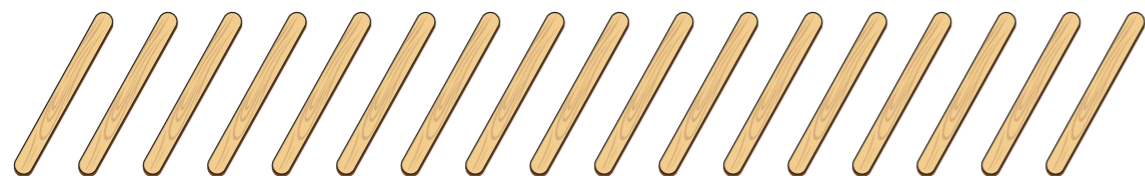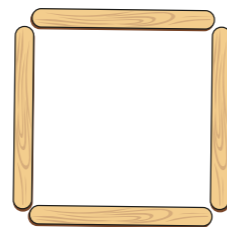# Divide 2-digits by 1-digit (3)

1 Mo has these lolly sticks.

He uses them to make squares.

How many squares can Mo make?

Complete the sentences.
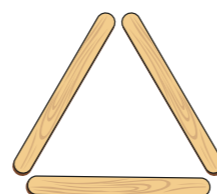
There are 17 lolly sticks.

There are ☐ groups of 4

There is ☐ lolly stick remaining.

17 ÷ 4 = ☐ remainder ☐

Mo can make ☐ squares.

2 Mo now uses the lolly sticks to make triangles.

How many triangles can Mo make?

Complete the sentences.
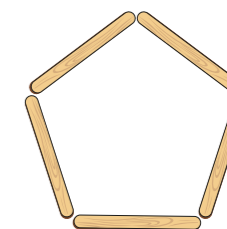
There are 17 lolly sticks.

There are ☐ groups of 3

There are ☐ lolly sticks remaining.

17 ÷ 3 = ☐ remainder ☐

Mo can make ☐ triangles.

3 Finally, Mo uses the lolly sticks to make pentagons.

How many pentagons can Mo make?

Complete the sentences.

There are 17 lolly sticks.
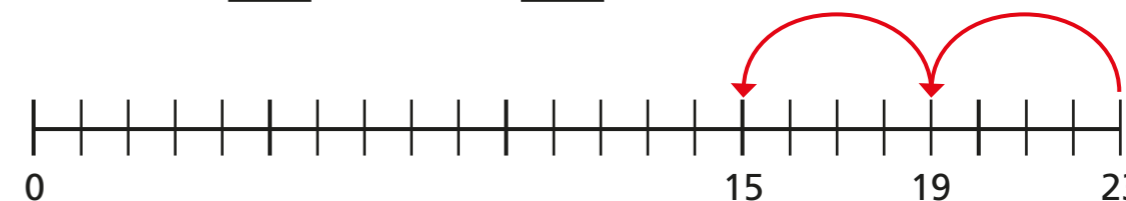
There are ☐ groups of 5

There are ☐ lolly sticks remaining.
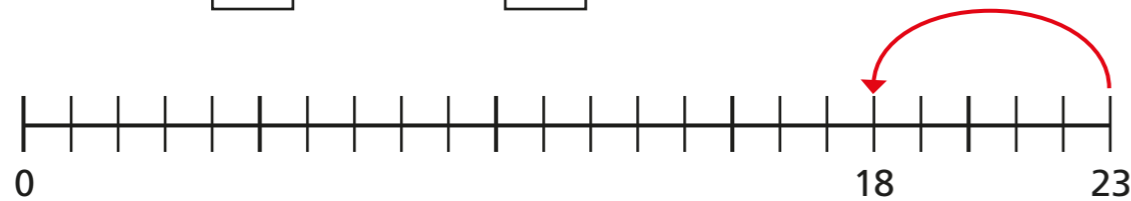
17 ÷ 5 = ☐ remainder ☐

Mo can make ☐ pentagons.

4 Use repeated subtraction to complete the divisions.
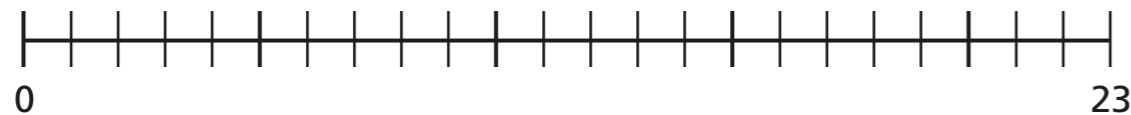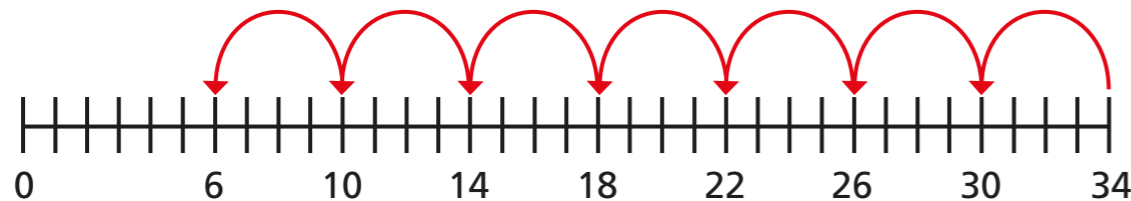
Use the number lines to help you.

a) 23 ÷ 4 = ☐ remainder ☐

```
0                              15      19      23
```

b) 23 ÷ 5 = ☐ remainder ☐

0 ··· 18 ··· 23

c) 23 ÷ 3 = ☐ remainder ☐

0 ··· 23

---

5 Eva works out 34 ÷ 4

0   6   10   14   18   22   26   30   34

There is a remainder of 6
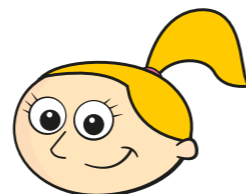
Is Eva correct? _____

How do you know?

---

6 Complete the calculations.

a) 29 ÷ ☐ = 4 remainder 5

c) 29 ÷ ☐ = 14 remainder 1

b) 29 ÷ ☐ = 4 remainder 1

---

7 How do you know there is no remainder when 75 is divided by 5?

_____

Without doing the division, what is the remainder when 76 is divided by 5? ☐

---

8 Use place value counters and a place value chart to work out the divisions.

a) 87 ÷ 4 = ☐ remainder ☐

b) 77 ÷ 3 = ☐ remainder ☐

c) 74 ÷ 5 = ☐ remainder ☐

---

9 Teddy has fewer than 60 marbles but more than 40

When he shares them equally into 3 pots he has no remainders.

When he shares them equally into 4 pots he has remainder 3

When he shares them equally into 5 pots he has remainder 1

How many marbles could Teddy have?

☐

Divide 2-digits by 1-digit (2)

1 Whitney is working out 49 ÷ 4 using a place value chart.

Tens	Ones
10	1 1
10	1 1
10	1 1
10	1 1

1

a) Talk about Whitney's method with a partner.

b) Why is there one counter left over?

_____

_____

c) Complete the division.

49 ÷ 4 = ☐

d) Use place value counters to complete the divisions.

50 ÷ 4 = ☐   51 ÷ 4 = ☐

What do you notice?

2 Complete the divisions.

a) 47 ÷ 3 = ☐   **e)** 49 ÷ 6 = ☐

b) 26 ÷ 5 = ☐   **f)** 47 ÷ 4 = ☐

c) 89 ÷ 4 = ☐   **g)** 74 ÷ 3 = ☐

d) 32 ÷ 5 = ☐   **h)** 81 ÷ 7 = ☐

3 Complete the divisions.

a) 36 ÷ 4 = ☐   **c)** 45 ÷ 3 = ☐

37 ÷ 4 = ☐   46 ÷ 3 = ☐

38 ÷ 4 = ☐   47 ÷ 3 = ☐

39 ÷ 4 = ☐   48 ÷ 3 = ☐

40 ÷ 4 = ☐   49 ÷ 3 = ☐

b) 70 ÷ 5 = ☐   **d)** 92 ÷ 4 = ☐

71 ÷ 5 = ☐   91 ÷ 4 = ☐

72 ÷ 5 = ☐   90 ÷ 4 = ☐

73 ÷ 5 = ☐   89 ÷ 4 = ☐

74 ÷ 5 = ☐   88 ÷ 4 = ☐

4 Dora has been working out some divisions.

$$72 \div 4 = 18$$
$$73 \div 4 = 18 \text{ r}1$$
$$74 \div 4 = 18 \text{ r}2$$
$$75 \div 4 = 18 \text{ r}3$$

> I know without working it out that 76 ÷ 4 must be 18 r4
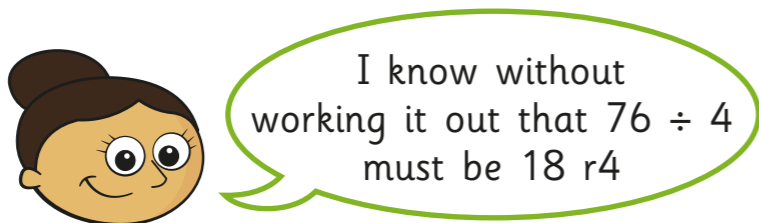
a) Why does Dora think this?

_____

_____

b) Explain why Dora is wrong.

_____

_____

5 Eggs come in boxes of 6

Annie has 75 eggs.

She wants to know how many boxes she can fill.
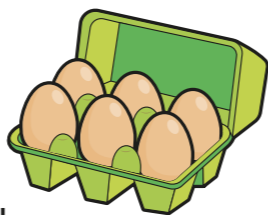
a) Complete the division to work it out.

[   ] ÷ [   ] = [   ] r [   ]

b) What does the remainder represent?
Talk about it with a partner.

c) Complete the sentence.

Annie can fill [   ] boxes with [   ] eggs left over.

6 Jack has these bulbs.

Daffodils 49

Tulips 63

Crocuses 98

Equal numbers of each bulb are put into 4 tubs.

How many of each bulb will be in each tub?

Daffodils [   ]   Tulips [   ]   Crocuses [   ]

How many of each bulb will be left over?

Daffodils [   ]   Tulips [   ]   Crocuses [   ]

How many tubs could Jack use so that there are no bulbs left over?

Divide 3-digits by 1-digit

1 Jack is working out 844 ÷ 4 using a place value chart.

H	T	O
100 100	10	1
100 100	10	1
100 100	10	1
100 100	10	1

a) Talk about Jack's method with a partner.

b) Complete the division.

844 ÷ 4 = ☐

2 Use Jack's method to work out these divisions.

a) 525 ÷ 5 = ☐

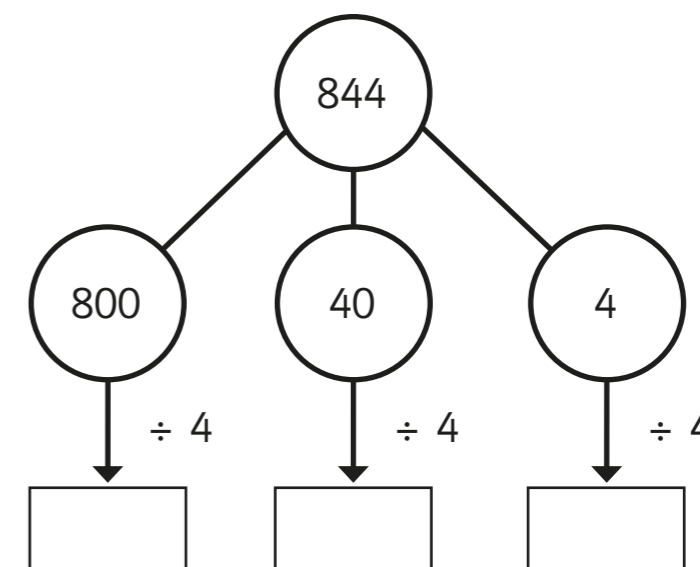**c)** 840 ÷ 8 = ☐

b) 636 ÷ 6 = ☐

d) 903 ÷ 3 = ☐

3 Eva is working out 844 ÷ 4 using a part-whole model.

```
           844
      /     |     \
    800    40      4
     |      |      |
    ÷4     ÷4     ÷4
     ↓      ↓      ↓
    ☐      ☐      ☐
```

Complete Eva's method.   844 ÷ 4 = ☐

4 A ball of string is 848 cm long.

It is cut into 4 equal pieces.

What is the length of one piece of string?

☐

5 Whitney is using flexible partitioning to divide a 3-digit number.

```
           856
      /     |     \
    800    40     16
     |      |      |
    ÷4     ÷4     ÷4
     ↓      ↓      ↓
    200    10      4
```
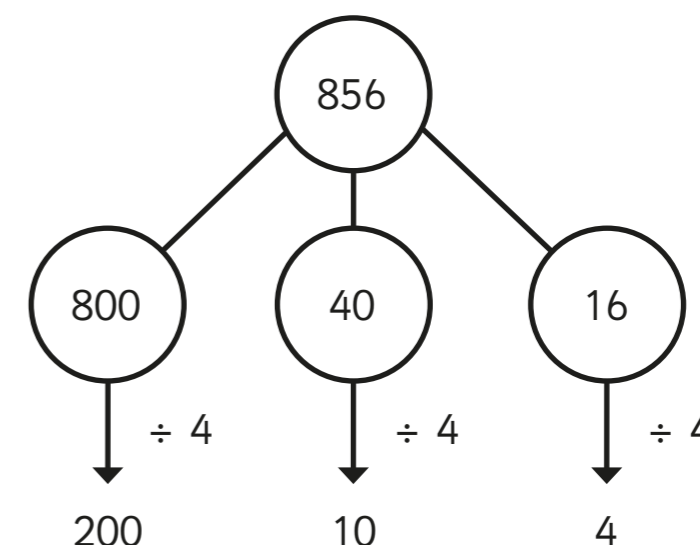
Could Whitney have partitioned her number another way?

Use Whitney's method to work out these divisions.

a) $585 \div 5 =$ ☐　　　**c)** $648 \div 4 =$ ☐
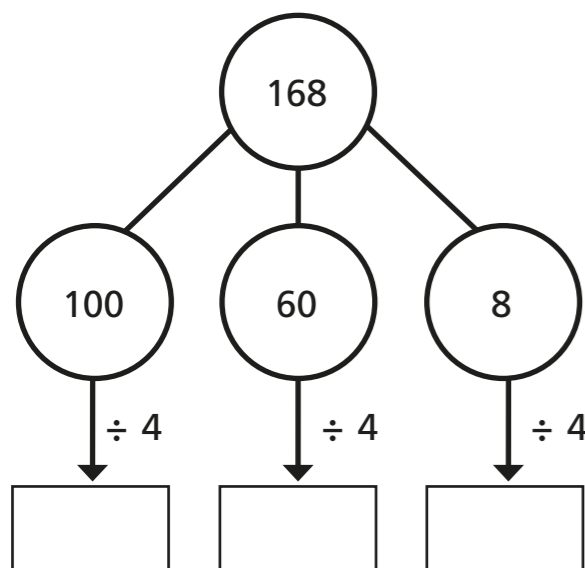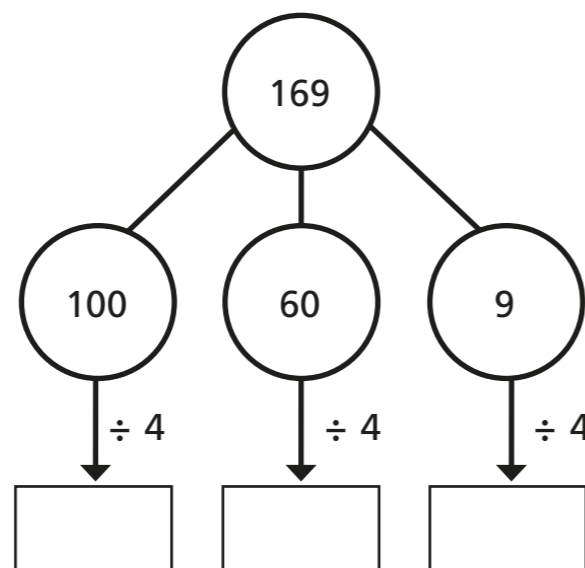
b) $672 \div 6 =$ ☐　　　**d)** $847 \div 7 =$ ☐

6 Complete the part-whole models and divisions.


```
        168                           169
   100   60   8              100    60     9
   ÷4    ÷4   ÷4             ÷4     ÷4      ÷4
   ☐     ☐    ☐              ☐      ☐       ☐
```

$168 \div 4 =$ ☐　　　　$169 \div 4 =$ ☐

What is the same and what is different about the calculations?

Talk about it with a partner.

7 Complete the divisions.

a) $258 \div 6 =$ ☐　　　**c)** $864 \div 4 =$ ☐

b) $623 \div 5 =$ ☐　　　**d)** $824 \div 3 =$ ☐

8 Eva has a piece of ribbon.

The ribbon measures 839 cm long.

How much ribbon would be left over if she cuts it into:

a) 4 equal pieces

☐

b) 6 equal pieces

☐

c) 8 equal pieces

☐

Can Eva cut the ribbon into equal pieces with no ribbon left over? _____

Explain your answer.

9 Use 15 counters and a place value chart.

a) Can you make a number that is divisible by 3? _____

b) Can you make a number that has a remainder of 1 when divided by 3? _____

c) Can you make a number that has a remainder of 2 when divided by 3? _____

What do you notice? Talk about your findings with a partner.

Correspondence problems

1 A canteen has 2 types of bread and a choice of 3 sandwich fillings.

Bread	Fillings
white	cheese
brown	tuna
	chicken

a) List the different sandwiches that can be made.

One has been done for you.

cheese on white _____

_____

_____

_____

b) Complete the multiplication to represent the number of different combinations of bread and filling.

☐ × ☐ = ☐

Complete the sentence.

There are ☐ combinations.

c) How many combinations would there be if there were 4 choices of sandwich filling?

☐

2 A pizzeria offers a choice of bases and toppings.

Pizza base	Toppings
deep pan	mushrooms
thin	chicken
	onion
	peppers
	sweetcorn

Complete the multiplication to work out how many different combinations of pizza there are.

☐ × ☐ = ☐

Complete the sentence.

There are ☐ combinations of pizza.

3 Mo visits the funfair.

He buys a ticket that allows him to choose 1 ride and 1 game at the fair.

Rides
Big dipper
Dodgems
Carousel

Games
Hook-a-duck
Basketball
Coconut shy
Lucky dip
Test-your-strength

There are 8 different possible choices of rides and games.

a) Is Mo correct? _____

Explain your answer.

_____

_____

b) List all the different choices Mo can make.

_____

_____

_____

_____

Mo can make [ ] different choices.

4 Aisha has 3 headbands and 5 hair slides.

Kim has 2 headbands and 6 hair slides.

Who has more choices of combinations for wearing one headband and 1 slide?

_____ has more choices.

Talk about it with a partner.

5 Here are the activity choices available at Summer Camp.

Sport	Arts and crafts	Outward bound
football	painting	wall climbing
tennis	pottery	kayaking
golf	mosaics	abseiling
	origami	

Each child is allowed to choose 3 activities per day:
1 sport, 1 arts and crafts and 1 outward bound.

a) How many activity combinations are there?

[ ]

b) Due to a flooded pitch, football is cancelled.

How many combinations are now possible?

There are [ ] combinations.

6 Tom and Esther are building a snowman.

They have a choice of 5 hats, 4 scarves and 2 pairs of gloves to dress their snowman.

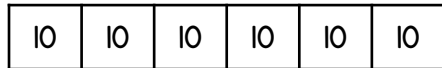How many different combinations are possible?
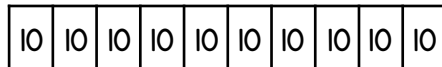
[ ] × [ ] × [ ] = [ ]

There are [ ] combinations.

Year 4

Multiplication and Division

Name _____

1 Match each statement to the correct bar model.

| 6 bags of 10 sweets |

| 10 | 10 | 10 | 10 | 10 | 10 |

| 10 bags of 6 sweets |

| 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |

| 10 bags of 10 sweets |

| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
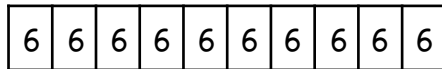
1 mark

2 Complete the bar model to show 7×3

| 3 | 3 | 3 | | | | |
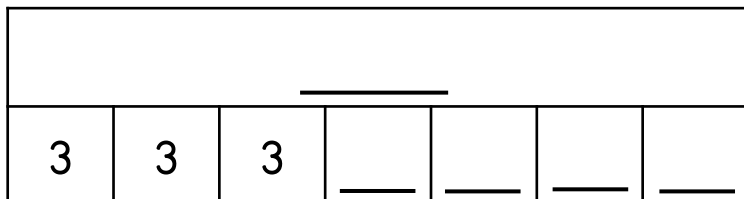
1 mark

3 Each box contains 6 eggs.

Complete the fact family to represent the eggs.

$$\Box \times \Box = \Box$$

$$\Box \times \Box = \Box$$

$$\Box \div \Box = \Box$$

$$\Box \div \Box = \Box$$

1 mark

4 Use the number line to help you work out

$$6 \times 40 = \Box$$
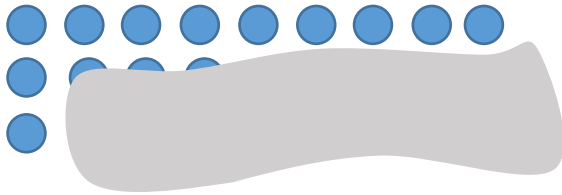
0   40   80   120   160   200   240   280   320   360   400
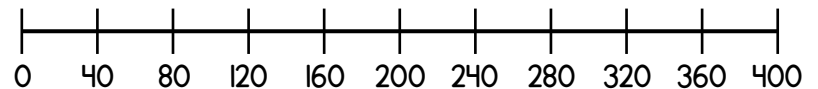
1 mark

5 Complete the calculations.

$5 \times 30 = \Box$ $180 \div 2 = \Box$

$5 \times 300 = \Box$ $630 \div \Box = 70$

3 marks

6 Leon makes an array using counters.
Part of the array is covered.

Write down a multiplication that the array shows.

[ ] × [ ]

How many counters are in the array?

_____ counters

7 A bag costs £11 and a mug costs £7
Annie spends £80 in total on bags and mugs.
She buys 6 bags.
How many mugs does she buy?

_____ mugs

8 The product of two numbers is 48
The sum of the two numbers is 16
Circle the two numbers.

2   4   6   8   12   24

[ ] 1 mark

9 What is the value of the triangle?

$7 \times \triangle = 8 \times \triangle$

$\triangle =$ _____

[ ] 1 mark

10 A sticker book can fit 6 stickers on each page.
8 out of 20 pages of the book are full.
How many **more** stickers are needed to complete the sticker book?

_____ stickers

[ ] 2 marks

[ ] 1 mark

[ ] 1 mark

[ ] 2 marks

Circle how confident you feel with multiplication & division.

1   2   3   4   5

Not
confident

Very
confident