



Year 4 Maths Home Learning | Summer Term



W.C. 4.5.2020

<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

<https://whiterosemaths.com/homelearning/year-4/>

Maths

Use these worksheets to work from **and not on**. All you need is a piece of paper, pencil and a ruler.

After watching the videos and having a go at the practise activities, have a go at these activities. Depending on your confidence choose Mild, Medium or Spicy (you may wish to have a go at more



Extensions – You may wish to deepen your learning by looking at the Collins Worksheets provided by the BBC too.

Monday <https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

Multiply two digit by 1 digit

Please have a go at the starter task (this task is for all)

STARTER:

Yusuf multiplies two single digits together and gets a two-digit answer whose digits add to make 10.

You have one minute to find as many possible multiplications as you can...

GO!

Mild

Calculate 12×3 using place-value counters and the formal method.

T	O
10	1 1
10	1 1
10	1 1

$$\begin{array}{r} 12 \\ \times 3 \\ \hline \\ \hline \end{array}$$

Calculate 13×4 using place-value counters and the formal method.

T	O
10	1 1 1
10	1 1 1
10	1 1 1
10	1 1 1

$$\begin{array}{r} 13 \\ \times 4 \\ \hline \\ \hline \end{array}$$

Calculate 36×6 using place-value counters and the formal method.

T	O

$$\begin{array}{r} 36 \\ \times 6 \\ \hline \\ \hline \end{array}$$



Calculate:

	4	3		3	6		7	4
x		3	x		4	x		5

Medium

Calculate 12×4

Use place value counters and the formal method.

T	D
	 
	 
	 
	 

	1	2
x		4

Calculate the answers.

a)
$$\begin{array}{r} 32 \\ \times 6 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 69 \\ \times 5 \\ \hline \end{array}$$

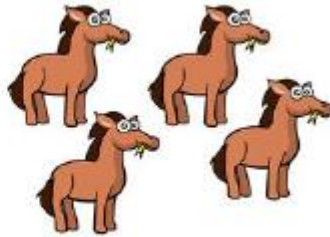
c)
$$\begin{array}{r} 26 \\ \times 3 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 53 \\ \times 6 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 85 \\ \times 2 \\ \hline \end{array}$$

f)
$$\begin{array}{r} 79 \\ \times 4 \\ \hline \end{array}$$

Each horse eats
37 carrots a day.
How many do
they eat altogether?



There are 28 children in a class.
Each of them brings £6 to school as a donation for charity.
How much money does the class raise altogether?
Show your working.

Spicy

Calculate the answers.

a)
$$\begin{array}{r} 32 \\ \times 6 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 69 \\ \times 5 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 26 \\ \times 3 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 53 \\ \times 6 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 85 \\ \times 2 \\ \hline \end{array}$$

f)
$$\begin{array}{r} 79 \\ \times 4 \\ \hline \end{array}$$

Here are three multiplications.

61	74	26
$\times 5$	$\times 7$	$\times 4$
<u>35</u>	<u>498</u>	<u>824</u>

Correct the multiplications.

Tom baked muffins in a tray like this.

Tom wasn't sure
how many he baked,
but he used
27, 28 or 29 tins!



When he counted them there were 174
muffins. How many tins did he use?

Always, sometimes, never

- When multiplying a two-digit number by a one-digit number, the answer has 3 digits.
- When multiplying a two-digit number by 8 the answer is odd.
- When multiplying a two-digit number by 7 you need to exchange.

Prove it!

Tuesday <https://whiterosemaths.com/homelearning/year-4/>

<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

Multiply 3 digits by 2 digit

Starter - have a go at this flash back activity

- 1) What is 431 multiplied by 5?
- 2) Write all the factors of 12
- 3) Work out $42 \div 6$
- 4) Round 347 to the nearest 10

Mild

Complete the multiplication.

Use the place value chart to help you.

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

		H	T	O	
		2	1	5	
	x			3	

Complete the calculation

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

H	T	O
2	0	3
x		3

x	500	0	4
6			

$$504 \times 6 = \square$$

Medium:

$$921 \times 7$$

6,347

6,447

6,547

A school has 245 packets of sweets.
Each packet contains 4 sweets.
How many sweets are there altogether?

H	T	O	H	T	O
2	4	5	2	4	5
x		4	x		4

Use the place value counters to solve the problem.
Remember, if there are ten or more counters in a column, to make an exchange.

Write the multiplication calculation represented and find the answer.

H	T	O
2	4	5
x		4

6 3 0

x

5

Spicy

Which calculation has the largest answer?

A. 591×6

B. 903×3

Match the numbers which have a product of 2,432.

203

4

304

6

406

8

608

9

Which numbers cannot be used?

Spot the mistake

Beth and Natasha have both completed the same multiplication. Who has the correct answer?
What was the misconception that caused the error?

Beth

Natasha

	2	3	4			2	3	4
	x		6			x		6
1, 2	0	4		1, 4	0	4		

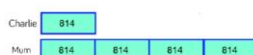
Charlie and his mum were having a reading competition.
In one month, Charlie read 814 pages.



His mum read 4 times as many pages as Charlie.

- How many pages did they read altogether?
- How many less pages than his Mum did Charlie read?

Use a bar model to help.



Wednesday <https://whiterosemaths.com/homelearning/year-4/>

<https://www.bbc.co.uk/bitesize/tags/z63tt39/year-4-and-p5-lessons/1>

Divide 2 digit by 1 digit

Please take a look at the starter question (all have a go at this)

STARTER:

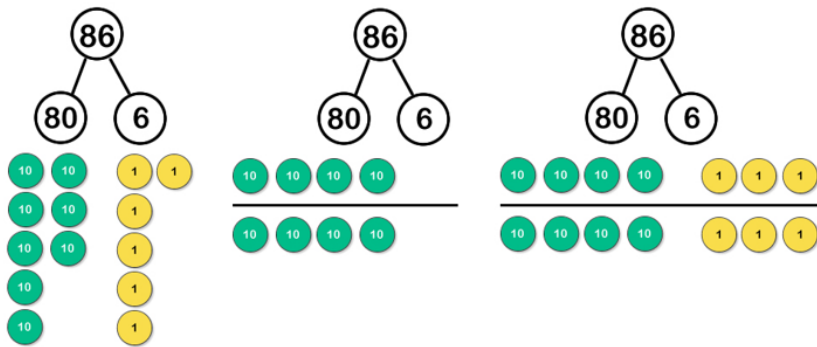
Using all of these digit cards (once only!) and any of the symbols +, −, ÷ and x, how many of the numbers from 0 to 12 can you make?



Mild:

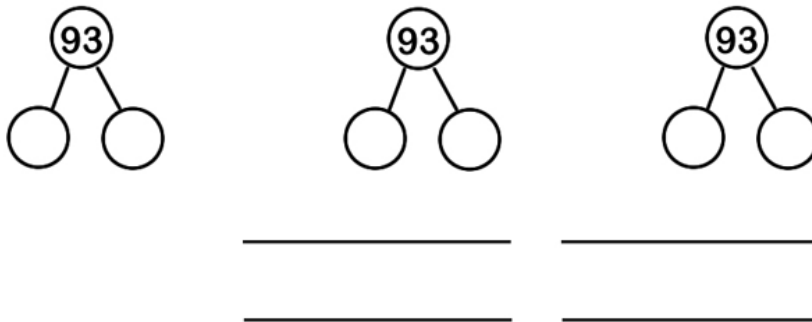
Talk to someone in your house hold, or note down what is happening at each stage.

Describe the method Carly uses to find the answer to $86 \div 2$.



Remember, you do not need counters- you can draw them or use other objects in your house such as buttons.

Use this method to find the answer to $93 \div 3$.



Use place-value counters and partitioning to find the answer to $84 \div 4$.

Medium

Match the following statements with the correct card.

My calculation needs no exchange.

My calculation is solved incorrectly.

My calculation needs to exchange.

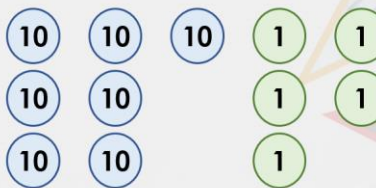
$96 \div 8 = 12$

$77 \div 7 = 11$

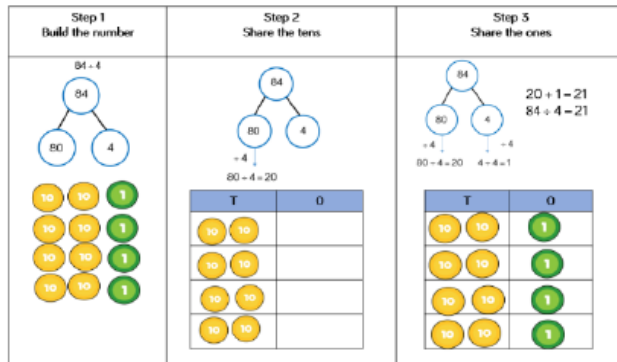
$90 \div 5 = 12$

True or false? The answer is 24.

$$75 \div 3 = \square$$



Charlie solves
 $84 \div 4$ like this:



Use this approach to solve:

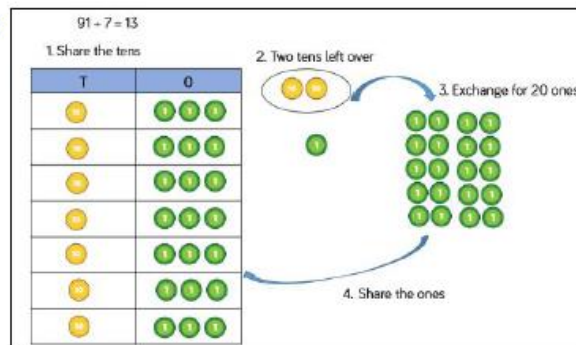
$$69 \div 3$$

$$88 \div 4$$

$$96 \div 3$$

Spicy:

Charlie now solves
 $91 \div 7$ like this:



Use this approach to solve:

$$75 \div 5$$

$$84 \div 6$$

$$68 \div 4$$

$$98 \div 7$$

1.

Macey is working out $72 \div 3$.
Before she starts, she says the calculation
will involve an exchange.

Do you agree?
Explain why.

2.

True or false?

The calculations below all have the same divisor.

$$57 \div \underline{\quad} = 19$$

$$72 \div \underline{\quad} = 18$$

$$85 \div \underline{\quad} = 17$$

3.

The children in Year 4 are checking their friend's method.
Who do you agree with and why?

This is correct
because there
are three
columns of
counters.
Nathan

This is correct
because there are
three counters in
each row.
Adil

This is incorrect
because 84 is
shared by 4,
not 3.
Jakob

This is incorrect
because the
answer is not
21.
Nelly

$$84 \div 3$$

T	O
20	10
20	10
20	10
20	10

4.

5.

Thursday <https://whiterosemaths.com/homelearning/year-4/>

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Divide 3 digits by 1 digit

Starter:

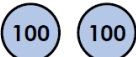
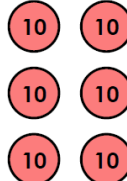
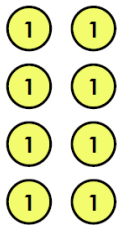
Using only these digit cards, how many different $TO \div O$ divisions with a remainder of more than 2 can you make?



Before you start going through every single possibility, think carefully about the digits
and try to narrow your search down...
Are there any division calculations that it is impossible to get a remainder of more than 2 for?

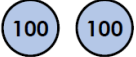
Mild

1a. Use place value counters to divide the amount below by 2.

H	T	O
		

Record your calculations using the short division method.

2a. Add the missing place value counters to divide six hundred and thirty nine by three.

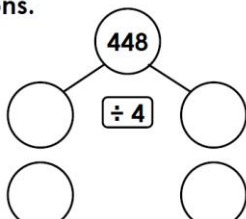
H	T	O
		

Use short division to show your calculations.

3a. True or false?

$$448 \div 4 = 112$$

Partition the number to support your calculations.



4a. Add the symbol $<$, $>$ or $=$ to make the following statement correct.

$$488 \div 4 \bigcirc 888 \div 8$$

Medium

Karen solves this calculation $816 \div 4$ and represents it like this:

Step 1 Build the number	Step 2 Group the hundreds	Step 3 Group the tens and ones																																													
$816 \div 4$ <table border="1"> <thead> <tr> <th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr> <td>200</td><td>10</td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> </tbody> </table>	H	T	O	200	10	6	200		6	200		6	200		6	$816 \div 4$ <table border="1"> <thead> <tr> <th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr> <td>200</td><td>10</td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> </tbody> </table> $\begin{array}{r} 2 \\ 4 \overline{)816} \end{array}$	H	T	O	200	10	6	200		6	200		6	200		6	$816 \div 4$ <table border="1"> <thead> <tr> <th>H</th><th>T</th><th>O</th></tr> </thead> <tbody> <tr> <td>200</td><td>10</td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> <tr> <td>200</td><td></td><td>6</td></tr> </tbody> </table> Exchange the tens for ten ones and then group the ones. $\begin{array}{r} 204 \\ 4 \overline{)816} \end{array}$	H	T	O	200	10	6	200		6	200		6	200		6
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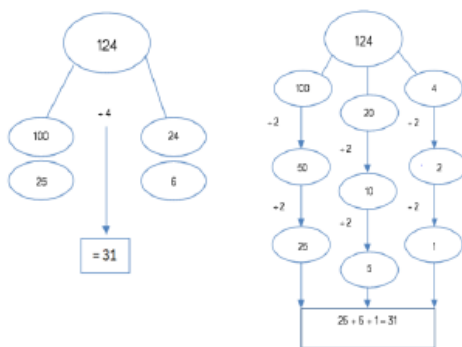
Use this method to solve:

$678 \div 3 =$ $791 \div 7 =$ $216 \div 4 =$

Erin uses partitioning and the part whole model to help her calculate $124 \div 4$

Use this method to solve:

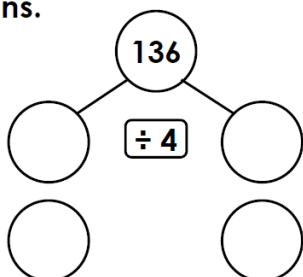
- $235 \div 5$
- $147 \div 7$
- $432 \div 8$



7a. True or false?

$432 \div 4 = 118$

Partition the number to support your calculations.



8a. Add the symbol $<$, $>$ or $=$ to make the following statement correct.

$728 \div 7$ ○ $848 \div 8$

Spicy

Use partitioning and part-whole models to solve these division calculations.

a) $463 \div 4$

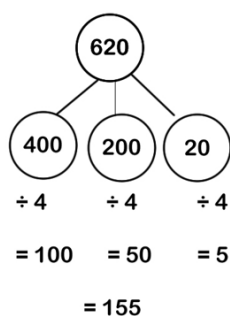
b) $974 \div 9$

c) $892 \div 5$

d) $353 \div 3$

e) $867 \div 7$

Describe the method Leah uses to find the answer to $620 \div 4$.



10a. Jimmy is trying to solve the following problem:

Seven hundred and seventy-one rugby tickets were donated to local schools. The tickets were divided equally between nine schools. How many tickets did each school receive?

Show your working.

Place $<$, $>$ or $=$ to make these number sentences correct.

$738 \div 6$		$868 \div 7$
$976 \div 8$		$625 \div 5$
$584 \div 4$		$438 \div 3$

You have 12 counters and the place value grid.

H	T	O



- Create a 3 digit number divisible by 2
- Create a 3 digit number divisible by 3
- Create a 3 digit number divisible by 4
- Create a 3 digit number divisible by 5
- Create a 3 digit number divisible by 6
- Can you find a 3 digit number divisible by 7, 8 or 9?