Year 5 Maths Home Learning | Summer Term

W.C. 22nd June 2020

https://www.bbc.co.uk/bitesize/tags/zhgppg8/year-5-and-p6-lessons/1

Maths

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

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

Decimals Focus

QUICK RECAP

https://www.bbc.co.uk/bitesize/topics/zm982hv/articles/zn9wjhv

Decimal numbers

A decimal is a way of writing a number that is **not whole.**

Decimal numbers are **'in between'** numbers. For example, 10.4 is in between the numbers 10 and 11. It is **more than** 10, but **less than** 11.

Take care when reading the values of decimal numbers.

4.2 means 4 and 2 tenths.

4.20 means 4 and 2 tenths and 0 one-hundredths. The last zero does not need to be there.

4.02 means 4 and 0 tenths and 2 one-hundredths.

Decimal Place Value Chart

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths	ten thousandths	hundred thousandths	millionths
M	HTh	TTh	Th	H	T	O	t	h	th	tth	hth	m

Monday

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Starter- Fluent in 5

1 186 + 70 =

1 mark

2 5,667 + 3,334 =

1 mark

3	3 x 7 =	1 mark
4	161 ÷ 7 =	1 mark

Subtract decimals using the formal method and involving exchange

Just like when we represent whole number subtraction using the Place Value Counters, we cross out the smaller number (second number in the number sentence) to find the answer.

Use the place value chart to solve the calculation.

2.48 – 1.32 = 1.16

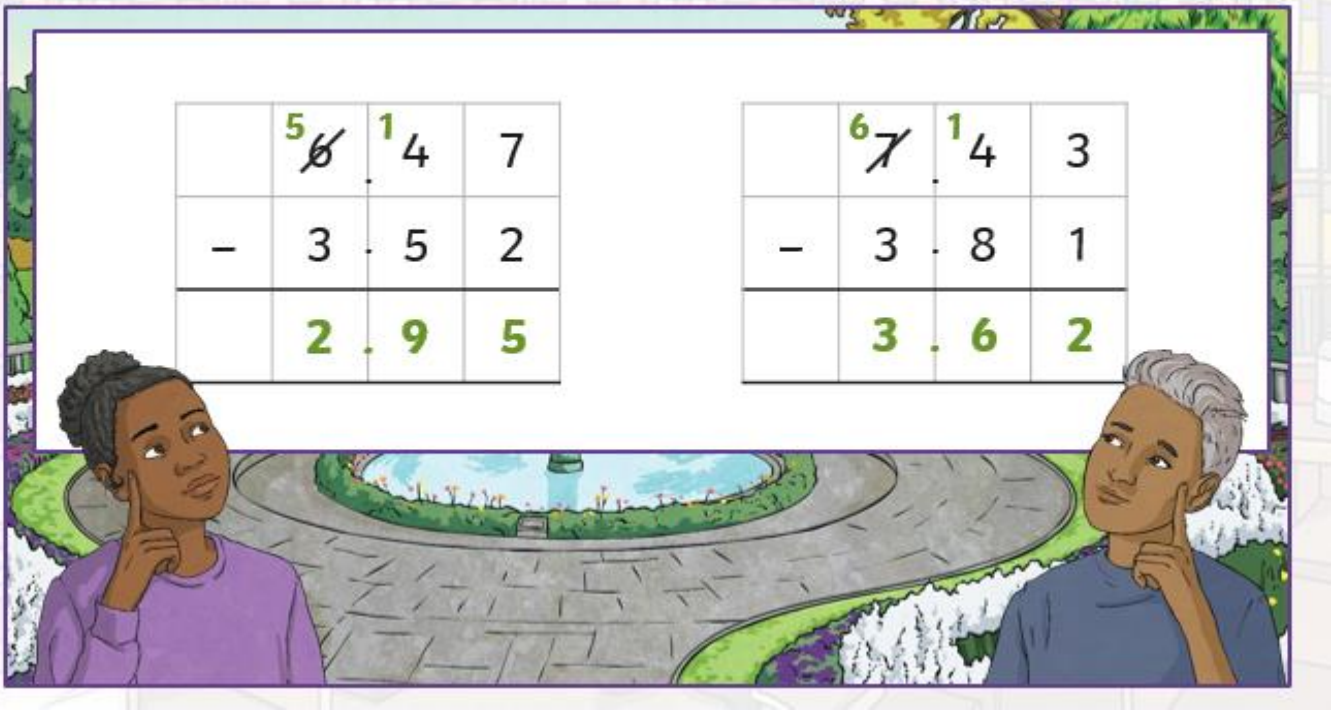
Ones	tenths	hundredths
1	$\frac{1}{10}$	$\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$

There are 2 hundredths to subtract.
There are 3 tenths to subtract.
There is 1 one to subtract.

We are left with 1 one, 1 tenth and 6 hundredths.
2.48 – 1.32 = 1.16

	2	. 4	8
–	1	. 3	2
	1	. 1	6

For the following questions, use a place value chart alongside the column method to help you calculate the answer.



For any activities that use a Place Value chart, you may wish to draw these out to support your learning.

Mild

Use the original number to answer the questions using the place value chart.

ones	tenths	hundredths	thousandths
	0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01 0.01 0.01	0.001

What number is the chart showing? ____

What is one hundredth less? ____

What is one thousandth less? ____

ones	tenths	hundredths	thousandths
	0.1 0.1 0.1 0.1 0.1 0.1	0.01	0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001

What number is the chart showing? ____

What is one hundredth less? ____

What is one thousandth less? ____

ones	tenths	hundredths	thousandths
	0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01	0.001 0.001

What number is the chart showing? ____

What is one hundredth less? ____

What is one thousandth less? ____

ones	tenths	hundredths	thousandths
	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01 0.01 0.01 0.01 0.01	0.001 0.001 0.001 0.001

What number is the chart showing? ____

Subtract 2 hundredths. ____

Subtract 3 tenths. ____

Subtraction of tenths

1. 0.9 - 0.5 =
2. 0.4 - 0.2 =
3. 0.8 - 0.6 =
4. 0.2 - 0.1 =
5. 0.9 - 0.9 =
6. 0.7 - 0.6 =
7. 0.8 - 0.3 =
8. 0.6 - 0.5 =
9. 0.7 - 0.3 =
10. 0.7 - 0.2 =

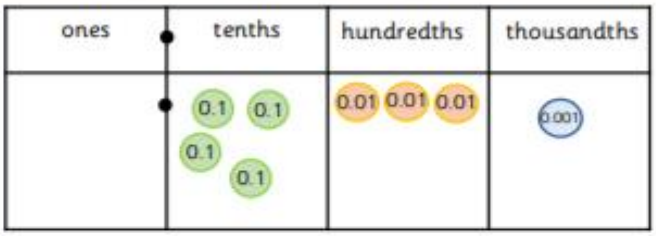
Subtraction of Hundredths

1. 0.41 - 0.32 =
2. 0.7 - 0.43 =
3. 0.17 - 0.16 =
4. 0.61 - 0.41 =
5. 0.89 - 0.89 =
6. 0.99 - 0.93 =
7. 0.93 - 0.87 =
8. 0.85 - 0.25 =
9. 0.74 - 0.49 =
10. 0.77 - 0.54 =

Subtraction of Ones and Hundredths

1. 8.51 - 3.55 =
2. 9.29 - 3.07 =
3. 8.39 - 7.89 =
4. 8.25 - 7.56 =
5. 7.75 - 3.4 =
6. 1.97 - 1.24 =
7. 9.5 - 5.08 =
8. 8.24 - 4.5 =
9. 9.86 - 0.92 =
10. 7.87 - 1.3 =

Medium

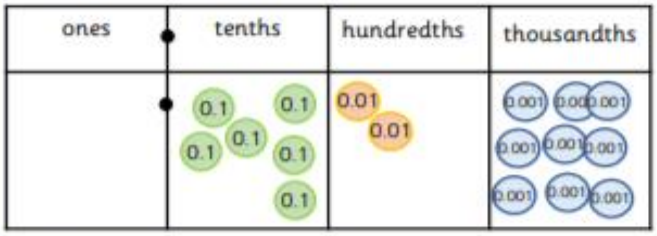


What number is the chart showing? ____

What is three tenths less than the number? ____

Subtract 0.03. ____

Take away 1 thousandth. ____

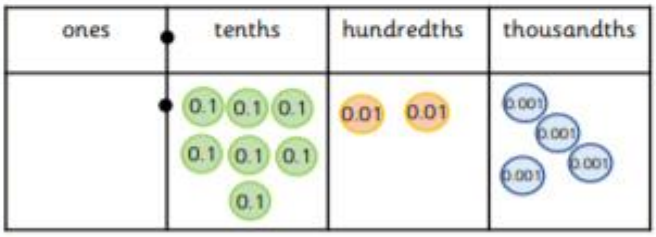


What number is the chart showing? ____

What is nine thousandths less than the number? ____

Subtract 0.002. ____

Take away 2 thousandths. ____



What number is the chart showing? ____

What is two hundredths less than the number? ____

Subtract 0.02. ____

Take away 3 tenths. ____

1 Use a place value chart and counters to help you complete the subtractions.

Tens	Ones	Tenths	Hundredths
10	1 1 1 1	0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01 0.01

a) 14.83 – 12.12 = ☐

b) 14.83 – 12.14 = ☐

c) 14.83 – 12.92 = ☐

d) 14.83 – 12.94 = ☐

e) Which calculation was easier? Talk about it with a partner.

f) What happens when you don't have enough counters in a column to take away?

Complete the column subtractions.

a)

		5	6	4	
	–	3	1	2	

c)

		8	0	9	
	–	3	8	1	

b)

		5	6	4	
	–	3	1	5	

d)

		1	2	0	2	
	–	1	1	3	8	

Here are some items for sale in a shop.

a) How much more does a scarf cost than a bag of marbles?

£ ☐

b) Esther has £15.31

She buys a pair of headphones and a bag of marbles.

How much money does she have left?

£ ☐

c) Tom has £7.01

He buys one item and has £5.92 left.

What did he buy?

Tom bought _____.

Spicy

ones	tenths	hundredths	thousandths
	0.1 0.1 0.1 0.1	0.01 0.01 0.01	0.001

What number is the chart showing? ☐

What is four hundredths less than the number? ☐

Subtract 0.05. ☐

Take away 3 thousandths. ☐

ones	tenths	hundredths	thousandths
	0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01	0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001

What number is the chart showing? ☐

What is four hundredths less than the number? ☐

Subtract 0.009. ☐

Take away five hundredths. ☐

ones	tenths	hundredths	thousandths
	0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.01 0.01	0.001 0.001 0.001

What number is the chart showing? ☐

What is nine thousandths less than the number? ☐

Subtract 0.03. ☐

Take away 5 hundredths. ☐

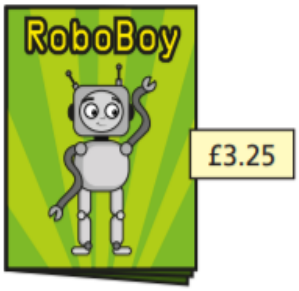
Subtraction of Decimals

1. 0.4 - 0.3 =
2. 0.7 - 0.1 =
3. 0.8 - 0.7 =
4. 0.9 - 0.5 =
5. 0.9 - 0.8 =
6. 0.63 - 0.33 =
7. 0.44 - 0.27 =
8. 0.64 - 0.34 =
9. 0.69 - 0.27 =
10. 0.98 - 0.9 =
11. 9.89 - 8.99 =
12. 9.19 - 1.37 =
13. 7.49 - 1.21 =
14. 7.68 - 7.54 =
15. 4.91 - 3.95 =

Whitney has £8.52

She buys this comic.

How much money does she have left?



£ ☐

Ron and Dora are doing a sponsored walk.

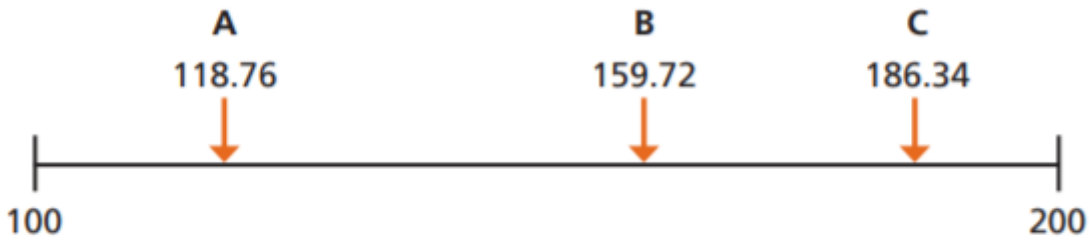
Ron walks 3.12 miles.

Dora walks 5.49 miles.

How much further does Dora walk than Ron?

Dora walks ☐ miles further than Ron.

A, B and C are points on a number line.



How much greater is the difference between A and C than the difference between B and C?

☐

Tuesday

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Starter – Bronze Arithmetic

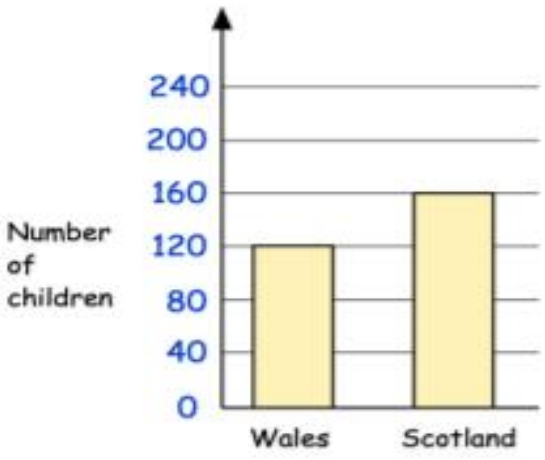
23rd June

$600 - 20$

15×3

Add together the number of days in **March** and **May**

A teacher asked the children in a primary school if they had visited Wales or Scotland.



How many more children have been to Scotland than Wales?

Jack thinks there are 280 children at the primary school.

Why might Jack be wrong?

Subtract decimals with different decimal places

a) 4.362 – 1.78 =

a)

	O	t	h	th
	~~4~~ (3)	~~3~~ (12)	6 (1)	2
–	1	7	8	0
	2	5	8	2

When subtracting decimals (using the formal method) and there are different decimal places, you must make sure that you hold you place value with a ZERO to help you calculate the answer.

See the example to the left. They have used a zero (in green), so that they can take away as we did yesterday.

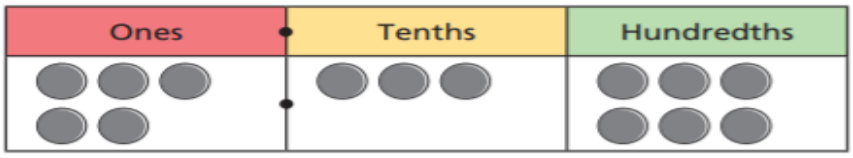
BE VERY CAREFUL – to use your place value charts carefully!

This would **not be correct** as I have not put the eight hundreths in the correct column on my place value chart.

	O	t	h	th
	4	3	6	2
		1	7	8

Mild – If you are still unsure about subtracting after yesterday's work. Have a go at Medium and/or Spicy from Monday. Then you can challenge yourself to do these! ☺

Use the place value chart to help you work out the subtractions.



a)

		5	3	6	
	–	1	2		

c)

		5	3	6	
	–	3	8		

b)

		5	3	6	
	–	3	5		

d)

		5	3	6	
	–	4	7		

Answer these calculations.

Draw out the bar models to help you

a)

	O	t	h	th
	3	6	2	5
−	1	8	1	

b)

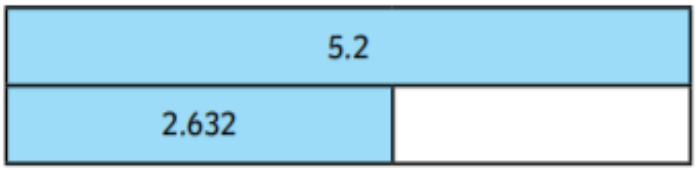
	O	t	h	th
	3	6	2	5
−	1	8	1	

c) 2.9 − 1.38 =

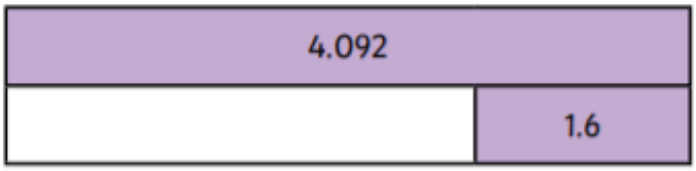
d) 5.03 − 1.8 =

Complete the bar models.

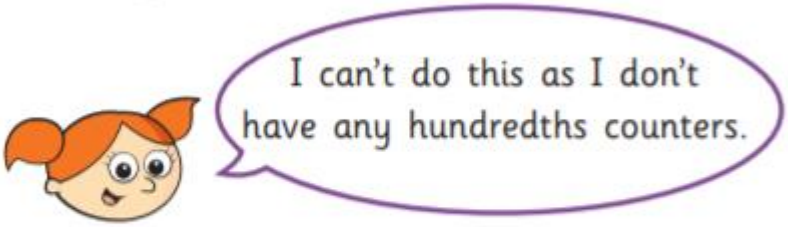
a)



b)



Alex is using counters to help her work out 4.7 − 1.35



Do you agree with Alex? _____.

Talk about it with a partner.

Medium

Complete the subtractions.

a)

		2	•	3	6
	–	1	•	4	
			•		

c)

		7	•	3	
	–	1	•	1	5
			•		

b)

		6	•	1	5
	–	3	•	8	
			•		

d)

		2	4	•	4	
	–		3	•	1	2
				•		

Use the column method to work out the subtractions.

a) 13.59 – 1.82

c) 5.6 – 1.39

b) 73.84 – 9.2

d) 18.2 – 3.64

Answer these word problems.

a) Peter has a length of wood measuring 2.8m to make a shelf. The shelf needs to be 1.46m in length. How much needs to be cut from Peter's wood?

b) Harry is trying to run 5.05km a week. So far he has run a distance of 3.459km. How much further does he need to run to reach her goal?

c) Phillipe has a 1.5l bottle of juice. He pours 0.45l out for his brother and 0.565l for his sister. How much juice is left in the bottle?

Spicy

) Spot the mistakes.
Which of these calculations are incorrect?
Explain the mistake then work out the correct answer.

a)

	4	3	8	2
−		1	6	3
	4	**2**	**1**	**9**

b)

	3	6	4	
−	1	3	7	2
	2	**2**	**7**	**2**

c)

	5	6		
−	2	3	8	
	3	**2**	**2**	

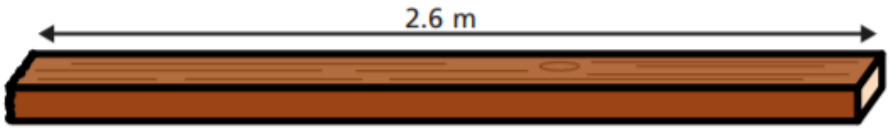
Find the missing digits.

	4		8	
−	1	4	6	
		9		7

		5	2	1
−	1			
	2	0	6	

A plank of wood measures 2.6 m.

A carpenter cuts a piece of wood from the plank that is 0.52 m long.



a) What is the length of the remaining plank?

m

b) The carpenter cuts a second piece of wood from the plank.

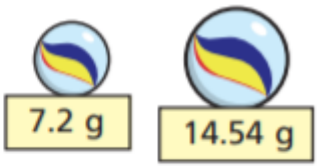
She now has 0.3 m of the plank remaining.

What is the length of the second piece of wood that she cut?

m

The mass of a bag of marbles is 54.3 g.

These two marbles are removed from the bag.



What is the mass of the bag of marbles now?

_____ g

Use the column method to work out the subtractions.

a) 14 – 2.7

d) 26 – 3.91

b) 8 – 3.65

e) 25 – 3.842

c) 20 – 2.85

f) 90 – 0.821

Wednesday

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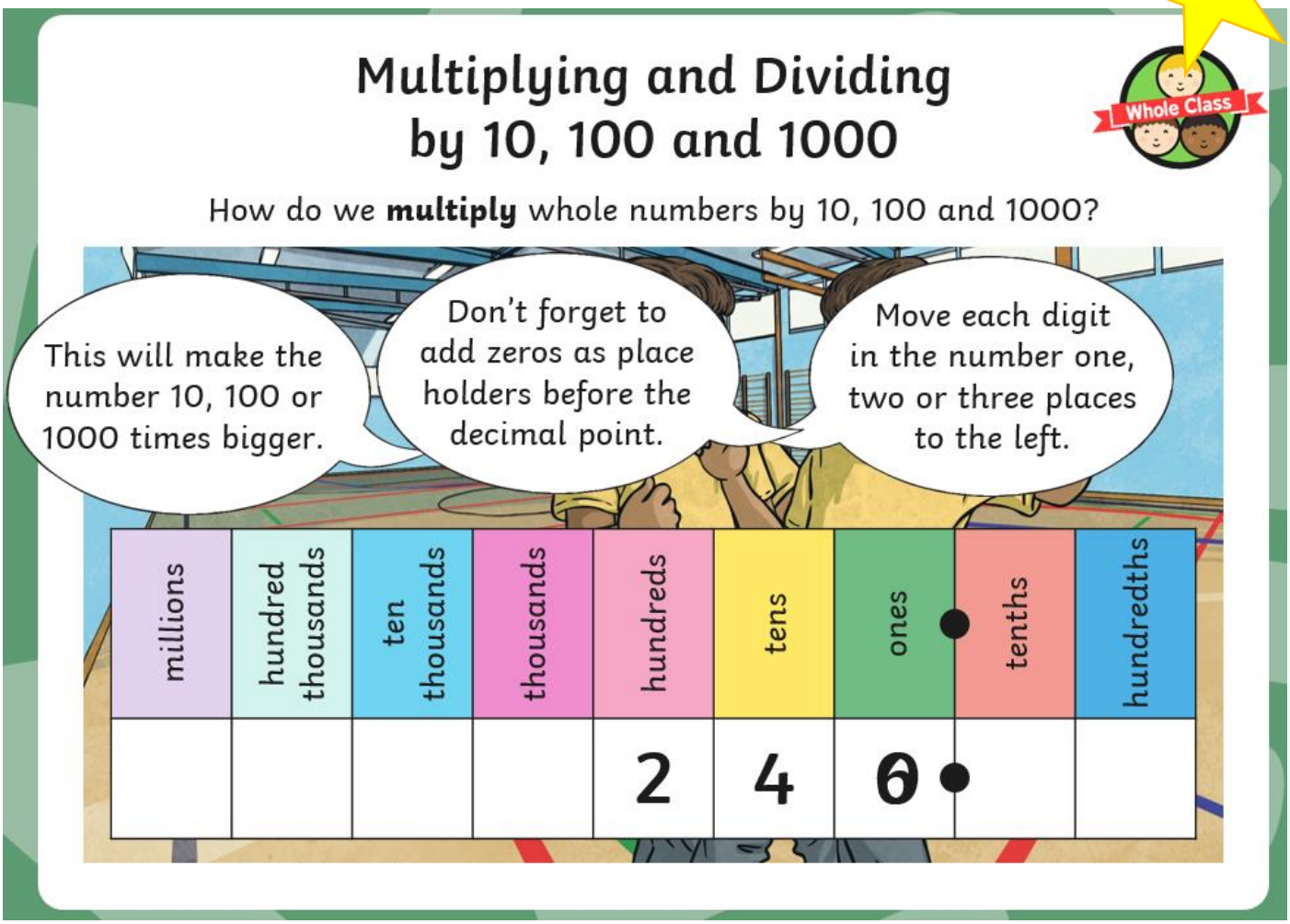
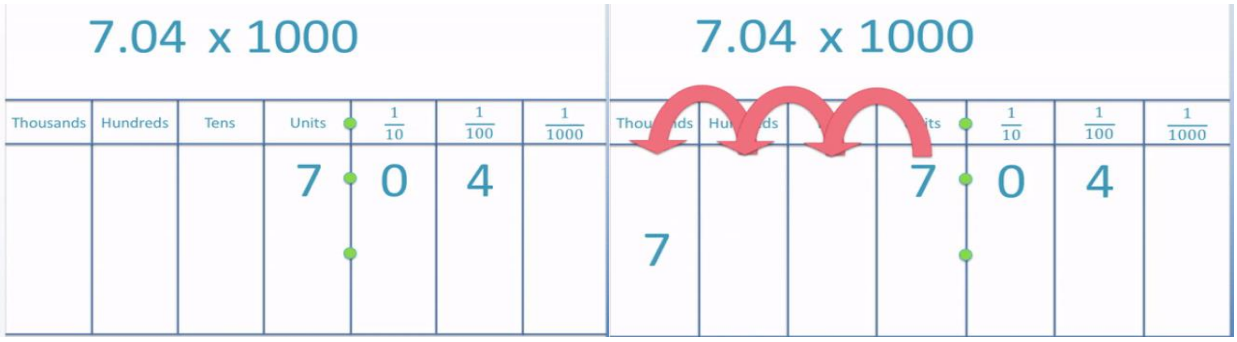
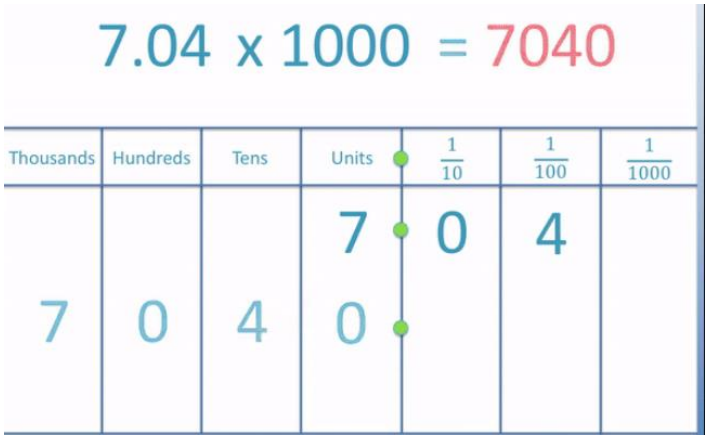
Multiply decimals by 10, 100, 1000







10 000	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

Multiplying

X 10	digits move LEFT **1** space
X 100	digits move LEFT **2** spaces
X 1000	digits move LEFT **3** spaces

Dividing

÷ 10	digits move RIGHT **1** space
÷ 100	digits move RIGHT **2** spaces
÷ 1000	digits move RIGHT **3** spaces

Mild

Complete the multiplications.

a)

H	T	O	Tths	Hths
		3	7	

3.7 × 10 = ☐

b)

H	T	O	Tths	Hths
	1	4	5	

14.5 × 10 = ☐

c)

H	T	O	Tths	Hths
		1	5	8

1.58 × 10 = ☐

d)

H	T	O	Tths	Hths
	1	3	0	6

13.06 × 10 = ☐

What do you notice when you multiply a number by 10?

a)

H	T	O	Tths	Hths
		4	1	

4.1 × 100 = ☐

b)

H	T	O	Tths	Hths
		4	1	5

4.15 × 100 = ☐

c)

H	T	O	Tths	Hths
	1	4	5	

14.5 × 100 = ☐

d)

H	T	O	Tths	Hths
		4	0	5

4.05 × 100 = ☐

What do you notice when you multiply a number by 100?

Multiply the following numbers by 10, 100 and 1000 to complete the table.

	x 10	x 100	x 1000
5.7			
23.02			
0.92			
0.306			
24.67			

Medium

Complete the multiplications.

a) 1.7 × 10 = ☐

b) 1.75 × 10 = ☐

c) 1.73 × 10 = ☐

d) 13.4 × 10 = ☐

e) 10 × 13.04 = ☐

f) 130.4 × 10 = ☐

Complete the calculations.

a) 7.2 × 100 = ☐

b) 3.4 × 100 = ☐

c) 19.5 × 100 = ☐

d) 1.89 × 100 = ☐

e) 73.57 × 100 = ☐

f) 1.317 × 100 = ☐

Complete the multiplications.

a) 4.7 × 10 = ☐

4.7 × 100 = ☐

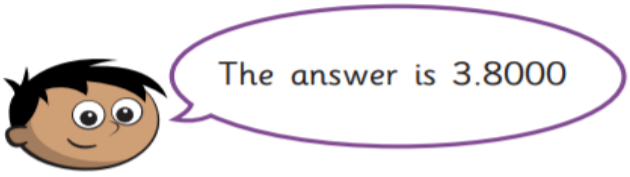
4.7 × 1,000 = ☐

c) 5.84 × 10 = ☐

5.84 × 100 = ☐

5.84 × 1,000 = ☐

Amir has multiplied 3.8 by 1,000



a) What mistake has Amir made?

_____

_____

b) Work out the correct answer. 3.8 × 1,000 = ☐

Spicy

Multiply the following numbers by 10, 100 and 1000 to complete the table.

	x 10	x 100	x 1000
4.02			
0.045			
34.094			
209.817			
0.006			

Complete the calculations.

a) 7.7 × ☐ = 770

b) ☐ × 10 = 1,950

c) 11.5 × ☐ = 115

d) ☐ × 11.5 = 11,500

e) 8.032 × ☐ = 80.32

f) ☐ × 18.3 = 1,830

g) 195.32 × ☐ = 1,953.2

h) ☐ × 1,000 = 7,200

Match the multiplications to the descriptions.

× 10 × 10	multiply by 10
× 10 × 10 × 10	
× 100 × 10	multiply by 100
× 10 × 100	
× 10 × 1	multiply by 1,000

After these activities be sure to battle against your friends on TTRS or go to our Home Learning Page and have a go at a 99 Club! Can you beat your score next week?

Thursday

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Divide a one or two digit number by 10, 100, 1000 and identify place value

10 000	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$

Multiplying

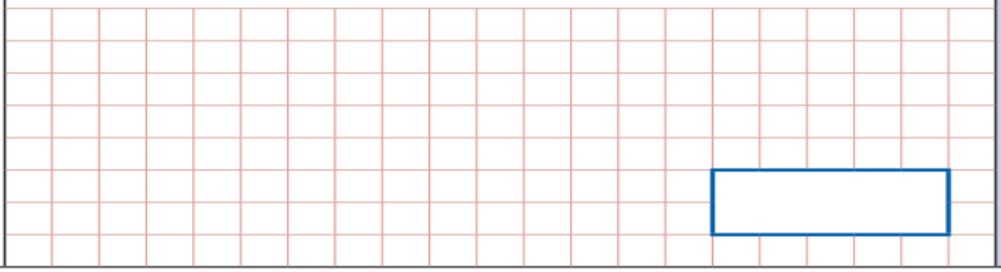
X 10	digits move LEFT **1** space
X 100	digits move LEFT **2** spaces
X 1000	digits move LEFT **3** spaces

Dividing

÷ 10	digits move RIGHT **1** space
÷ 100	digits move RIGHT **2** spaces
÷ 1000	digits move RIGHT **3** spaces

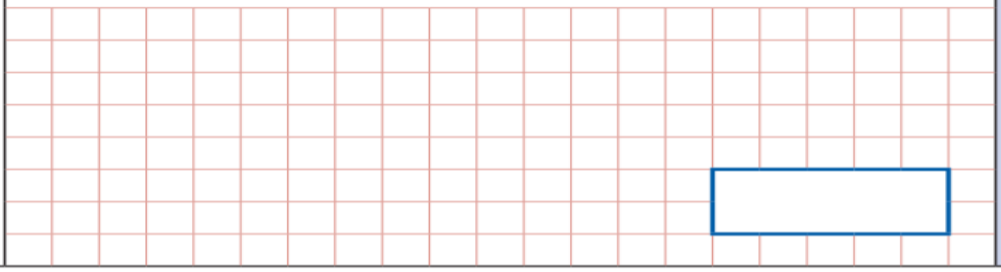
Fluent in 5

1 $377 + 40 =$



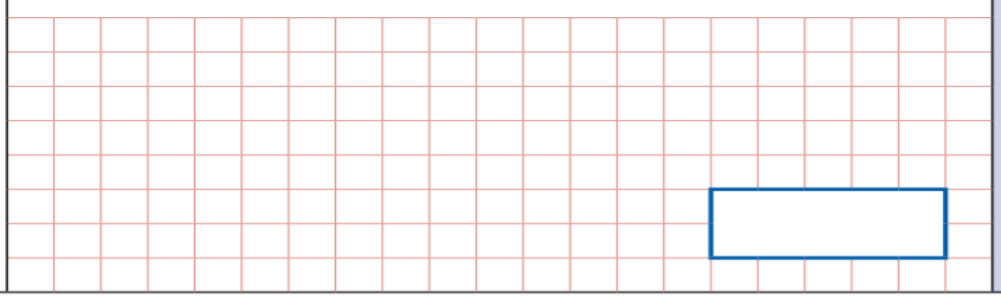
1 mark

2 $7{,}643 + 1{,}339 =$



1 mark

3 $3{,}327 + 4{,}375 =$



1 mark

4 $\frac{1}{4}$ of $36 =$

1 mark

Mild

Complete the divisions.

a)

H	T	O	Tths	Hths
		5		

5 ÷ 10 = ☐

b)

H	T	O	Tths	Hths
	1	5		

15 ÷ 10 = ☐

c)

H	T	O	Tths	Hths
		3	8	

3.8 ÷ 10 = ☐

d)

H	T	O	Tths	Hths
	1	3	8	

13.8 ÷ 10 = ☐

What do you notice when you divide a number by 10?

a)

H	T	O	Tths	Hths	Thths
	1	7			

17 ÷ 100 = ☐

b)

H	T	O	Tths	Hths	Thths
		9	4		

9.4 ÷ 100 = ☐

c)

H	T	O	Tths	Hths	Thths
2	7	6			

276 ÷ 100 = ☐

d)

H	T	O	Tths	Hths	Thths
	3	2	5		

32.5 ÷ 100 = ☐

What do you notice when you divide a number by 100?

Divide the following numbers by 10, 100 and 1000 to complete the table.

	÷ 10	÷ 100	÷ 1000
43			
219			
703			
64.8			
2560			

Medium

Complete the calculations.

a) 7 ÷ 10 = ☐ **d)** 16 ÷ 10 = ☐

b) 7.8 ÷ 10 = ☐ **e)** 16.4 ÷ 10 = ☐

c) 7.86 ÷ 10 = ☐ **f)** 16.48 ÷ 10 = ☐

Complete the divisions.

a) 7 ÷ 100 = ☐ **b)** 109 ÷ 100 = ☐

7.2 ÷ 100 = ☐ 10.9 ÷ 100 = ☐

7.25 ÷ 100 = ☐ 10.95 ÷ 100 = ☐

Complete the calculations.

a) 147 ÷ 10 = ☐ **c)** 3,200 ÷ 10 = ☐

147 ÷ 100 = ☐ 3,200 ÷ 100 = ☐

147 ÷ 1,000 = ☐ 3,200 ÷ 1,000 = ☐

Use a place value chart to work out 136 ÷ 1,000

H	T	O	Tths	Hths	Thths
1	3	6			

Complete the calculation.

136 ÷ 1,000 = ☐

Spicy

b) 21 ÷ 10 = ☐

21 ÷ 100 = ☐

21 ÷ 1,000 = ☐

d) 5,006 ÷ 10 = ☐

5,006 ÷ 100 = ☐

5,006 ÷ 1,000 = ☐

Divide the following numbers by 10, 100 and 1000 to complete the table.

	÷ 100	**÷ 1000**	**÷ 10**
4.08			
215.9			
9.99			
450.04			

Complete the divisions.

a) 83 ÷ ☐ = 0.83

b) ☐ ÷ 10 = 0.95

c) ☐ ÷ 10 = 3.9

d) 68 ÷ ☐ = 0.068

e) 1,799 ÷ ☐ = 17.99

f) ☐ ÷ 100 = 11.8

g) 178 ÷ ☐ = 17.8

h) 3.18 ÷ ☐ = 0.318

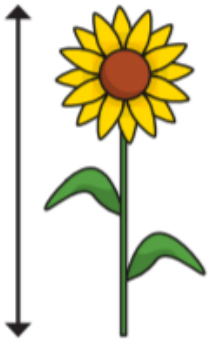
Use your knowledge of measure to work out the answers.

a) What is the mass of the box in kilograms?

☐ ÷ ☐ = ☐

b) What is the height of the sunflower in metres?

☐ ÷ ☐ = ☐



c) What is the amount of juice in litres?

☐ ÷ ☐ = ☐

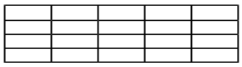
Friday

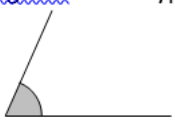
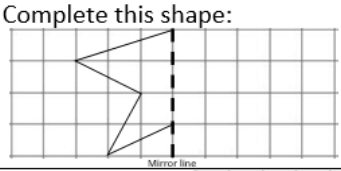
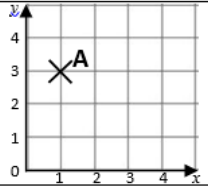
Today you may wish to challenge yourself with the online challenges or the Key Skills tasks! But make sure to have plenty of fun with maths today!

Key Skills

Remember these sheets are only to work from not on so don't worry if you cannot complete a couple of the questions, just read through and think of how you would complete them instead.

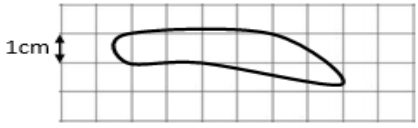
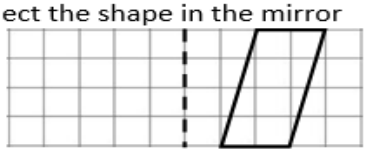
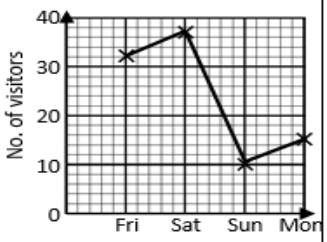
Mild

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions
1. What is the missing number? 14 21 28 ☐ 42	*4:1*	11. 9 x 12 =
2. What is the missing number? 36 ☐ 48 54 60	*4:1*	12. Complete the sum that is equal to 36 x 7: 3 x ☐ x 7
3. Round this number to the nearest 10: 5,731	*4:2*	13. 68 x 4 =
4. Round this number to the nearest 100: 3,275	*4:2*	14. One wooden block is 4cm tall. If 14 blocks are piled up, how tall are they?
5. What is the next number in this sequence: 4, 2, 0, -2, ☐	*4:3*	15. $\frac{?}{5} = \frac{4}{20}$ 
6. Write < or > to make this correct: 3,948 ☐ 2,817	*4:4*	16. When I divide a number by 100, what fraction do I have?
7. What number does this Roman Numeral represent? **XC**	*4:5*	17. $\frac{14}{13} - \frac{5}{13}$
8. 2,725 - 834 =	*4:6*	18. Write $\frac{7}{10}$ as a decimal number.
9. **Estimate** the answer to: 6,504 + 4,478	*4:7*	19. What is the **value** of the 9 in: 3.91
10. Sarah had £65. She bought a £28 dress and a £17 bag. How much left?	*4:8*	20. A log is 6 metres long. It is cut into quarters. How long is each piece?
Total (A)		Total (B)

C: Measure and Geometry	
21. On the back of a film box it says length of the film is 97 minutes. How long is this in hours and minutes?	*4:19*
22. What name is given to this type of angle? 	*4:24*
23. Draw all the lines of symmetry on this triangle. 	*4:25*
24. Complete this shape: 	*4:26*
25. What are the co-ordinates of the point labelled A? 	*4:27*
Total (C)	

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions
1. What is the value of the **2** in this number? 2,934,765	*5:1*	11. Write **all** of the factors of 18.
2. Put these in order, smallest first: 212,285 32,956 110,000 85,253	*5:1*	12. Which of the following are **prime numbers**? 3 4 7 15 18
3. Round 163,824 to the **nearest ten thousand.**	*5:2*	13. 1,016 x 8
4. What is the missing number? 117,250 107,250 ☐ 87,250	*5:2*	14. 9.2 ÷ 100
5. Put these in order, smallest first: -3, 1, -5, 0, 4, -2	*5:3*	15. What is $\mathbf{3^3}$?
6. What year is represented by these Roman Numerals? **MCMXCV**	*5:4*	16. Put these in order, smallest first: $\frac{3}{5}$ $\frac{7}{10}$ $\frac{8}{15}$
7. 112,498 – 48,745 =	*5:5*	17. Find an **equivalent fraction** of $\frac{2}{4}$. 
8. 34,857 + 79,384 =	*5:5*	18. Write the answer as a **mixed number**. $\frac{7}{8} + \frac{11}{8}$
9. Complete this sum without written working. 15,200 - 2,050 =	*5:6*	19. $\frac{2}{9}$ x 27 =
10. The temp. was -4°C. It rose by 9°C, then dropped by 4°C. What is it now?	*5:7*	20. Write 0.8 as a fraction.
Total (A)		Total (B)

C: Measure, Geometry and Statistics	
21. If 1 kilogram is **approximately** 2.2 pounds, about how many kilograms are equal to 8.8 pounds?	*5:20*
22. **Estimate** the area of this shape: 	*5:21*
23. Reflect the shape in the mirror line. 	*5:28*
24. Customers over a long weekend: How many customers were there on the busiest day? 	*5:29*
25. How many customers were there in total over the long weekend?	*5:29*
Total (C)	