a) Circle the groups of 3 to help complete the sentences and calculation.
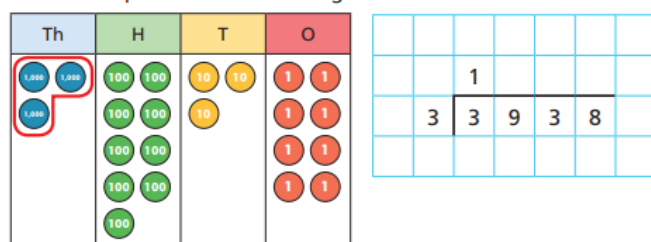
The first step has been done for you.

Th	H	T	O
1,000 1,000	100 100	10 10	1 1
1,000	100 100	10	1 1
	100 100		1 1
	100 100		1 1
	100		

		1		
3	3	9	3	8

There is ☐1☐ group of 3 thousands.

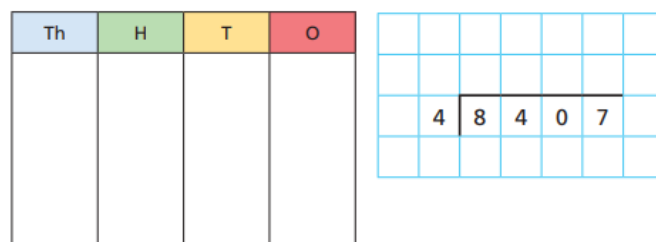There are ☐ groups of 3 hundreds.

There is ☐ group of 3 tens.

There are ☐ groups of 3 ones.

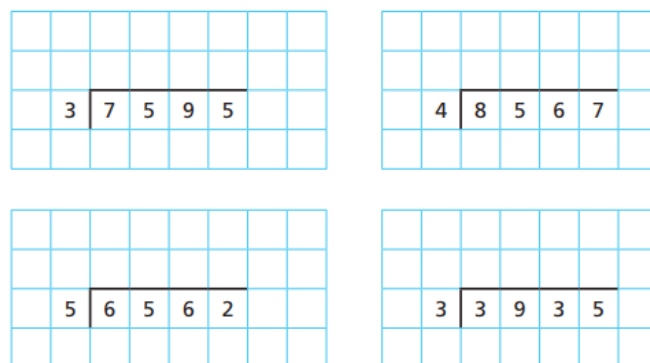There are ☐ ones left over.

3,938 ÷ 3 = ☐ remainder ☐

Tricky

b) Use place value counters to work out 8,407 ÷ 4

Th	H	T	O

	4	8	4	0	7

8,407 ÷ 4 = ☐ remainder ☐

2 **a)** Complete the divisions.

Use place value counters to help you.

	3	7	5	9	5

	4	8	5	6	7

	5	6	5	6	2

	3	3	9	3	5

Trickier – complete question 2a from Tricky challenge first

b) Write <, > or = to complete the statements.

7,595 ÷ 3 ◯ 8,567 ÷ 4

6,562 ÷ 5 ◯ 3,935 ÷ 3

Muffins are packed in trays of 6 in a factory.
In one day, the factory makes 5,623 muffins.
How many trays do they need?
How many trays will be full?
Why are your answers different?

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

5,066 ÷ 4   9,513 ÷ 4   1,234 ÷ 4

6,562 ÷ 4   6,563 ÷ 4   9,515 ÷ 4

Remainder of 1	Remainder of 2	Remainder of 3	Remainder of 4

Trickiest – Complete question 3 from Trickier challenge above before tackling the questions below

| 7,816 | 7,861 | 6,781 | 1,786 |

I know that if I divide these numbers by 5 the remainder will be 1

Is Eva correct? _____

How do you know?

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? _____

Explain your answer.

I am thinking of a 3-digit number.

When it is divided by 9, the remainder is 3

When it is divided by 2, the remainder is 1

When it is divided by 5, the remainder is 4

What is my number?

Always, Sometimes, Never?

A three-digit number made of consecutive descending digits divided by the next descending digit always has a remainder of 1

$765 \div 4 = 191$ remainder 1

How many possible examples can you find?

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?

Answers

Tricky

a) Circle the groups of 3 to help 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.

There are **2** ones left over.

$3,938 \div 3 =$ **1,312** remainder **2**

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

$8,407 \div 4 =$ **2,101** remainder **3**

$7,595 \div 3$ ⬭ $>$ ⬭ $8,567 \div 4$

$6,562 \div 5$ ⬭ $>$ ⬭ $3,935 \div 3$

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?

Remainder of 1	Remainder of 2	Remainder of 3	Remainder of 4
$9,513 \div 4$	$5066 \div 4$	$6563 \div 4$	
	$6562 \div 4$	$9,515 \div 4$	
	$1,234 \div 4$		

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__

There will always be a remainder 1 because in the ones column is 6 and 1

In the five times table the ones column is either a 5 or 0, so there will be one left

Will need 66 tables as $459 \div 7 = 65$ r4

I am thinking of a 3-digit number.

When it is divided by 9, the remainder is 3

When it is divided by 2, the remainder is 1

When it is divided by 5, the remainder is 4

What is my number?

Possible answers:

129	219
309	399
489	579
669	759
849	939

Encourage children to think about the properties of numbers that work for each individual statement. This will help decide the best starting point.

Always, Sometimes, Never?

A three-digit number made of consecutive descending digits divided by the next descending digit always has a remainder of 1

$765 \div 4 = 191$ remainder 1

How many possible examples can you find?

Sometimes

Possible answers:

$432 \div 1 = 432$ r 0
$543 \div 2 = 271$ r 1
$654 \div 3 = 218$ r 0
$765 \div 4 = 191$ r 1
$876 \div 5 = 175$ r 1
$987 \div 6 = 164$ r 3