



W.C.11th May 2020

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

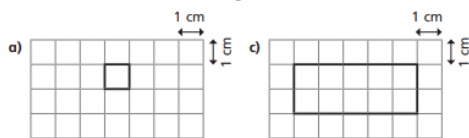
Maths ANSWERS

Monday

Formula for area

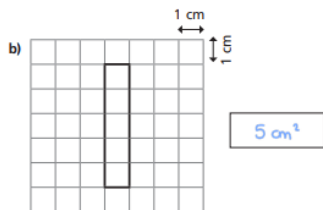
Mild

- 1 On the grid, the area of each square is 1 cm^2 .
Calculate the area of each rectangle.



$$1\text{ cm}^2$$

$$10\text{ cm}^2$$



$$5\text{ cm}^2$$

- 2 Complete the sentences to describe the rectangle.

There are 2 rows.

Each row has 4 squares.

There are 8 squares altogether.

$$2 \times 4 = 8$$



- 3 The area of each square is 1 cm^2 .

Work out the area of each rectangle.

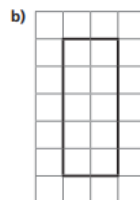


$$3 \times 7 = 21$$

$$\text{area} = 21\text{ cm}^2$$

$$3 \times 5 = 15$$

$$\text{area} = 15\text{ cm}^2$$



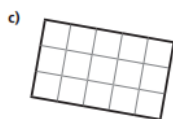
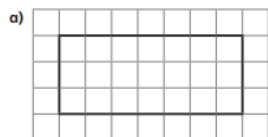
$$5 \times 2 = 10$$



$$7 \times 1 = 7$$

Medium

- 3 The area of each square is 1 cm^2
Work out the area of each rectangle.

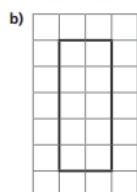


$$3 \times 7 = 21$$

$$\text{area} = 21 \text{ cm}^2$$

$$3 \times 5 = 15$$

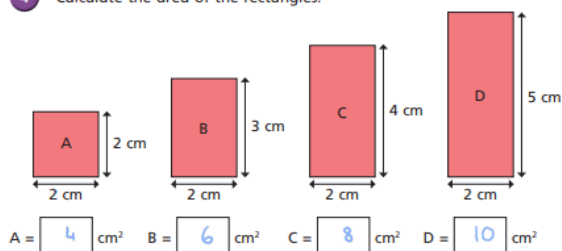
$$\text{area} = 15 \text{ cm}^2$$



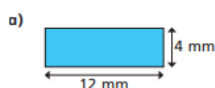
$$5 \times 2 = 10$$

$$7 \times 1 = 7$$

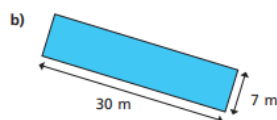
- 4 Calculate the area of the rectangles.



- 5 Work out the area of these rectangles.



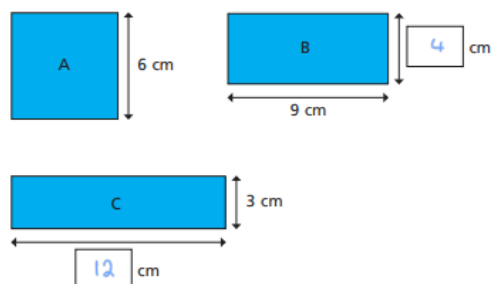
$$48 \text{ mm}^2$$



$$210 \text{ m}^2$$

Spicy

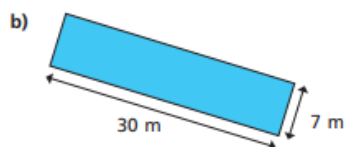
- 7 These shapes all have the same area. Shape A is a square.
Work out the missing lengths.



- 5 Work out the area of these rectangles.

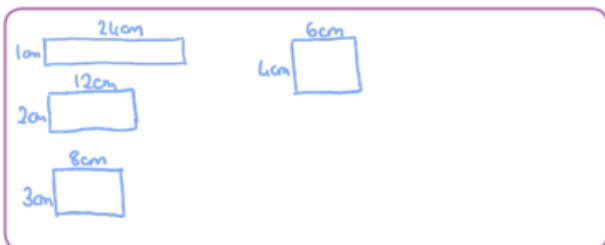


$$48 \text{ mm}^2$$



$$210 \text{ m}^2$$

- 6 How many rectangles can you draw that have an area of 24 cm^2 ?
Label the lengths. Your drawings do not have to be exact.



- 8 A rectangle has an area of 96 cm^2
The length of the rectangle is 4 cm longer than the width.
Work out the length and width of the rectangle.

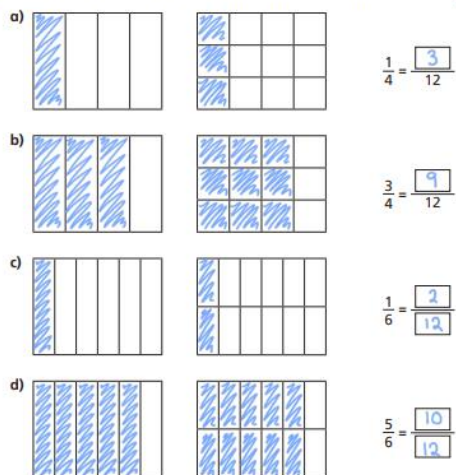
$$\text{length} = 12 \text{ cm} \quad \text{width} = 8 \text{ cm}$$

Tuesday

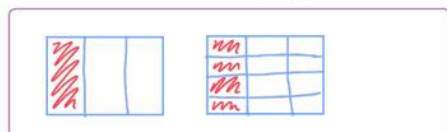
Multiplying by a 2 digit number

Mild

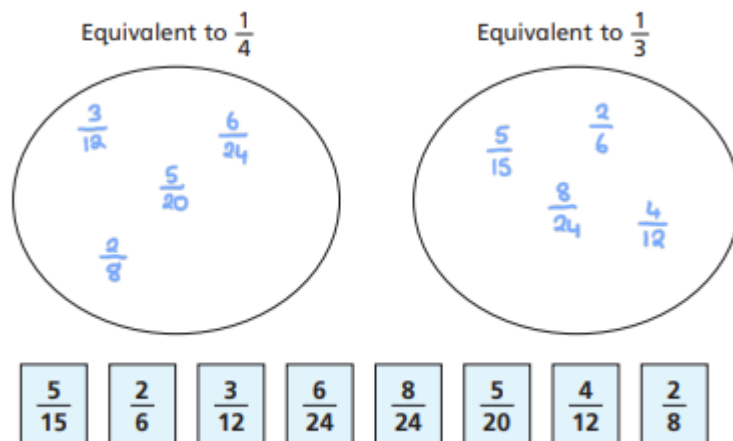
1 Shade the shapes to show the equivalent fractions.



2 Draw two rectangles to show that $\frac{1}{3} = \frac{4}{12}$



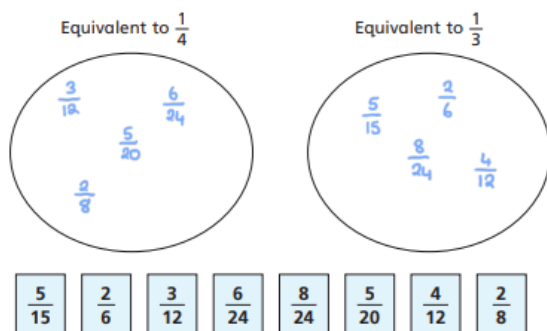
3 a) Sort the fractions into the groups.



b) Write one more fraction in each group.

Medium

3 a) Sort the fractions into the groups.



b) Write one more fraction in each group.

4 Complete the equivalent fractions.

a) $\frac{1}{7} = \frac{2}{14}$

d) $\frac{3}{4} = \frac{6}{8}$

g) $\frac{2}{3} = \frac{10}{15}$

b) $\frac{5}{7} = \frac{10}{14}$

e) $\frac{3}{4} = \frac{12}{16}$

h) $\frac{2}{5} = \frac{10}{25}$

c) $\frac{7}{8} = \frac{14}{16}$

f) $\frac{3}{4} = \frac{9}{12}$

i) $\frac{2}{7} = \frac{10}{35}$

5 Find three ways to make the fractions equivalent.

e.g.

a) $\frac{1}{2} = \frac{7}{14}$

b) $\frac{7}{7} = \frac{14}{14}$

c) $\frac{1}{7} = \frac{2}{14}$

$\frac{1}{8} = \frac{7}{56}$

$\frac{7}{1} = \frac{14}{2}$

$\frac{5}{7} = \frac{10}{14}$

$\frac{1}{100} = \frac{7}{700}$

$\frac{7}{10} = \frac{14}{20}$

$\frac{21}{7} = \frac{42}{14}$

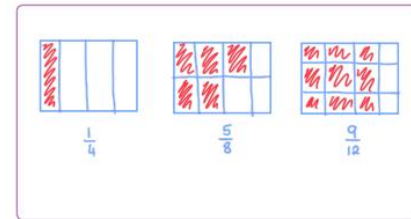
Spicy

6 Ron is finding equivalent fractions to $\frac{1}{4}$



$\frac{1}{4}$ is equivalent to $\frac{5}{8}$
and $\frac{9}{12}$

Do you agree with Ron? No
Draw a diagram to support your answer.



5 Find three ways to make the fractions equivalent.

e.g.

a) $\frac{1}{2} = \frac{7}{14}$

$\frac{1}{8} = \frac{7}{56}$

$\frac{1}{100} = \frac{7}{700}$

b) $\frac{7}{7} = \frac{14}{14}$

$\frac{7}{1} = \frac{14}{2}$

$\frac{7}{10} = \frac{14}{20}$

c) $\frac{1}{7} = \frac{2}{14}$

$\frac{5}{7} = \frac{10}{14}$

$\frac{21}{7} = \frac{42}{14}$

7 Here are some equivalent fractions.

Find the values of A, B and C.

$\frac{A}{9} = \frac{3}{B} = \frac{2}{18} = \frac{C}{90}$

A = 1

B = 27

C = 10

8 Here are three fraction cards.

All the fractions are equivalent.

$\frac{3}{A} = \frac{B}{14} = \frac{12}{C}$

A + B = 13

Work out the value of C.

C = 28

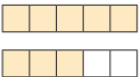
Wednesday

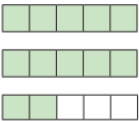
Improper fractions to mixed numbers and vice versa

<https://whiterosemaths.com/homelearning/year-5/>

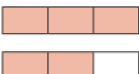
Mild

1 Convert the improper fractions to mixed numbers.

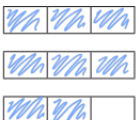
a)  $\frac{8}{5} = 1\frac{3}{5}$

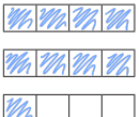
b)  $\frac{12}{5} = 2\frac{2}{5}$

c)  $\frac{9}{4} = 2\frac{1}{4}$

d)  $\frac{5}{3} = 1\frac{2}{3}$

a)  $\frac{7}{3} = 2\frac{1}{3}$

b)  $\frac{8}{3} = 2\frac{2}{3}$

c)  $\frac{9}{4} = 2\frac{1}{4}$

d)  $\frac{11}{4} = 2\frac{3}{4}$

3 Convert the improper fractions to mixed numbers.

a) $\frac{10}{2} = 5$

e) $\frac{12}{5} = 2\frac{2}{5}$

b) $\frac{10}{3} = 3\frac{1}{3}$

f) $\frac{13}{6} = 2\frac{1}{6}$

c) $\frac{10}{4} = 2\frac{1}{2}$

g) $\frac{13}{7} = 1\frac{6}{7}$

d) $\frac{10}{5} = 2$

h) $\frac{31}{8} = 3\frac{7}{8}$

Medium

3 Convert the improper fractions to mixed numbers.

a) $\frac{10}{2} = 5$

e) $\frac{12}{5} = 2\frac{2}{5}$

b) $\frac{10}{3} = 3\frac{1}{3}$

f) $\frac{13}{6} = 2\frac{1}{6}$

c) $\frac{10}{4} = 2\frac{1}{2}$

g) $\frac{13}{7} = 1\frac{6}{7}$

d) $\frac{10}{5} = 2$

h) $\frac{31}{8} = 3\frac{7}{8}$

4 Eva has 7 bottles of juice.

Each bottle contains half a litre of juice.



How many litres of juice does Eva have altogether?

Write your answer as a mixed number.

$3\frac{1}{2}$

5 Dexter is converting improper fractions.



$\frac{32}{3} = 3\frac{2}{3}$

Explain why Dexter is incorrect.

Spicy

3 Convert the improper fractions to mixed numbers.

a) $\frac{10}{2} = 5$

e) $\frac{12}{5} = 2\frac{2}{5}$

b) $\frac{10}{3} = 3\frac{1}{3}$

f) $\frac{13}{6} = 2\frac{1}{6}$

c) $\frac{10}{4} = 2\frac{1}{2}$

g) $\frac{13}{7} = 1\frac{6}{7}$

d) $\frac{10}{5} = 2$

h) $\frac{31}{8} = 3\frac{7}{8}$

5 Dexter is converting improper fractions.



$\frac{32}{3} = 3\frac{2}{3}$

Explain why Dexter is incorrect.

6 Find the value of ●

$\frac{27}{9} = 3$

● = 5

7 Find two possible values for ★ and ▲

$\frac{30}{6} = 5$

★ = 14

▲ = 2

★ = 7

▲ = 4

Thursday

Mild, Medium and Spicy - Log on to Timetable Rockstars and compete in the Battles we have set up!



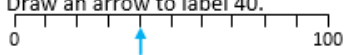
Be sure to check the answers for this task on the BBC Bitesize website.

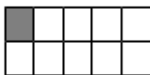
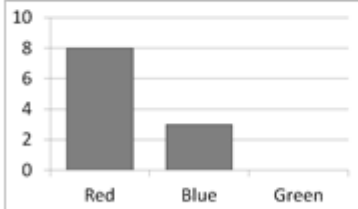
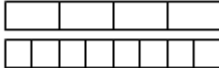
Friday

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 and Rockstars

Mild

A: Place Value, Add and Subtract	
1. What is the missing number? 0 8 24 32	^{3:1} 16
2. What is the 2 worth in this number? 257	^{3:2} 200 (hundreds)
3. Put these in order, smallest first. 293 329 932 392	^{3:3} 293, 329, 392, 932
4. Draw an arrow to label 40. 	^{3:4} Arrow
5. Circle all the multiples of 8. 6 8 14 16 20	^{3:5} 8, 16
6. $462 + 100 =$	^{3:6} 562
7. $256 + 128 =$	^{3:7} 384
8. Write the sum to check $82 - 37 = 45$. Check: $45 + \text{ } = \text{ }$	^{3:8} 37, 82
9. To a no. I add 27 then subtract 19. I now have 13. What did I start with?	^{3:9} 5
10. What is the missing number? $149 + \text{ } = 211$	^{3:9} 62

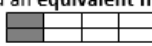
B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics	
11. $36 \div 3 =$	3:10	23. About how long does it take for a full kettle to boil? a. 50 seconds b. 5 minutes c. 50 minutes 	3:23
12. $8 \times 3 =$	3:10		
13. Use $5 \times 6 = 30$ to solve: $300 \div 6 =$	3:11	22. Which of these is a correct description of a cuboid? a. I have 6 faces and 6 vertices. b. I have 6 edges and 8 vertices. c. I have 6 faces and 12 edges.	3:25
14. Eggs come in boxes of 6. I need 20 eggs. How many boxes should I buy?	3:12		
15. What fraction is shaded? 	3:13	23. Label two acute angles using the letter 'A'. 	3:26
16. Circle $\frac{3}{5}$ of the marbles. 	3:14		
17. What fraction is labelled? 	3:15	24. Favourite colours of students: 	3:29
18. $\frac{1}{4} = \frac{?}{8}$ 	3:16		
19. Subtract the fractions. $\frac{7}{8} - \frac{3}{8}$	3:17		
20. Write the largest fraction. $\frac{2}{5} \quad \frac{1}{5} \quad \frac{4}{5} \quad \frac{3}{5}$	3:18	25. How many more people said 'Red' than said 'Blue'?	3:30
Total (B)		Total (C)	

Medium

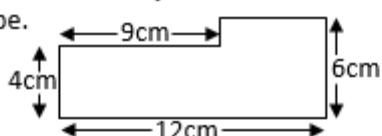
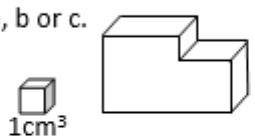
A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions	
1. What is the missing number? 1,000 2,000 4,000 5,000	4:1 3,000	11. $9 \times 9 =$	4:9 81
2. What is the missing number? 200 225 250 275	4:1 300	12. Complete the sum that is equal to $4 \times 5 \times 18: 20 \times$	4:10 18
3. Round this number to the nearest 1,000: 3,192	4:2 3,000	13. $932 \times 4 =$	4:11 3,728
4. What is 1,000 more than 6,394?	4:2 7,394	14. To work out 4×55 you could do: $50 \times$ $+$ $\times 4$	4:12 4, 5
5. If the temperature starts at 5°C , then drops by 9°C , what is it now?	4:3 -4	15. $\frac{35}{40} = \frac{7}{?}$	4:13 8
6. What is the value of the 8 in this number? 6,283	4:4 80	16. What is the missing number? 9.96 9.97 9.98 9.99	4:14 10(.00)
7. Write the number 74 in Roman numerals.	4:5 LXXIV	17. $\frac{2}{5} + \frac{4}{5}$	4:15 $\frac{6}{5}$
8. $4,115 - 1,472 =$	4:6 2,643	18. Write 0.8 as a fraction.	4:16 $\frac{8}{10}$
9. Estimate the answer to: $15,507 + 4,489$	4:7 20,000	19. $293 \div 10 =$	4:17 29.3
10. From 300 tickets, pupils buy 89 & parents buy 184. How many are left?	4:8 27	20. Using £20 Rob buys a DVD for £6 and a CD for £6.95. How much left?	4:18 £7.05
Total (A)		Total (B)	

C: Measure, Geometry and Statistics							
21. How many millilitres are there in 2.15 litres?	4:19 2,150						
22. Tick (✓) the shape that has exactly 2 lines of symmetry. 	4:25 <u>Rect-</u>angle						
23. Complete this shape: 	4:26 Lines drawn						
24. Number of tyres sold by a garage one weekend: <table border="1" data-bbox="502 1742 949 1926"> <tr> <td colspan="2">Key: $\oplus = 4$ tyres</td></tr> <tr> <td>Saturday</td><td>$\oplus \oplus \oplus \oplus \in$</td></tr> <tr> <td>Sunday</td><td>$\oplus \oplus \oplus \triangle$</td></tr> </table> 13 were sold on Sunday. Show this. 25. How many tyres were sold in total over the weekend?	Key: $\oplus = 4$ tyres		Saturday	$\oplus \oplus \oplus \oplus \in$	Sunday	$\oplus \oplus \oplus \triangle$	4:29 <u>Picto-</u>gram drawn 4:30 31
Key: $\oplus = 4$ tyres							
Saturday	$\oplus \oplus \oplus \oplus \in$						
Sunday	$\oplus \oplus \oplus \triangle$						
Total (C)							

Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions	
1. What is the value of the 4 in this number? 1,348,567	5:1 40,000	11. Which is a common factor of 12 and 20? 3 4 5 6 10	5:8 4
2. Write eight hundred thousand, three hundred and seven in digits.	5:1 800,307	12. Give two prime numbers between 1 and 10.	5:9 2, 3, 5 or 7
3. Round 247,599 to the nearest thousand.	5:2 248,000	13. 628×12	5:10 7,536
4. What is the missing number? 837 937 1,137	5:2 1,037	14. $1,278 \div 100$	5:11 12.78
5. What temperature is 15 degrees less than 6 degrees Celsius?	5:3 -9°C	15. What is 7^2 ?	5:12 49
6. What number is represented by these Roman Numerals? DXXX	5:4 530	16. $\frac{3}{4} + \frac{1}{8} =$	5:13 $\frac{7}{8}$
7. $12,498 - 3,149 =$	5:5 9,349	17. Find an equivalent fraction of $\frac{1}{4}$. 	5:14 $\frac{2}{8}$ oe
8. $24,829 + 83,592 =$	5:5 108,421	18. Write $\frac{17}{6}$ as a mixed number.	5:15 $2\frac{5}{6}$
9. Complete this sum without written working. $15,200 - 4,150 =$	5:6 11,050	19. $\frac{2}{7} \times 21 =$	5:16 6
10. I buy 2 CDs costing £8.45 each. How much change do I get from £20?	5:7 £3.10	20. Round 2.37 to 1 decimal place.	5:17 2.4
Total (A)		Total (B)	

C: Measure and Problem Solving

21. Megan and Joe are sharing a pizza. Megan eats 25% of the pizza. Joe eats $\frac{1}{2}$ of the pizza. What fraction of the pizza is left?	5:19 $\frac{1}{4}$
22. How many centimetres are there in 3.7 metres?	5:20 370
23. Calculate the perimeter of this shape. 	5:21 36cm
24. Estimate the volume of this shape. Write a, b or c. a. 6 cm^3 . b. 26 cm^3 . c. 46 cm^3 . 	5:22 b
25. Sarah gets on a train at 2.30pm. The train journey lasts 110 minutes. What time does Sarah arrive at her destination?	5:23 4.20pm
Total (C)	