2)
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1 ₁	2	1 ₁	4	6

a) Tiny has made two mistakes. What are they?

b) What is the correct answer?

3 Tiny is calculating $2,541 \times 42$

Here are Tiny's workings.

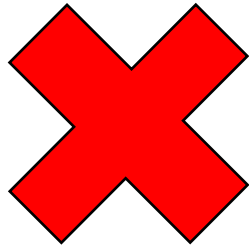


2	5	4	1	
×		4	2	
4 ₁	0	8	2	(2,541 × 2)
8 ₂	0 ₁	6	4	(2,541 × 40)
1 ₁	2	1 ₁	4	6

a) Tiny has made two mistakes. What are they?

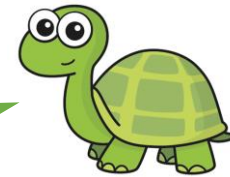
b) What is the correct answer?

Thurs



$$7 \times 6 = 42$$

$$\begin{array}{c} \uparrow \quad \uparrow \\ 147 \times 6 = 884 \end{array}$$



	Th	H	T	O
		1	4	7
×				6
		8	8	2
		2	4	

Discuss

Could these calculations be correct?

Explain your reasons.



$$214 \times 5 = 1,071$$

$$2 \times 293 = 576$$

$$3 \times 431 = 1,292$$

Could be correct	Definitely incorrect

Could these calculations be correct?
Explain your reasons.



$$214 \times 5 = 1,071$$

$$2 \times 293 = 576$$

$$3 \times 431 = 1,292$$

Could be correct	Definitely incorrect

Thurs

Could these calculations be correct?
Explain your reasons.



$$214 \times 5 = 1,071$$

$$2 \times 293 = 576$$

$$3 \times 431 = 1,292$$

Could be correct	Definitely incorrect

- 5 A machine makes 2,734 boxes every hour.
The machine works for 3 hours each day.
How many boxes will it make in 12 days?

Compare methods with a partner.



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The machine works for 3 hours each day.
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The machine works for 3 hours each day.
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Maths Meeting-Thurs units of measure- time



How many units of time
measure can you name?





Converting Units of Time

Diving

Convert the units of time.



3 minutes and
9 seconds

189 seconds



1 hour and 25
minutes

85 minutes



3 weeks and
1 day

22 days

Converting Units of Time

Diving



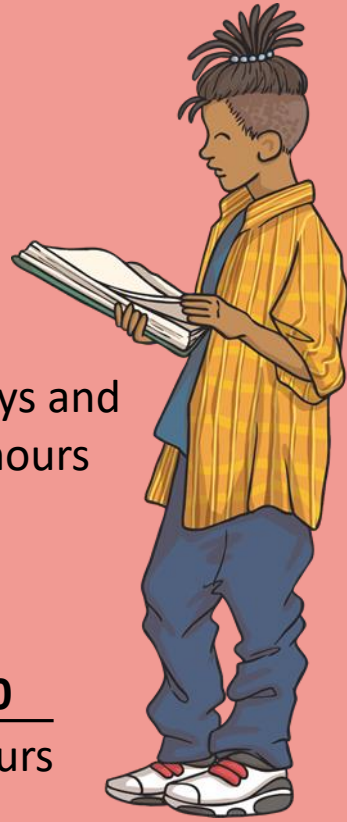
Convert the units of time.



A girl with brown hair and glasses, wearing a red shirt, is holding a round birthday cake with pink frosting and lit candles on a white plate.

8 years and
4 months

100 months



A boy with a topknot hairstyle, wearing a yellow shirt and blue pants, is holding a stack of books.

3 days and
8 hours

80
hours



A boy in a red shirt and a girl in a purple shirt are baking together. The boy is stirring a blue bowl with a wooden spoon, and the girl is rolling out dough with a rolling pin on a wooden surface.

$2\frac{3}{4}$ hours

165 minutes



Converting Units of Time

Deeper

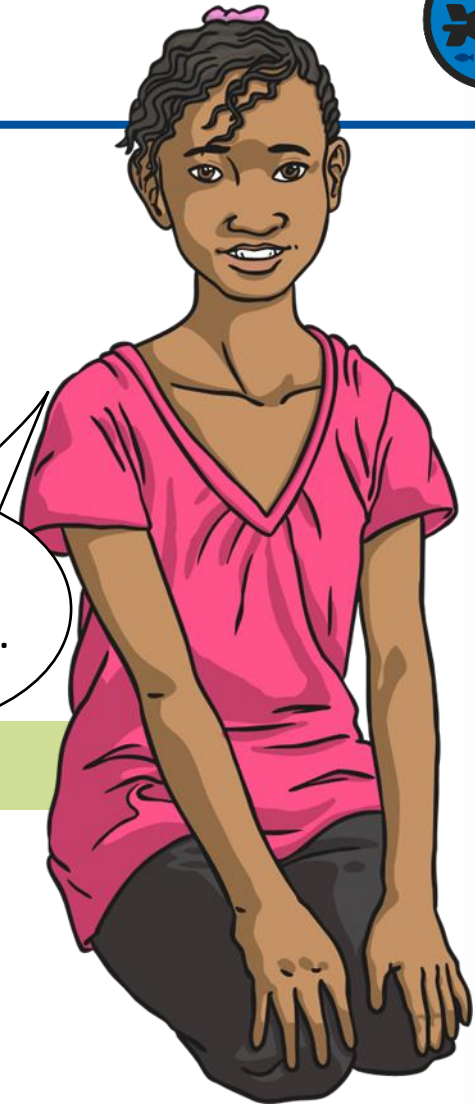


Tomek
730 days



Gill
22 months

Gill is the
eldest child.



Is Sam correct? Explain your answer.

**Sam is incorrect.
730 days equals 2 years and 22 months equals 1 year and 10 months.**



Converting Units of Time

Deeper

Here are four films and their running times:

**Clowning
Around**

1 hour and
56 minutes

**Dance School**
100 minutes

Dance School is 120
seconds longer than
Ghost House.

Superhero Squad
 $1\frac{3}{4}$ hours**Ghost
House**

1 hour and
38 minutes



Is Sam correct? Explain your answer.

Reveal answer

Sam is correct. Ghost House is 98 minutes and Dance School is 100 minutes. This is a difference of 2 minutes, which is equal to 120 seconds.





Converting Units of Time

Deepest

Ola is taking part in a sponsored silence for charity.

Three of Ola's friends agree to sponsor her for the following amounts:



Ben

£1 for every 5
minutes

£6



Michael

£1.50 for every
600 seconds

£4.50



Lucie

£2.00 for every
quarter of an hour

£4

a) How much will each friend give to Ola after 30 minutes of silence?



Converting Units of Time

Deepest

Ola is taking part in a sponsored silence for charity.

Three of Ola's friends agree to sponsor her for the following amounts:



Ben

£1 for every 5
minutes



Michael

£1.50 for every
600 seconds



Lucie

£2.00 for every
quarter of an hour

b) How much money will Ola earn in total after 195 minutes of silence?

£94.25