Divide 2-digits by 1-digit (1)

1 Rosie is working out 93 ÷ 3 using a place value chart.

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

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

b) Complete the division.

93 ÷ 3 = 31

2 Use place value counters to complete the divisions.

a) 66 ÷ 3 = 22

b) 86 ÷ 2 = 43

c) 50 ÷ 5 = 10

d) 48 ÷ 4 = 12

e) 13 = 39 ÷ 3

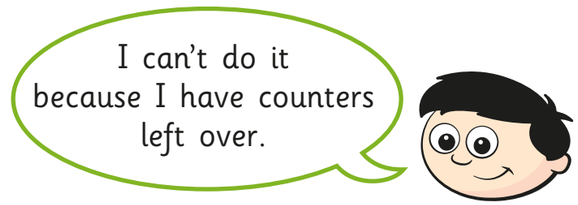
f) 84 ÷ 4 = 21

3 Dexter is working out 56 ÷ 4 using a place value chart.

T	O
10	1
10	1
10	1
10	1

10 1 1

a)



Do you agree with Dexter? No

Explain your answer.

He can exchange 1 ten for 10 ones.

b) Work out 56 ÷ 4 using place value counters.

56 ÷ 4 = 14

4 Use place value counters to complete the divisions.

a) 72 ÷ 3 = 24

b) 92 ÷ 4 = 23

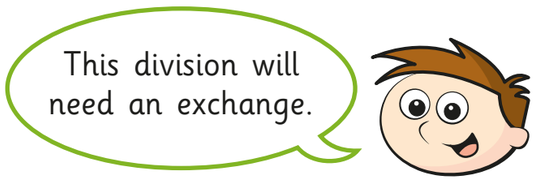
c) 65 ÷ 5 = 13

d) 48 ÷ 6 = 8

e) 15 = 45 ÷ 3

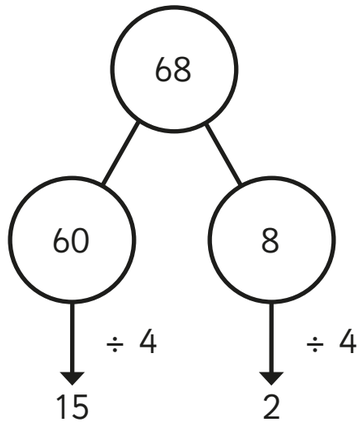
f) 64 ÷ 4 = 16

5 Teddy is working out 57 ÷ 3



How does Teddy know this? Talk about it with a partner.

6 Amir is working out 68 ÷ 4

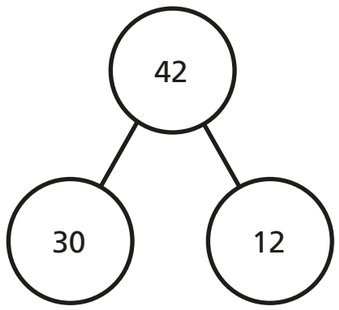


68 ÷ 4 = 17

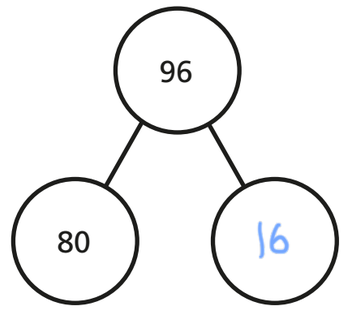
Talk about Amir's method with a partner.

7 Use Amir's method to complete these calculations.

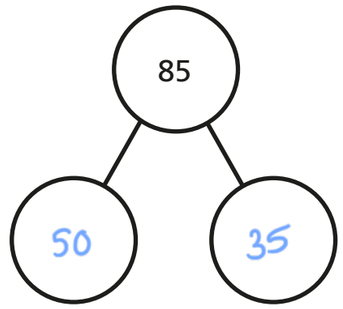
a) 42 ÷ 3 = 14



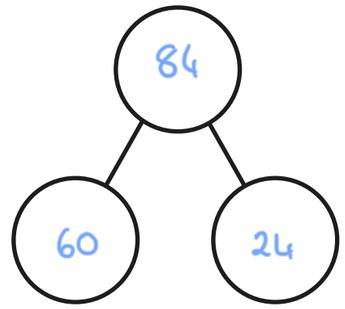
b) 96 ÷ 4 = 24



c) 85 ÷ 5 = 17



d) 84 ÷ 6 = 14



8 Kim has 92 beads.

She wants to share them equally between 4 friends.

How many beads will each friend get?

23

9 Write <, > or = to make the statements correct.

96 ÷ 8 = 72 ÷ 6

95 ÷ 5 < 63 ÷ 3

51 ÷ 3 > 64 ÷ 4

98 ÷ 7 < 95 ÷ 5

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?

It is a remainder.

c) Complete the division.

49 ÷ 4 = 12 r 1

d) Use place value counters to complete the divisions.

50 ÷ 4 = 12 r 2

51 ÷ 4 = 12 r 3

What do you notice?

2 Complete the divisions.

a) 47 ÷ 3 = 15 r 2

b) 26 ÷ 5 = 5 r 1

c) 89 ÷ 4 = 22 r 1

d) 32 ÷ 5 = 6 r 2

e) 49 ÷ 6 = 8 r 1

f) 47 ÷ 4 = 11 r 3

g) 74 ÷ 3 = 24 r 2

h) 81 ÷ 7 = 11 r 4

3 Complete the divisions.

a) 36 ÷ 4 = 9

37 ÷ 4 = 9 r 1

38 ÷ 4 = 9 r 2

39 ÷ 4 = 9 r 3

40 ÷ 4 = 10

b) 70 ÷ 5 = 14

71 ÷ 5 = 14 r 1

72 ÷ 5 = 14 r 2

73 ÷ 5 = 14 r 3

74 ÷ 5 = 14 r 4

c) 45 ÷ 3 = 15

46 ÷ 3 = 15 r 1

47 ÷ 3 = 15 r 2

48 ÷ 3 = 16

49 ÷ 3 = 16 r 1

d) 92 ÷ 4 = 23

91 ÷ 4 = 22 r 3

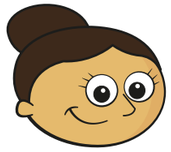
90 ÷ 4 = 22 r 2

89 ÷ 4 = 22 r 1

88 ÷ 4 = 22

4 Dora has been working out some divisions.

$72 \div 4 = 18$
$73 \div 4 = 18$ r1
$74 \div 4 = 18$ r2
$75 \div 4 = 18$ r3



I know without working it out that $76 \div 4$ must be 18 r4

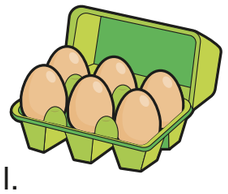
a) Why does Dora think this?

She has spotted a pattern.

b) Explain why Dora is wrong.

You can't have a remainder of 4 when dividing by 4

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.

75 ÷ 6 = 12 r 3

b) What does the remainder represent?

Talk about it with a partner.

c) Complete the sentence.

Annie can fill 12 boxes with 3 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 12 Tulips 15 Crocuses 24

How many of each bulb will be left over?

Daffodils 1 Tulips 3 Crocuses 2

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 = 211

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

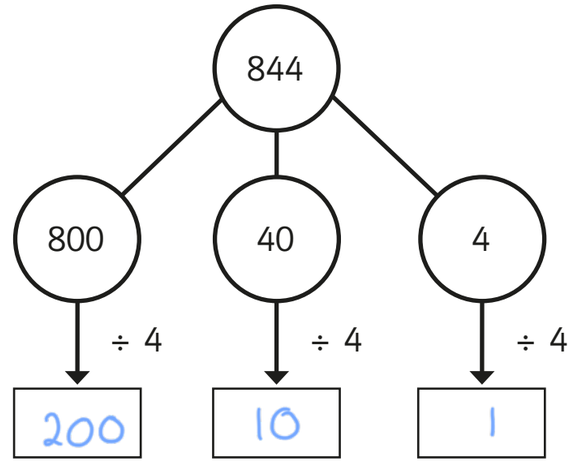
a) 525 ÷ 5 = 105

b) 636 ÷ 6 = 106

c) 840 ÷ 8 = 105

d) 903 ÷ 3 = 301

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



Complete Eva's method.

844 ÷ 4 = 211

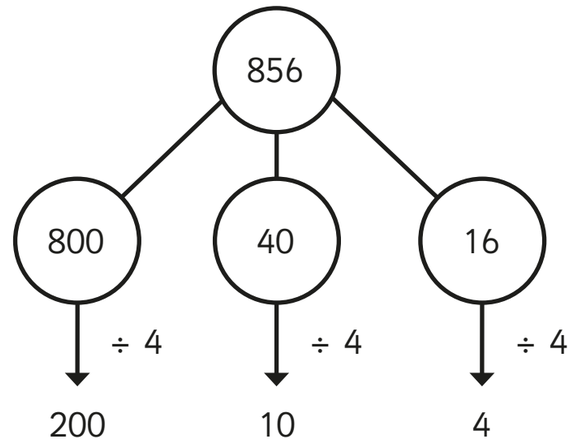
4 A ball of string is 848 cm long.

It is cut into 4 equal pieces.

What is the length of one piece of string?

212cm

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



Could Whitney have partitioned her number another way?

Use Whitney's method to work out these divisions.

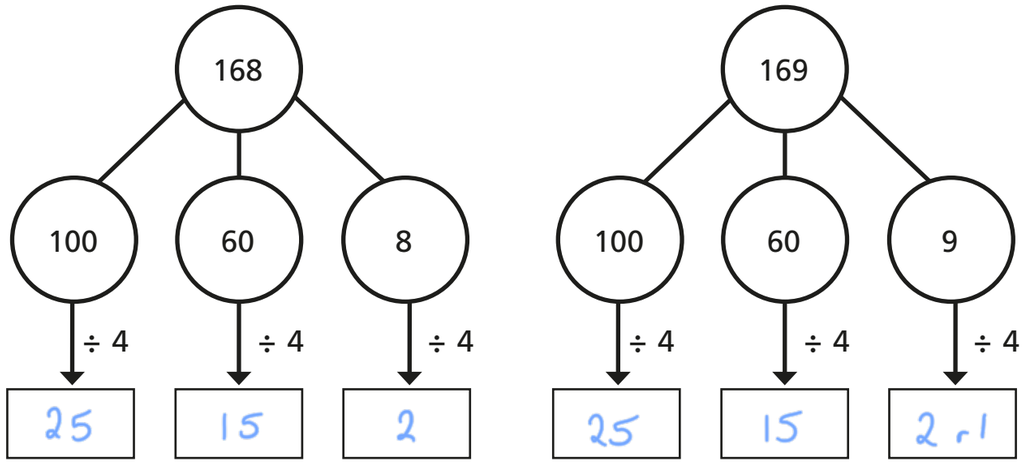
a) 585 ÷ 5 = 117

c) 648 ÷ 4 = 162

b) 672 ÷ 6 = 112

d) 847 ÷ 7 = 121

6 Complete the part-whole models and divisions.



168 ÷ 4 = 42

169 ÷ 4 = 42 r 1

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

Talk about it with a partner.

7 Complete the divisions.

a) 258 ÷ 6 =

c) 864 ÷ 4 =

b) 623 ÷ 5 =

d) 824 ÷ 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

3 cm

b) 6 equal pieces

5 cm

c) 8 equal pieces

7 cm

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

Explain your answer. 839 pieces each 1 cm long.

9 Use 15 counters and a place value chart.

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

b) Can you make a number that has a remainder of 1 when divided by 3? no

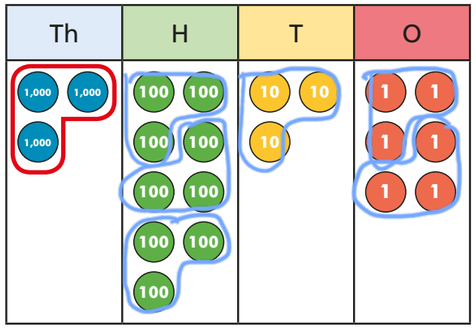
c) Can you make a number that has a remainder of 2 when divided by 3? no

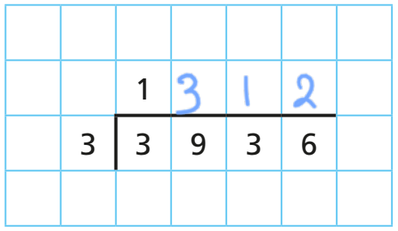
What do you notice? Talk about your findings with a partner.

Divide 4-digits by 1-digit

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

The first step has been done for you.





There is [1] group of 3 thousands.

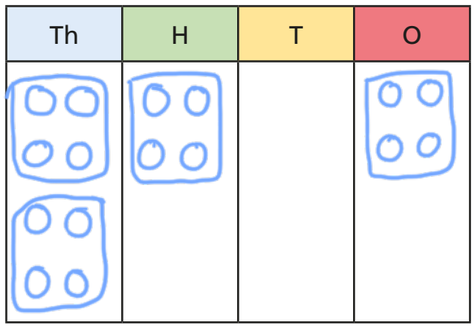
There are [3] groups of 3 hundreds.

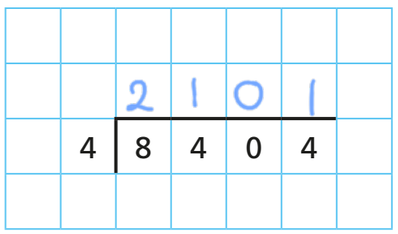
There is [1] group of 3 tens.

There are [2] groups of 3 ones.

3,936 ÷ 3 = [1,312]

b) Use the place value chart to work out 8,404 ÷ 4

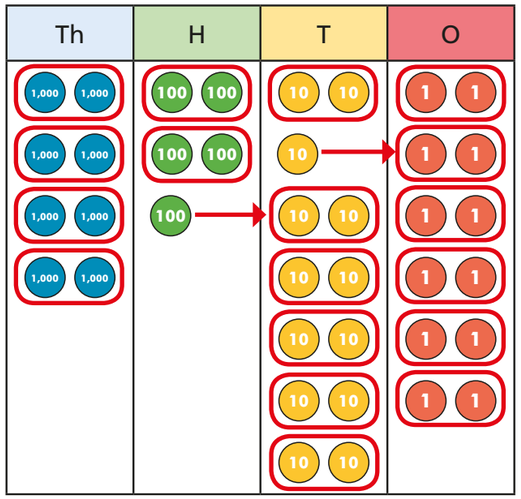


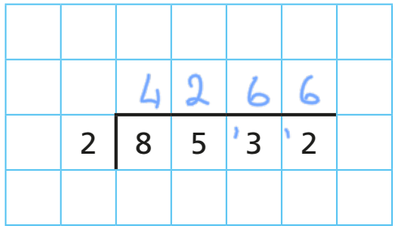


8,404 ÷ 4 = [2,101]

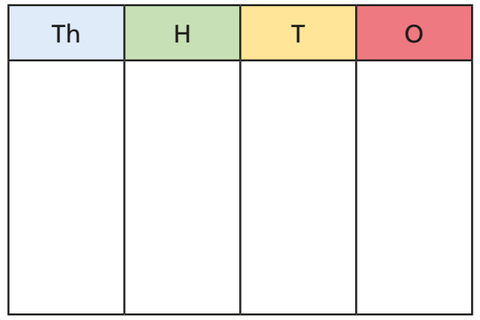
2 Use the place value charts to work out the divisions.

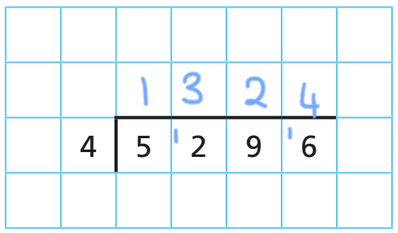
a) 8,532 ÷ 2 = [4,266]



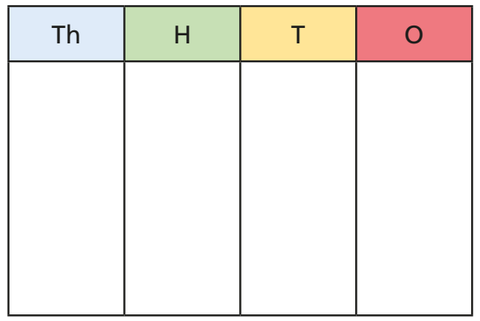


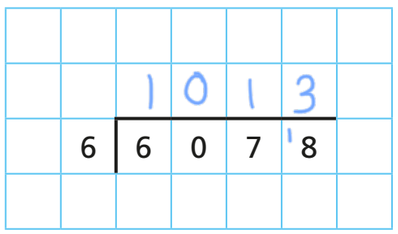
b) 5,296 ÷ 4 = [1,324]





c) 6,078 ÷ 6 = [1,013]





3 Complete the divisions.

a)

		0	7	1	2	
	5	3	3 5	6	1 0	

b)

		0	3	0	4	
	9	2	2 7	3	3 6	

c)

		1	6	3	1	
	4	6	2 5	1 2	4	

d)

		1	6	3	1	
	6	9	3 7	1 8	6	

e)

		1	5	6	1	
	3	4	1 6	1 8	3	

f)

		2	0	7	9	
	1	2	0	7	9	

Could you have calculated the answer to part f) more efficiently?

4 Work out the values of a, b and c.

9,415						
a	a	a	a	a	a	a

a = 1,345

b	b	b	b	b	b	b	b
5,328							

b = 666

120		120		120		120	
c	c	c	c	c	c	c	c

c = 80

5 Find the missing digits.

a)

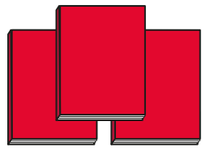
		2	2	4	1	
	4	8	9	6	4	

b)

		3	2	6	2	
	2	6	5	2	4	

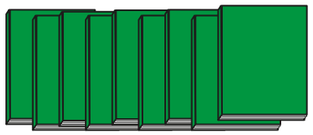
6 Books are available to buy in three different deals.

Deal A



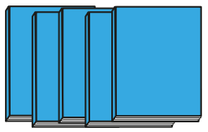
£12.99

Deal B



£38.16

Deal C



£25.60

Which is the best deal? Deal B

Show your workings.