

Maths sheets – Yr5

(Maths sheet 1) w/c 4 May

Multiply 2-digits (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 2 ones altogether.
There are 8 tens altogether.
There are 6 hundreds altogether.

$31 \times 22 = \boxed{682}$

2 Use base 10 to work out the multiplications.
a) $12 \times 14 = \boxed{168}$ b) $23 \times 13 = \boxed{299}$

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3 Amir is using base 10 to calculate 31×24 .
a) Add the missing information to the area model and complete the sentences.

There are 4 ones altogether.
There are 14 tens altogether.
There are 6 hundreds altogether.

b) Describe any exchanges you need to make.
You can change the 14 tens to 1 x Hundred and 4 x 10's

c) Complete the multiplication.
 $31 \times 24 = \boxed{744}$

4 Use base 10 to work out these multiplications.
a) $25 \times 15 = \boxed{375}$ b) $36 \times 12 = \boxed{432}$

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

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

6 Use an area model to help you complete the multiplication.

a) $28 \times 14 = \boxed{392}$

x	20	8
10	200	80
4	80	32

c) $35 \times 22 = \boxed{770}$

x	30	5
20	600	100
2	60	10

b) $27 \times 16 = \boxed{432}$

x	20	7
10	200	70
6	120	42

d) $45 \times 36 = \boxed{1,620}$

x	40	5
30	1200	150
6	240	30

7 Complete the multiplications.
 $21 \times 24 = \boxed{504}$ $31 \times 25 = \boxed{775}$
 $18 \times 26 = \boxed{1,000}$

8 $24 \times \boxed{32} = 768$
Complete the area model to find the missing number.

9 Use each digit card once to write a multiplication.

2 3 4 5

$\boxed{24} \times \boxed{35} = \boxed{840}$

How many different answers can you find?

Over 4 - $45 \times 32 = 1440$
 $43 \times 52 = 2236$ $24 \times 35 = 840$ $23 \times 45 = 1035$

How many products are there between 1,000 and 1,500?
 $\frac{2}{4} = 50\%$

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(Maths sheet 2) w/c 4 May

(2)

Multiply 4-digits by 2-digits

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1 Complete the multiplication.

		1	2	3	4	
x				2	1	
		1	2	3	4	
		2	4	6	8	0
		2	5	9	1	4

(1,234 × 1) (1,234 × 20) ✓

2 Tommy is calculating 1,234 × 26

a) Complete his working out.

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

(1,234 × 6) (1,234 × 20) ✓

b) Fill in the grid to check Tommy's working is accurate. You may use place value counters to help.

x	1,000	200	30	4
20	20,000	4,000	600	80
6	6,000	1,200	180	24

3 Rosie is calculating 2,541 × 42. Here is Rosie's working.

		2	5	4	1	
x				4	2	
		5	4	0	8	2
		8	0	6	4	0
		1	2	1	4	6

a) Rosie has made two mistakes. What are they?
 1. She didn't include the 1 she exchanged.
 2. She hasn't included the 0 for the 40,000.

b) What is the correct answer?

		2	5	4	1		
x				4	2		
		5	0	8	2		
		1	0	1	6	4	0
		1	0	6	7	2	2

106,722

4 Work out the multiplications.

a) 4,284 × 23 b) 2,142 × 46

		4	2	8	4	
x				2	3	
		1	2	8	5	2
		8	5	6	8	0
		9	8	5	3	2

		2	1	4	2	
x				4	6	
		1	2	8	5	2
		8	5	6	8	0
		9	8	5	3	2

31,752

What do you notice?
They have the same answer.

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5 A machine makes 2,734 boxes every hour. The machine works for 3 hours each day.

a) How many boxes will it make in 12 days?

		2	7	3	4	
x				3		
		8	2	0	2	
		8	2	0	2	0
		9	8	4	2	4

Per Day: 8,202 Boxes
In 12 days: 98,424 Boxes

b) Compare methods with a partner. Were there any other ways you could have worked out the answer?

6 Work out 378 × 7 × 12. Show your method clearly.

		3	7	8		
x				7		
		2	6	4	6	
		2	6	4	6	0
		3	1	7	5	2

31,752

7

1	2	3	4	5	6

a) Using all the digit cards, create 4 different calculations and work out the answer to each.

		1	2	3	4	
x				5	6	
		6	9	1	2	
		6	9	1	2	0
		6	9	1	0	4

		3	4	5	6		
x				1	2		
		6	5	4	3		
		6	5	4	3	0	
		1	3	7	4	0	3

		6	5	4	3		
x				2	1		
		2	1	6	0	5	
		2	1	6	0	5	0
		2	8	0	8	6	5

b) Write your answers in ascending order.
41,472 69,104 137,403 280,865

c) What is the smallest product that can be made? 31,928

8 Amir scores 4,680 points in a computer game for 12 games in a row. Whitney scores 2,512 points every game for 24 games.

Who scores more points?
How many more?

		4	6	8	0		
x				1	2		
		4	6	8	0	0	
		4	6	8	0	0	0
		5	6	1	6	0	

		2	5	1	2		
+				2	4		
		1	0	0	4	8	
		1	5	0	2	4	0
		6	0	2	8	8	

4,128

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Maths sheets – Yr5

(Maths sheet 3) w/c 4 May

Divide with remainders

1 a) Circle the groups of 3 to help complete the sentences and calculation.

The first step has been done for you.

Th	H	T	O
1000	100	10	1
1000	100	10	1
1000	100	10	1
1000	100	10	1
1000	100	10	1

There is **1** group of 3 thousands.

There are **3** groups of 3 hundreds.

There is **1** group of 3 tens.

There are **2** groups of 3 ones.

There are **2** ones left over.

$3,938 \div 3 = 1312$ remainder **2**

b) Use place value counters to work out $8,407 \div 4$

Th	H	T	O
8000	400	0	7

$8,407 \div 4 = 2101$ remainder **3**

2 a) Complete the divisions. Use place value counters to help you.

$371595 \div 4$	$2531r2$	$485167 \div 4$	$2141r3$
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$5615612 \div 3$	$1312r2$	$33935 \div 3$	$1311r2$
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b) Write $<$, $>$ or $=$ to complete the statements.

$7,595 \div 3 > 8,567 \div 4$

$6,562 \div 5 > 3,935 \div 3$

$6,562 \div 2 > 1311r2$

$3171595 \div 3 > 2141r3$

$51615612 \div 2 > 313935$

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3 Write the calculations in the correct column of the table.

$5,066 \div 4$	$9,513 \div 4$	$1,234 \div 4$
$6,562 \div 4$	$6,563 \div 4$	$9,515 \div 4$

Remainder of 1	Remainder of 2	Remainder of 3	Remainder of 4
$9513 \div 4$	$5066 \div 4$	$8563 \div 4$	
	$6562 \div 4$	$9515 \div 4$	
	$1234 \div 4$		

Are any columns empty? Talk to a partner about why this has happened. *Because we are dividing by 4, the remainder 4 column is empty because you can't have a remainder the same or higher than the number you are dividing.*

4

$7,816 \div 5$	$7,861 \div 5$	$6,781 \div 5$	$1,786 \div 5$
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I know that if I divide these numbers by 5 the remainder will be 1.

Is Eva correct? **Yes**

How do you know? *Because the last number ends in 1 or 6, when it is divided by 5 they will leave a 1.*

5 There are 459 children in a school. They are sitting at tables in groups of 7.

We will need 65 tables.

Do you agree with Mo? **NO**

Explain your answer. *Because 4 children will not have a seat. You need 66 tables.*

6 Bags of crisps are put into multipacks of 6. The multipacks are then packed into boxes of 8. Yesterday, 6,500 bags of crisps were packed. How many boxes of crisps were packed?

135

7

2	3	4	5
□	□	□	□

a) How many ways can you complete the calculation using all the digit cards so that there is a remainder of 1?

$253 \div 2 = 63r1$ $345 \div 2 = 172r1$

$325 \div 4 = 81r1$

b) What do you notice? *I'm not sure.*

8 Dora is thinking of a number between 500 and 600. When she divides it by a 1-digit number it has a remainder of 4. What could Dora's number be? $534 \div 5 = 106r4$

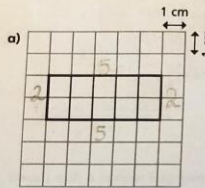
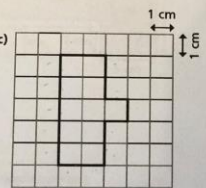
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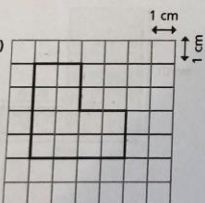
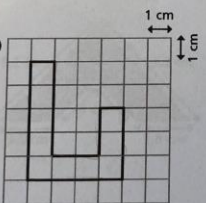
Maths sheets – Yr5

(Maths sheet 4) w/c 4 May

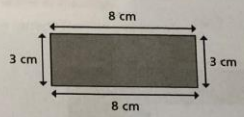
Calculate perimeter

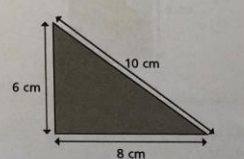
1 Calculate the perimeter of each shape.

a)  c) 

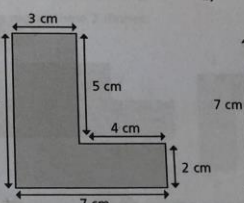
b)  d) 

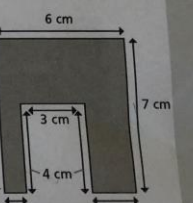
2 Calculate the perimeter of these shapes.

a)  22 cm

b)  24 cm

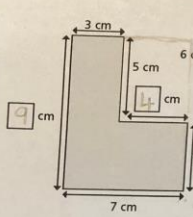
3 Calculate the perimeter of these shapes.

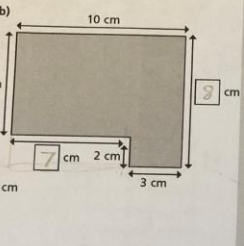
a)  28 cm

b)  34 cm

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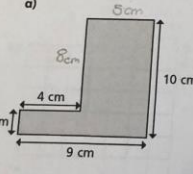
4 Work out the missing lengths on these shapes.

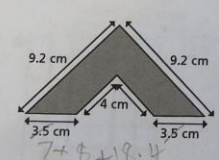
a)  4 cm

b)  2 cm

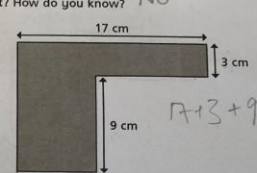
Discuss with a partner how you worked them out.

5 Calculate the perimeter of these shapes.

a)  38 cm

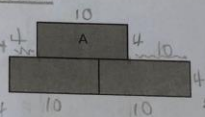
b)  33.4

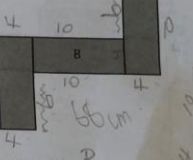
6 Mo thinks that there is not enough information to calculate the perimeter of the shape. Is he correct? How do you know? **NO**

 17 + 3 + 9 + 12 + 17 = 58 cm

He isn't right because he has all information he needs.

7 Rosie is making shapes made up of 3 rectangles. Each rectangle has a length of 10 cm and a width of 4 cm. She makes these 2 shapes.

 56 cm

 68 cm

a) Which shape has the greatest perimeter? **B**

b) What other shapes can you make with 3 rectangles? What is the perimeter of the shapes? **68 cm**

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