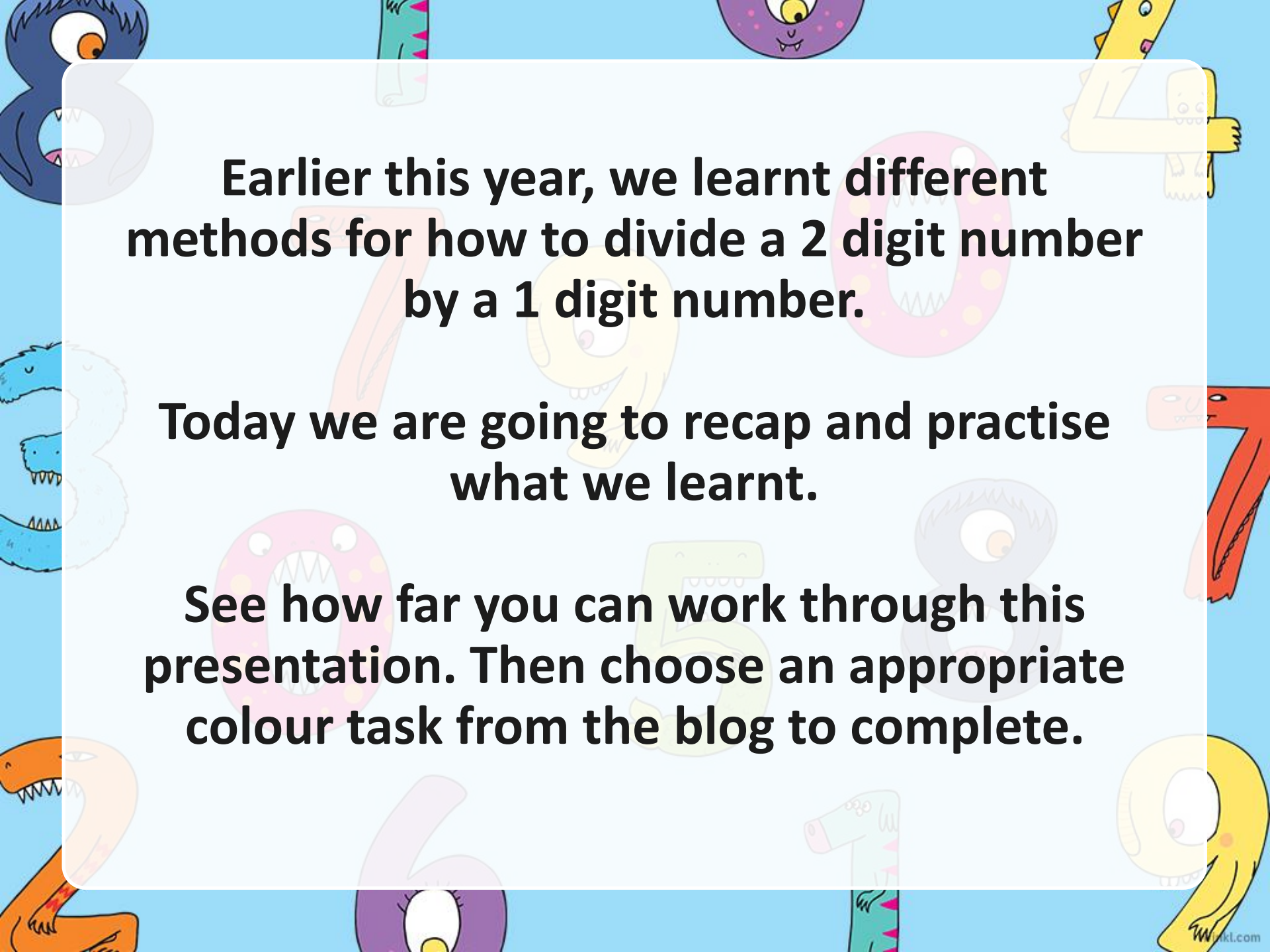




Year 3 Division



Earlier this year, we learnt different methods for how to divide a 2 digit number by a 1 digit number.

Today we are going to recap and practise what we learnt.

See how far you can work through this presentation. Then choose an appropriate colour task from the blog to complete.

Blue challenge

e.g. $26 \div 2$



Use what you know about place value to identify how many tens and ones there are in the 2 digit number.

T O
26

Draw a place value grid and divide each column into 2 (as you are dividing by 2 in this calculation)





Tens	Ones

Draw tens counters in the place value grid to represent the 2 tens in the number you are dividing ($26 \div 2$)

Tens	Ones
	
	


You must put an equal number of tens counters in each part of the grid.

Now draw ones counters in the place value grid to represent the 6 ones in the number you are dividing ($26 \div 2$)





Tens	Ones
	
	

You must put an equal number of ones counters in each part of the grid.

You have now completed $26 \div 2$.
Look at one section of the grid to
find the answer.

Tens	Ones
	
	

$$26 \div 2 = 13$$

Tens	Ones
	
	

Blue challenge

e.g. $39 \div 3$

Use what you know about place value to identify how many tens and ones there are in the 2 digit number.

T O
39

Draw a place value grid and divide each column into 3 (as you are dividing by 3 in this calculation)

Tens	Ones

Draw tens counters in the place value grid to represent the 3 tens in the number you are dividing ($39 \div 3$)

Tens	Ones
10	
10	
10	


You must put an equal number of tens counters in each part of the grid.

Now draw ones counters in the place value grid to represent the 9 ones in the number you are dividing ($39 \div 3$)

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

You must put an equal number of ones counters in each part of the grid.

You have now completed $39 \div 3$.
Look at one section of the grid to find
the answer.

Tens	Ones
	
	
	

$$39 \div 3 = 13$$

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

Green challenge

e.g. $32 \div 2$



This is similar to Blue challenge except we need to exchange a ten counter for ten ones counters. First identify the tens and ones in the 2 digit number.

T O
3 2

Draw a place value grid and divide each column into 2 (as you are dividing by 2 in this calculation)



Tens	Ones

**Draw tens counters in the place value grid.
Remember, you must put an equal number
of tens counters in each part of the grid.**

Tens	Ones
	
	



This time there is a tens counter left over.
You cannot put it in either section of the
grid as then the tens counters would not be
equal.

Tens	Ones
	
	


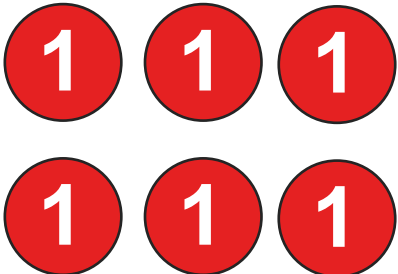
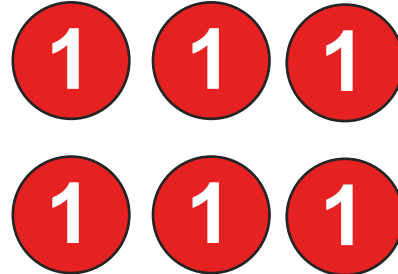


You must change this tens counter to ten ones counters.

10


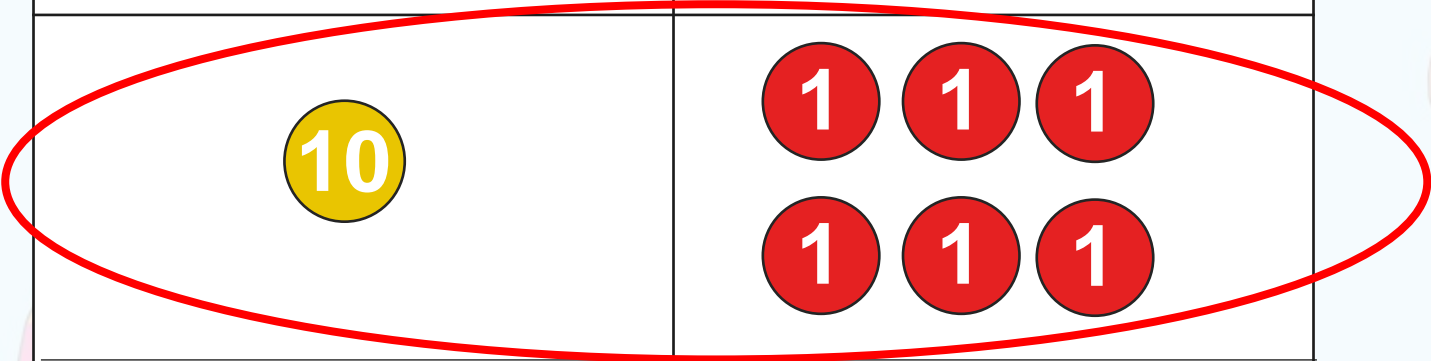

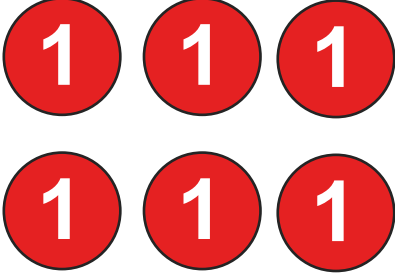


Now draw ones counters in the place value grid to represent the 2 ones in the number you are dividing ($32 \div 2$) and the ten ones counters we just exchanged.


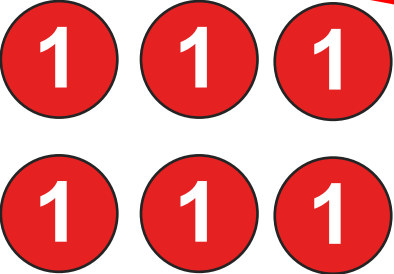

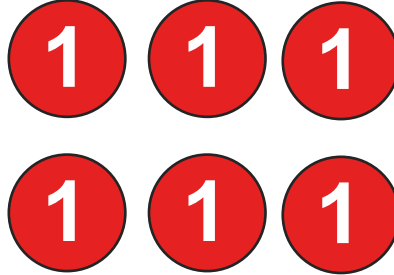
Tens	Ones
	
	

You must put an equal number of ones counters in each part of the grid.

You have now completed $32 \div 2$.
Look at one section of the grid to
find the answer.

Tens	Ones
	
	

$$32 \div 2 = 16$$

Tens	Ones
	
	

Green challenge

e.g. $45 \div 3$

This is similar to Blue challenge except we need to exchange a ten counter for ten ones counters. First identify the tens and ones in the 2 digit number.

T O
45

Draw a place value grid and divide each column into 3 (as you are dividing by 3 in this calculation)

Tens	Ones

**Draw tens counters in the place value grid.
Remember, you must put an equal number
of tens counters in each part of the grid.**

Tens	Ones
10	
10	
10	

10

This time there is a tens counter left over.
You cannot put it in any section of the grid
as then the tens counters would not be
equal.

Tens	Ones
10	
10	
10	

10

You must change this tens counter to ten ones counters.

10



Now draw ones counters in the place value grid to represent the 5 ones in the number you are dividing ($45 \div 3$) and the ten ones counters we just exchanged.

Tens	Ones
	
	
	

You must put an equal number of ones counters in each part of the grid.

You have now completed $45 \div 3$.
Look at one section of the grid to
find the answer.

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

$$45 \div 3 = 15$$

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

White challenge

We can use a quicker and more efficient method to divide numbers. We still need to use our place value knowledge.

$$\text{e.g. } 48 \div 2$$

Set out your calculation using a 'bus stop'. Put the two digit number you are dividing inside the bus stop and the one digit number you are dividing by outside the bus stop.

$$2 \overline{) 48}$$

Now work out how many twos there are
in four.

(Four represents 4 tens but to make
things easier, we can just say four).

Write the answer on top of the bus stop.

$$\begin{array}{r} 2 \\ \hline 2 \quad | \quad 4 \quad 8 \end{array}$$

Now work out how many twos there are in eight. Write the answer on top of the bus stop.

$$\begin{array}{r} 2 \quad 4 \\ \hline 2 \quad | \quad 4 \quad 8 \end{array}$$

$$48 \div 2 = 24$$

2 4

2 | 4 8

White challenge

You might have to deal with a
'remainder' though!

e.g. $65 \div 5$

Set out your calculation using a 'bus stop'. Put the two digit number you are dividing inside the bus stop and the one digit number you are dividing by outside the bus stop.

$$5 \overline{) 65}$$

Now work out how many fives there are in six.
This time there is one whole 5 but also 1 remainder.

Write the answer on top of the bus stop and put the remainder in the correct space.

$$\begin{array}{r} 1 \\ \hline 5 \overline{) 65} \\ \underline{5} \\ 1 \end{array}$$

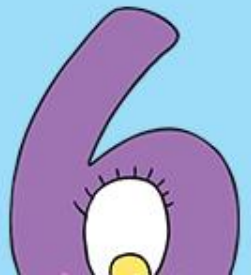
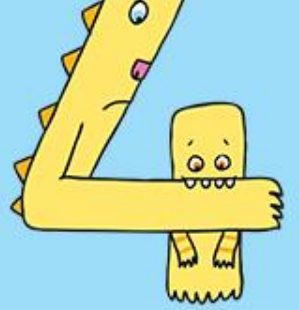
Now work out how many fives there are in fifteen. Write the answer on top of the bus stop.

$$\begin{array}{r} 13 \\ \hline 5 \overline{) 65} \\ \underline{65} \\ 0 \end{array}$$

1

$$65 \div 5 = 13$$

$$\begin{array}{r} 13 \\ 5 \overline{) 65} \\ \underline{5} \\ 15 \\ \underline{15} \\ 0 \end{array}$$



twinkl