



W.C.8th June 2020

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

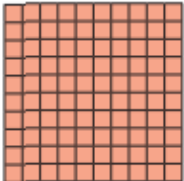
Maths ANSWERS

Monday

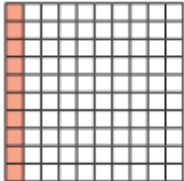
Mild

Decimals as fractions (2)

1 This grid represents 1



This grid represents 0.1 or $\frac{10}{100}$ or $\frac{1}{10}$

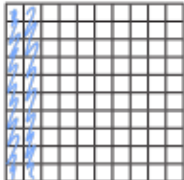


Colour the hundred squares to represent the fractions.

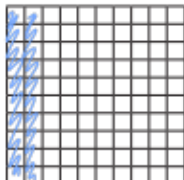
a) $\frac{2}{100}$



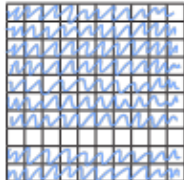
b) $\frac{2}{10}$



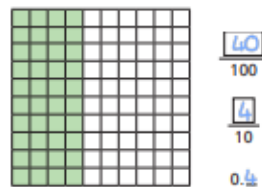
c) $\frac{20}{100}$



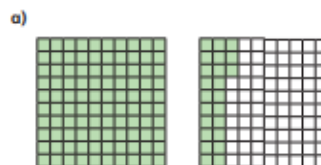
d) $\frac{90}{100}$



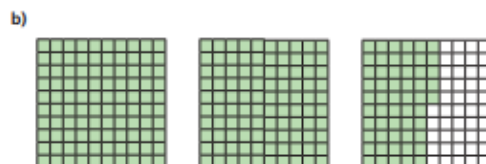
2 Complete the numbers to show how much of the square is shaded.



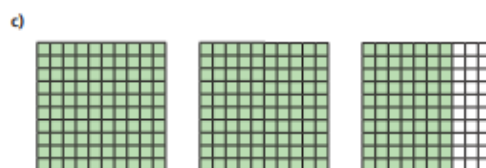
3 What fractions and decimals are represented?



1 $\frac{23}{100} = 1.23$



2 $\frac{55}{100} = 2.55$

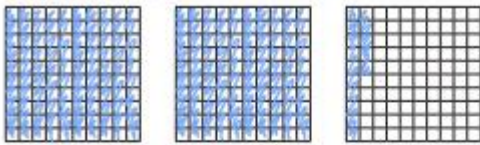


2 $\frac{7}{10} = 2.7$

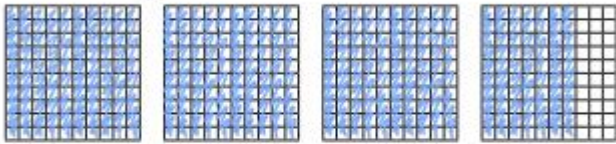
Medium

4

a) Represent 2.15

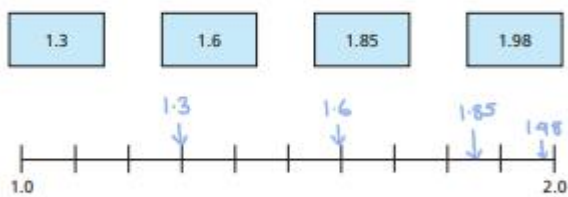


b) Represent $3\frac{7}{10}$

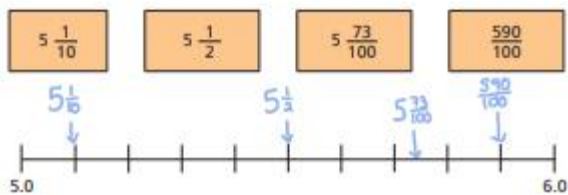


5

a) Label the number line with the decimals.



b) Label the number line with the fractions.



Spicy

6 Complete the table.

Decimal	Decimal (expanded form)	Fraction	Fraction (expanded form)	In words
2.13	$2 + 0.1 + 0.03$	$2 \frac{13}{100}$	$2 + \frac{1}{10} + \frac{3}{100}$	2 ones, 1 tenth and 3 hundredths
4.37	$4 + 0.3 + 0.07$	$4 \frac{37}{100}$	$4 + \frac{3}{10} + \frac{7}{100}$	4 ones, 3 tenths and 7 hundredths
5.62	$5 + 0.6 + 0.02$	$5 \frac{62}{100}$	$5 + \frac{6}{10} + \frac{2}{100}$	5 ones, 6 tenths and 2 hundredths
8.02	$8 + 0.02$	$8 \frac{2}{100}$	$8 + \frac{2}{100}$	8 ones and 2 hundredths

7 Write the decimals as fractions.
Give your answer as a mixed number.

a) $32.6 = 32 \frac{6}{10}$

c) $13.08 = 13 \frac{8}{100}$

b) $2.03 = 2 \frac{3}{100}$

d) $3.98 = 3 \frac{98}{100}$

8 Use the digits 3, 4 and 5 to complete the decimal number.

e.g. $3 \frac{4}{5} . 0$

How many different numbers can you make?

Tuesday

Mild

Understand thousandths

- 1 Tommy is using base 10 to represent decimals.

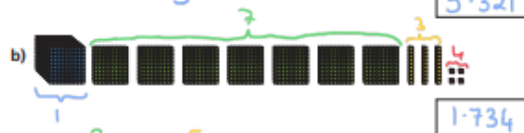
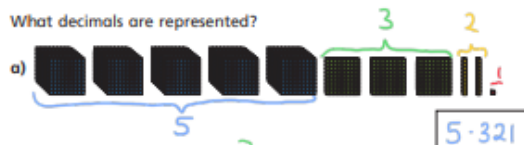
He uses  to represent 1 whole.

He uses  to represent $\frac{1}{10}$ or 0.1

He uses  to represent $\frac{1}{100}$ or 0.01

He uses  to represent $\frac{1}{1000}$ or 0.001

What decimals are represented?



- 2 a) Represent each number using base 10

0.512

1.352

2.003

- b) Use your representations to help you complete the statements.

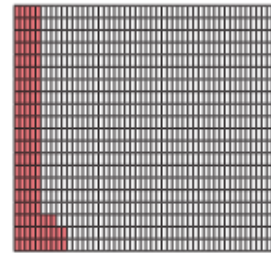
$$0.512 = 0.5 + 0.01 + \boxed{0.002}$$

$$1.352 = 1 + \boxed{0.3} + \boxed{0.05} + \boxed{0.002}$$

$$2.003 = \boxed{2} + \boxed{0.003}$$

- 3 Here is a thousand square.

Part of the square has been coloured.



- a) Why do you think it is called a thousand square?

It is split into one thousand equal parts.

- b) What fraction of the square has been coloured?

$\frac{113}{1000}$

- c) Write the fraction as a decimal.

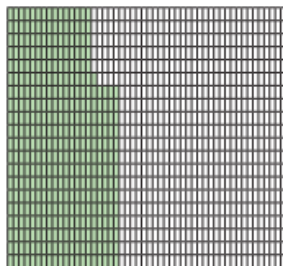
0.113

Medium

- 4 What fraction of each square has been shaded?

Write each number as a fraction and as a decimal.

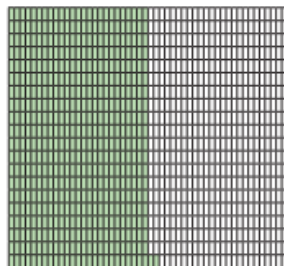
a)



fraction = $\frac{371}{1000}$

decimal = 0.371

b)

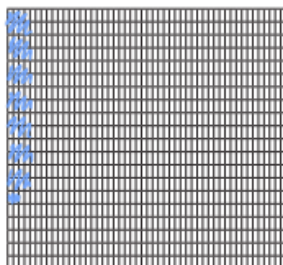


fraction = $\frac{502}{1000}$

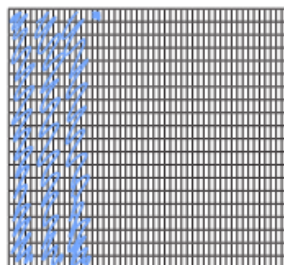
decimal = 0.502

- 5 Colour the grids to represent the fraction and decimal.

a) $\frac{73}{1000}$

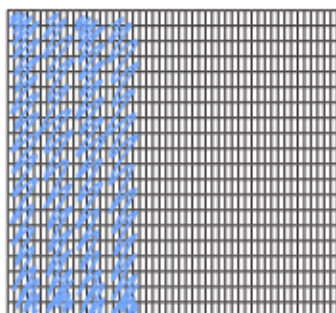


b) 0.302



Spicy

- 7 Show that $\frac{400}{1000}$ is the same as 0.4



400 out of 1,000
equal parts = $\frac{400}{1000}$

4 out of 10 equal
columns = $\frac{4}{10} = 0.4$

- 8 Write the numbers represented by the place value charts.

a)

Ones	Tenths	Hundredths	Thousandths
1 1 1 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 0.001 0.001

4.276

b)

Ones	Tenths	Hundredths	Thousandths
	0.1 0.1 0.1 0.1 0.1		0.001 0.001 0.001 0.001

0.504

Wednesday

- 1 Show the position of each number on the number line.

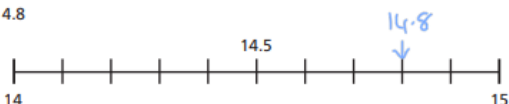
Use the number line to round these decimals to the nearest whole number.

- a) 7.2



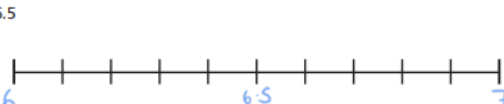
The nearest whole number is **7**

- b) 14.8



The nearest whole number is **15**

- c) 6.5



The nearest whole number is **7**

- 3 a) When rounding to the nearest tenth, how many digits will there be after the decimal point? **1**

- b) Round each number to one decimal place.

1.33	1.3	4.03	4.0
1.34	1.3	4.04	4.0
1.35	1.4	4.05	4.1
1.36	1.4	4.06	4.1
1.37	1.4	4.07	4.1

- 4 Round each number to the nearest tenth.

a) 4.21	4.2	d) 11.86	11.9	g) 12.92	12.9
b) 8.09	8.1	e) 5.67	5.7	h) 10.65	10.7
c) 4.84	4.8	f) 0.15	0.2		

- 5 Circle each decimal that rounds to 6.2

6.32 **6.23** 6.27 **6.17** 6.12 6.25

Explain your reasoning.

They are greater than 6.15 but less than 6.25

- 6 Here are the weights in kilograms of some parcels.



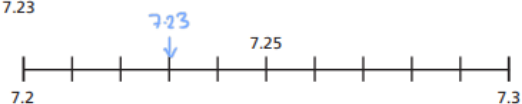
3.48 kg

1.42 kg

10.65 kg

1.03 kg

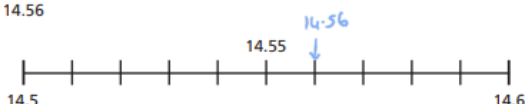
- a) 7.23



The nearest tenth is **7.2**

The nearest whole number is **7**

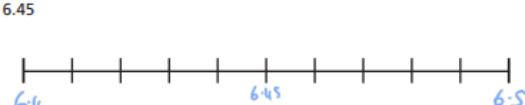
- b) 14.56



The nearest tenth is **14.6**

The nearest whole number is **15**

- c) 6.45



The nearest tenth is **6.5**

The nearest whole number is **6**

Explain to a partner how you rounded decimal numbers to...

- a) Round the weight of each parcel to 1 decimal place.

3.5 kg **1.4** kg **10.7** kg **1.0** kg

- b) The weight of each parcel has been rounded to the nearest 100g.

Is this true or false? **true**

Talk about it with a partner.

- 7 Amir is thinking of a number.

Rounded to the nearest whole his number is 5

Rounded to the nearest tenth his number is 4.8

Write at least four different numbers that Amir could be thinking of.

4.8, 4.75, 4.79, 4.81, 4.84

- 8 A farmer is building a new fence for her sheep field.

Here are the measurements.



She wants to build a fence around the whole field.

Estimate how much fencing you think she will need.

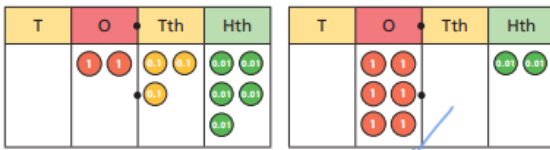
$$125.5 + 89.6 + 125.5 + 89.6 = 251 + 179.2 = 430.2 \text{ m}$$

Talk about your estimate with a partner.

Thursday

- 1 Which number is greater?

Tick your answer.



Explain your answer.

It has more ones.

- 2 Which is the smaller number?

Tick your answer.



Explain your answer.

It has fewer tenths.

- 6 Alex and Dora are competing in the long jump.
Alex jumps 1.35 metres and Dora jumps 1.4 metres.

Alex wins because 35 is greater than 4



- a) Is Dora correct? no

Talk about it with a partner.

- b) Kim joins in the competition.

What is the shortest distance she can jump to go into the lead?

1.41m

- 7 Write the numbers in ascending order.

- a) 0.45 0.654 0.546 0.405

0.405 0.45 0.546 0.654

- b) 7.2 kg 7.212 kg 7.21 kg

7.2kg 7.21kg 7.212kg

- c) 25.391 25.309 25.093 25.193

25.093 25.193 25.309 25.391

- b) Which is the smallest number?

4.08

How do you know?

- 4 Here are some numbers in a place value chart.

Ones	Tenths	Hundredths	Thousandths
3	2	3	4
3	1	6	
3	2	0	8
3	1	4	5

Write the numbers in order, starting with the greatest.

3.234

3.208

3.16

3.145

- 5 Mo, Amir, Ron, Teddy and Jack are measuring their heights with a metre rule.

Mo	Amir	Ron	Teddy	Jack
1.35 m	1.53 m	1.32 m	1.3 m	1.5 m

Write the names and heights of the children in order from shortest to tallest.

Name	Height
Teddy	1.3m
Ron	1.32m
Mo	1.35m
Jack	1.5m
Amir	1.52m

- 8 Dexter is thinking of a number.



It is a decimal number with 2 decimal places that is greater than 2.47 but less than 2.58

What possible numbers could Dexter be thinking of?

2.48, 2.49, 2.50, 2.51, 2.52, 2.53, 2.54, 2.55, 2.56, 2.57

- 9 Tick the numbers that are equal to 2.5

Circle the numbers that are greater than 2.5

You will need to convert the mixed numbers to decimal numbers first.

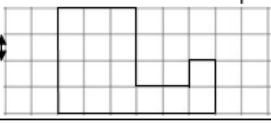
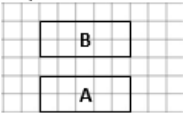
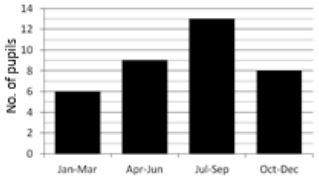
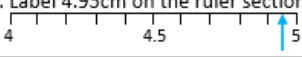
2.05	$2\frac{5}{10}$	$2\frac{1}{2}$
$2\frac{5}{100}$	2.53	$2\frac{3}{5}$
2.501	$2\frac{80}{100}$	$2\frac{3}{10}$

Friday

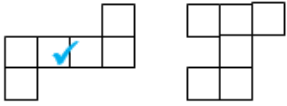
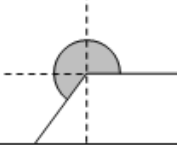
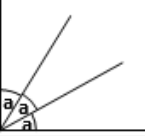
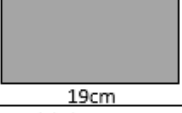
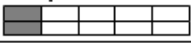
Make sure you check BBC Bitesize for the Challenge ANSWERS

Key Skills

Mild

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics	
1. What is the missing number? 18 24 36 42	4:1 30	11. $7 \times 9 =$	4:9 63	21. What is the area of this shape? 	4:20 16cm²
2. What is the missing number? 2,000 3,000 4,000	4:1 5,000	12. Circle the sum that is the same as 16×7 : <u>$4 \times 7 \times 4$</u> $2 \times 8 \times 6$	4:10 $4 \times 7 \times 4$	22. Circle the name that describes a 90° angle. <u>Right angle</u> Obtuse angle Acute angle	4:24 Right-angle
3. Round this number to the nearest 100: 3,192	4:2 3,200	13. $138 \times 9 =$	4:11 1,242	23. To transform shape A onto B: Translate A units . 	4:27 3, up
4. What is 1,000 less than 10,293?	4:2 9,293	14. To work out 9×58 you could do: $\times 9 + 8 \times$	4:12 50, 9	24. Month of birth of Class 7 pupils. 	4:29 15
5. What is 12 less than 4?	4:3 -8	15. Circle the equivalent fraction to $\frac{1}{9}$. $\frac{3}{27}$ $\frac{4}{18}$ <u>$\frac{5}{36}$</u>	4:13 $\frac{3}{27}$	25. How many pupils were born in the first half of the year?	4:30 36
6. What is the value of the 2 in this number? 6,283	4:4 200	16. Complete the sequence: $\frac{37}{100}$ $\frac{38}{100}$ $\frac{39}{100}$	4:14 $\frac{40}{100}$		
7. Write the number 91 in Roman numerals.	4:5 XCI	17. $\frac{4}{3} + \frac{1}{3} =$	4:15 $\frac{5}{3}$		
8. $2,472 - 598 =$	4:6 1,874	18. Write 0.01 as a fraction.	4:16 $\frac{1}{100}$		
9. Write the sum to check $3,250 - 975 = 2,275$: $2,275$ 975 $3,250$	4:7 +, =	19. $11 \div 10 =$	4:17 1.1		
10. There are 73 people on a bus. 15 get off & 28 get on. How many now?	4:8 86	20. Label 4.95cm on the ruler section: 	4:18 Arrow		

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Geometry and Problem Solving	
1. Write < or > to make this correct: 850,200 805,200	5:1 >	11. Circle all the multiples of 7. 12 <u>21</u> 30 <u>35</u>	5:8 21, 35	21. Which of these three numbers is the largest ? a. 0.67 b. 0.534 c. 0.6	5:18 a
2. Write 1,600,850 in words.	5:1 One million, six hundred thousand, eight hundred and fifty	12. The number 45 has two prime factors . What are they?	5:9 3, 5	22. Tick (✓) the net of a cube.	5:24 Left net ticked
3. Round 596,147 to the nearest hundred .	5:2 596,100	13. $3,464 \times 4$	5:10 13,856		
4. What is the missing number? 235,875 236,875 238,875	5:2 237,875	14. 1.09×1000	5:11 1,090	23. Estimate the size of this angle: 	5:25 225° - 245°
5. Find the difference in temperatures. London -9°C Glasgow 11°C	5:3 20°C	15. Complete the sequence of square numbers . 1 4 9 16	5:12 25	24. Calculate the missing angle labelled a: 	5:26 30°
6. Write this number in Roman Numerals: 1,504	5:4 MDIV	16. Write <, = or > to make this correct: $\frac{3}{4}$ $\frac{10}{12}$	5:13 <	25. The perimeter of this rectangle is 50cm. How long is the <u>missing</u> side? 	5:27 6cm
7. $1,035,230 - 302,015 =$	5:5 733,215	17. Find an equivalent fraction of $\frac{2}{10}$. 	5:14 $\frac{1}{5}$		
8. $27,495 + 8,420 =$	5:5 35,915	18. Write $5\frac{5}{8}$ as an improper fraction .	5:15 $\frac{45}{8}$		
9. Complete this sum without written working. $15,600 + 7,400 =$	5:6 23,000	19. $3\frac{4}{5} \times 2 =$	5:16 $7\frac{3}{5}$		
10. A train has 1,200 seats. 457 seats are empty. How many are <u>on board</u> ?	5:7 743	20. Round 7.51 to the nearest whole number.	5:17 8		
Total (A)		Total (B)		Total (C)	
Test Total (A+B+C)		R (0-9)		Y (10-19)	
				G (20-25)	