Year 4 Maths Home Learning | Summer Term

W.C. 18th May 2020

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

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

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

What is a fraction?

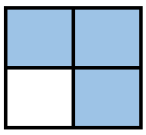
Starter:

STARTER:

You only have red and yellow pencils.
How many different ways can you colour this strip?

Mild

1a. Circle fractions that represent $\frac{1}{3}$.



2a. Match the fraction to the correct representation.

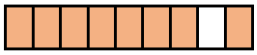
$\frac{1}{11}$

$\frac{1}{5}$

$\frac{1}{9}$

$\frac{1}{2}$

A. 

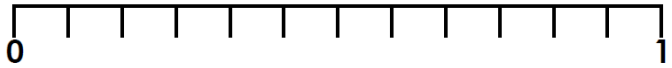
B. 

C. 

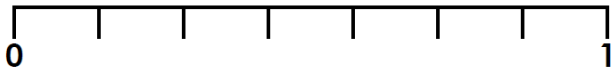
D. 

3a. Place the following fractions on the number line below.

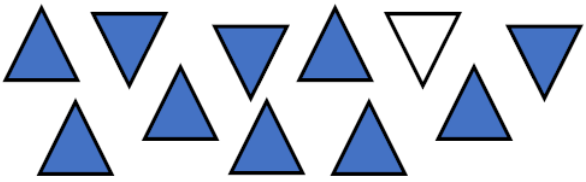
$\frac{1}{12}$



$\frac{1}{7}$



4a. True or false? The fraction below is $\frac{1}{9}$.



Medium

Hauwa says,

If I have a pizza and I cut it into four pieces, I have cut it into quarters.

Is Hauwa's statement always, sometimes or never true?

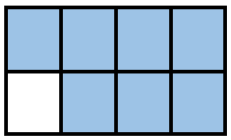
Jamie has made some different representations of 3/5.

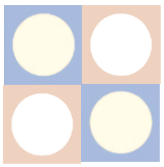
Which ones are not correct?

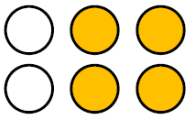
$\frac{3}{5}$

three fifths

5a. Circle the unit fractions.







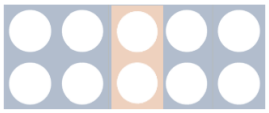
6a. Match the fraction to the correct representation.

$\frac{2}{6}$

$\frac{8}{10}$

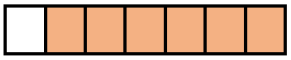
$\frac{3}{12}$

$\frac{1}{7}$

A. 

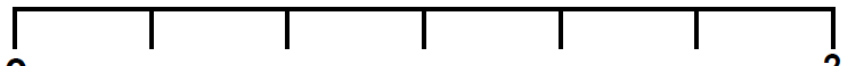
B. 

C. 

D. 

7a. Place the following fractions on the number line below.

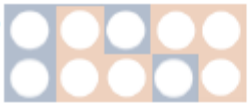
$\frac{5}{10}$ $\frac{4}{10}$ $\frac{10}{10}$ $\frac{2}{10}$



0 $1\frac{2}{10}$

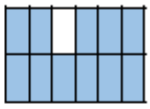
Spicy

9a. Write the fraction shown by each image.

A. 

B. 

C. 

D. 

VF

10a. Match the fraction to the correct representation. Which fraction is left?

$\frac{3}{10}$

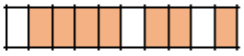
$\frac{2}{7}$

$\frac{3}{9}$

$\frac{5}{11}$

A. 

B. 

C. 

D. 

VF

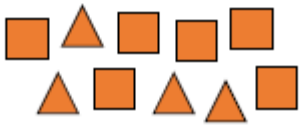
11a. Place the following fractions on the number line below.

$\frac{11}{12}$ $\frac{6}{12}$ $\frac{1}{12}$ $\frac{4}{12}$

0 1

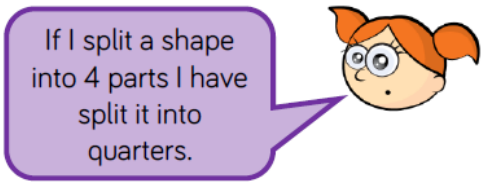
VF

12a. True or false? Four tenths is shown below.



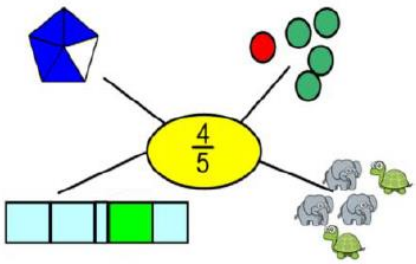
VF

Always, Sometimes, Never



Explain your answer.

Which representations of $\frac{4}{5}$ are incorrect?



Explain how you know.

Tuesday

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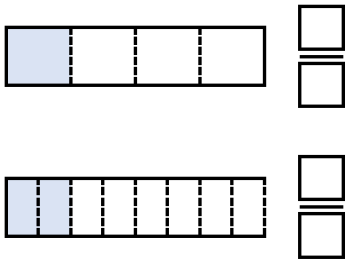
https://whiterosemaths.com/homelearning/year-4/

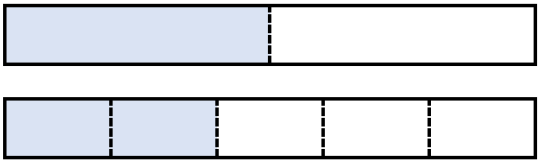
Equivalent Fractions

Mild

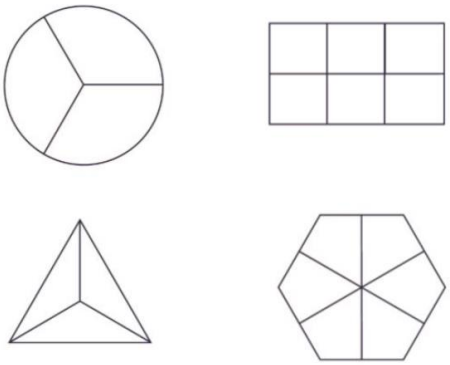
1a. Write the shaded fraction represented in the images below.



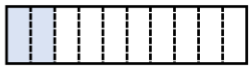
2a. True or false? The shaded fractions represent equivalent fractions.

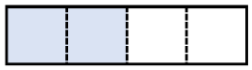


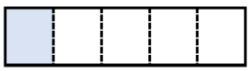
4a. Shade the shapes to show $\frac{1}{3}$.



3a. Which 2 fractions are equivalent to each other?

A. 

B. 

C. 

Medium:

Shade the bar models to represent the equivalent fractions.

a)

$\frac{1}{2}$	$\frac{1}{2}$

$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{1}{6}$

$\frac{1}{2} = \frac{3}{6}$

b)

$\frac{1}{2}$	$\frac{1}{2}$

$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$

$\frac{1}{2} = \frac{5}{10}$

Use the fraction wall to complete the equivalent fractions.

$\frac{1}{2}$				$\frac{1}{2}$			
$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$		$\frac{1}{4}$	
$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$

a) $\frac{1}{2} = \frac{\square}{4}$

b) $\frac{1}{2} = \frac{\square}{8}$

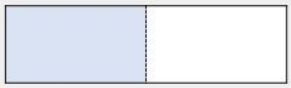
c) $\frac{2}{4} = \frac{4}{\square}$

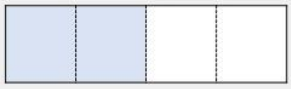
d) $\frac{2}{8} = \frac{\square}{4}$

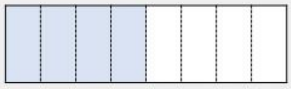
e) $\frac{\square}{8} = \frac{3}{4}$

f) $\frac{2}{2} = \frac{\square}{4} = \frac{\square}{8}$

The same strip of paper has been folded in different ways.

A. 

B. 

C. 

$\frac{2}{4}$

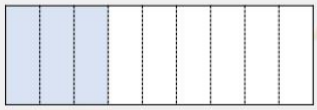
$\frac{4}{8}$

$\frac{1}{2}$

Match the strip of paper to the correct fraction.

Write the fraction represented by the shaded part of the images.

$\frac{\square}{\square}$

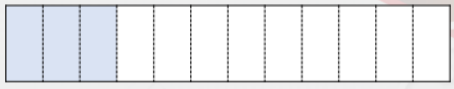


$\frac{\square}{\square}$

Which 2 fractions are equivalent to each other?

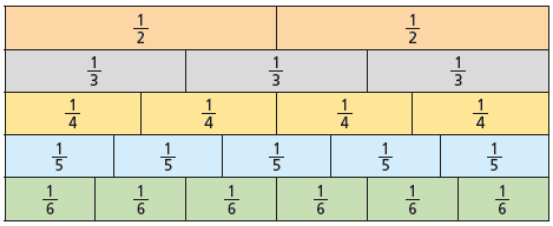
A. 

B. 

C. 

Spicy

Here is a fraction wall.

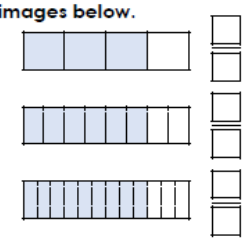


Is each statement true or false? Tick your answers.

	True	False
a) $\frac{1}{2}$ is equivalent to $\frac{3}{6}$	☐	☐
b) $\frac{2}{3}$ is equivalent to $\frac{3}{4}$	☐	☐
c) $\frac{2}{4}$ is equivalent to $\frac{3}{6}$	☐	☐
d) $\frac{2}{3}$ is equivalent to $\frac{4}{5}$	☐	☐
e) $\frac{2}{3}$ is equivalent to $\frac{4}{6}$	☐	☐
f) $\frac{3}{5}$ is equivalent to $\frac{4}{6}$	☐	☐

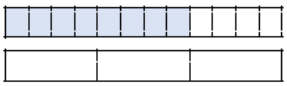
Write your own equivalent fractions statements.

9a. Write the shaded fraction represented in the images below.



VF

10a. Use the blank strip of paper to make the statement true.

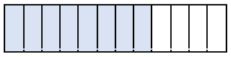


The shaded fractions represent equivalent fractions.

VF

11a. Which 2 fractions are equivalent to each other?

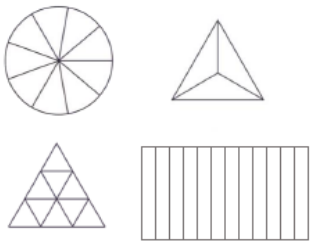
A. $\frac{1}{2}$

B. 

C. $\frac{6}{9}$

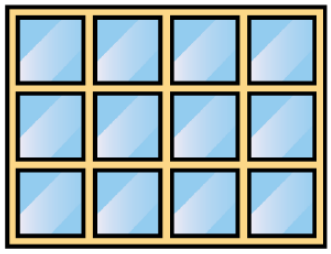
VF

12a. Shade the shapes to show $\frac{2}{3}$.



VF

How many equivalent fractions can you see in this picture?



Eva says,

I know that $\frac{3}{4}$ is equivalent to $\frac{3}{8}$ because the numerators are the same.

Is Eva correct?
Explain why.

Ron has two strips of the same sized paper.
He folds the strips into different sized fractions.
He shades in three equal parts on one strip and six equal parts on the other strip.
The shaded areas are equal.

What fractions could he have folded his strips into?

Wednesday

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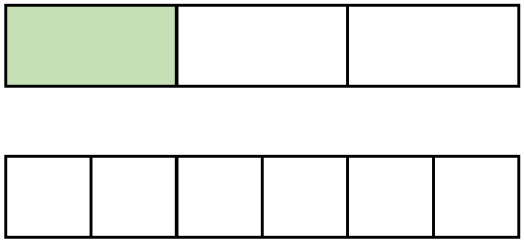
https://whiterosemaths.com/homelearning/year-4/

Equivalent Fractions Part Two (a building block to know how to simplify a fraction)

Mild:

1a. Complete the diagram to show the equivalent fraction.



2a. What have the numerator and denominator been multiplied by to make the equivalent fraction?

$$\frac{1}{5} \times \frac{\square}{\square} = \frac{2}{10}$$

3a. Circle the fraction which is equivalent to $\frac{1}{2}$.

$$\frac{2}{3} \qquad \frac{1}{4} \qquad \frac{2}{4}$$

4a. Complete the fraction equivalent to $\frac{1}{4}$.

$$\frac{2}{\square}$$

Shade the diagrams to help you complete the equivalent fractions.

The first one has been done for you.

a)

$\frac{1}{3} = \frac{2}{6}$

b)

$\frac{1}{2} = \frac{\square}{\square}$

c)

$\frac{1}{4} = \frac{\square}{\square}$

Medium:

Draw a diagram to show that $\frac{3}{4} = \frac{6}{8}$

Match the equivalent fractions.

$\frac{1}{4}$	$\frac{3}{21}$
$\frac{4}{10}$	$\frac{2}{3}$
$\frac{10}{15}$	$\frac{2}{5}$
$\frac{1}{7}$	$\frac{3}{12}$

Complete the equivalent fractions.

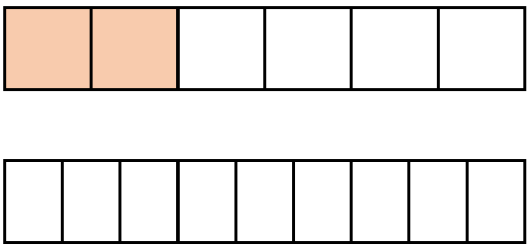
a) $\frac{1}{5} = \frac{\square}{10}$ d) $\frac{3}{10} = \frac{9}{\square}$ g) $\frac{8}{12} = \frac{2}{\square}$

b) $\frac{4}{5} = \frac{\square}{10}$ e) $\frac{6}{8} = \frac{3}{\square}$ h) $\frac{2}{\square} = \frac{10}{25}$

c) $\frac{3}{10} = \frac{6}{\square}$ f) $\frac{8}{12} = \frac{\square}{3}$ i) $\frac{1}{\square} = \frac{4}{28}$

Spicy:

9a. Complete the diagram to show the equivalent fraction.



10a. What is the lowest common denominator for the equivalent fractions below?

$\frac{3}{15}$ $\frac{5}{25}$

11a. Circle the fractions which are equivalent to $\frac{4}{28}$.

$\frac{5}{35}$ $\frac{1}{8}$ $\frac{3}{21}$

$\frac{6}{30}$ $\frac{2}{14}$

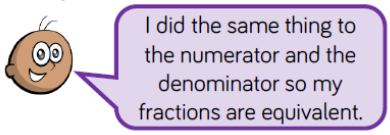
12a. Write a fraction which is equivalent to $\frac{5}{20}$.

$\frac{\square}{\square}$

Tommy is finding equivalent fractions.

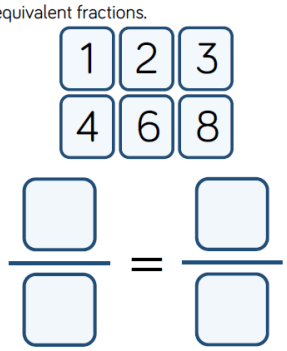
$$\frac{3}{4} = \frac{5}{6} = \frac{7}{8} = \frac{9}{10}$$

He says,



Do you agree with Tommy?
Explain your answer.

Use the digit cards to complete the equivalent fractions.



How many different ways can you find?

Thursday

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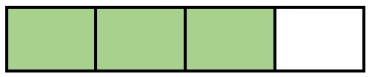
https://whiterosemaths.com/homelearning/year-4/

Fractions greater than 1

Mild

1a. Look at the diagram below.

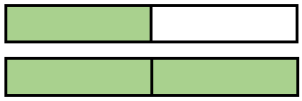


How many parts make the whole?

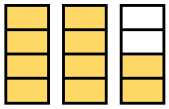
1 3 4

How many parts need to be shaded to complete the whole?

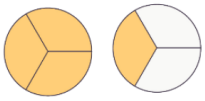
2a. Match the shaded fraction to the correct written fraction.

A. 

$2\frac{2}{4}$

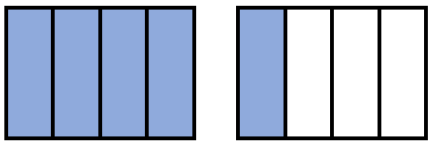
B. 

$1\frac{1}{3}$

C. 

$1\frac{1}{2}$

3a. True or false? The following diagram represents one whole and one half.



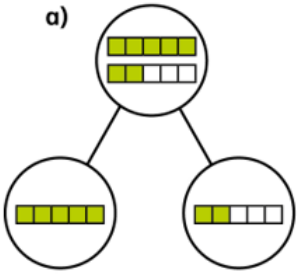
4a. Cleo is planting seeds in pots. She has 9 seeds. Each pot needs 2 seeds.

How many pots can she fill?

How many seeds are left over?

1 Complete the sentences.

a)

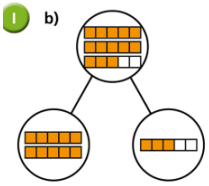


There are 7 fifths altogether.

7 fifths = ☐ whole + ☐ fifths

Medium

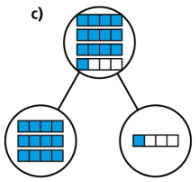
1 b)



There are ☐ fifths altogether.

☐ fifths = ☐ wholes + ☐ fifths

c)



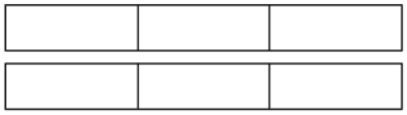
There are ☐ quarters altogether.

☐ quarters = ☐ wholes + ☐ quarter

Shade the bar models to represent the fractions.

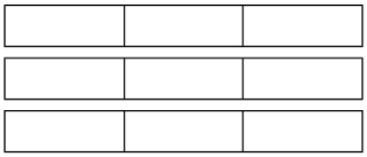
Complete the number sentences.

a) $\frac{5}{3}$



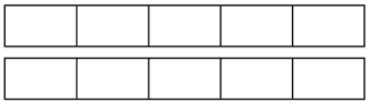
$\frac{5}{3}$ = ☐ whole + ☐ thirds = ☐

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



$\frac{8}{3}$ = ☐ wholes + ☐ thirds = ☐

c) $\frac{8}{5}$



$\frac{8}{5}$ = ☐ whole + ☐ fifths = ☐

Complete the statements.

a) $\frac{12}{2}$ = ☐ wholes

b) $\frac{12}{4}$ = ☐ wholes

c) $\frac{12}{6}$ = ☐ wholes

d) $\frac{12}{3}$ = ☐ wholes

e) $\frac{15}{3}$ = ☐ wholes

f) $\frac{15}{5}$ = ☐ wholes

g) $\frac{15}{4}$ = ☐ wholes + ☐ quarters

h) $\frac{15}{2}$ = ☐ wholes + ☐ half

Spicy

Whitney bakes 26 muffins.

Muffins are packed in boxes of 4

a) How many boxes can Whitney fill?

Whitney can fill ☐ boxes.

b) How many more muffins does Whitney need to fill another box?

Whitney needs ☐ muffins to fill another box.

Explain how you know.

_____

How does writing $\frac{26}{4}$ help you to answer this?

Write <, > or = to complete the statements.

a) 2 wholes and 3 quarters ◯ 5 quarters

b) 2 wholes and 3 quarters ◯ 15 quarters

c) 2 wholes and 3 sixths ◯ 15 sixths

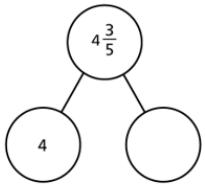
d) 2 wholes and 3 eighths ◯ 15 eighths

e) $\frac{15}{3}$ ◯ $\frac{15}{5}$

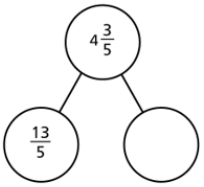
f) $\frac{15}{3}$ ◯ $\frac{20}{4}$

Complete the part-whole models.

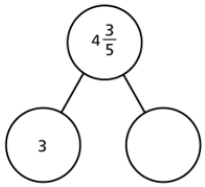
a)



c)

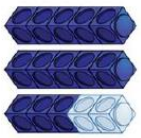


b)



3 friends share some pizzas.
Each pizza is cut into 8 equal slices.
Altogether, they eat 25 slices.
How many whole pizzas do they eat?

Spot the mistake.



$\frac{13}{5}$ = 10 wholes and 3 fifths

Rosie says,

$\frac{16}{4}$ is greater than $\frac{8}{2}$ because 16 is greater than 8

Do you agree?
Explain why.

Friday

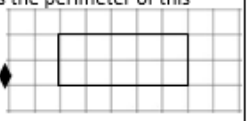
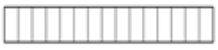
Today you can challenge yourself with the key skills test, along with the challenge activities posted on the BBC website

*Remember these sheets are only to work from **not on** so do not worry if you cannot complete a couple of the questions.*

Mild

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure and Problem Solving	
1. What is the missing number? 0 4 8 ☐ 16	3:1	11. 28 ÷ 4 =	3:10	23. Alfie is 1m 12cm tall. Zac is 91cm tall. How much taller is Alfie than Zac?	3:19
2. What is the **6** worth in this number? 361	3:2	12. 8 x 6 =	3:10		
3. Write this number in numerals. four hundred and sixty two	3:3	13. Use 9 x 6 = 54 to solve: 9 x 12 =	3:11	22. What is the perimeter of this rectangle? ☐ 6cm 9cm	3:20
4. What number is labelled? 0 20 40	3:4	14. What is the missing number? 4 x ☐ = 50 - 22	3:12		
5. Make the largest number possible using the digits 6 4 8.	3:5	15. What is the missing number? 0.7 0.8 0.9 1.0 ☐	3:13	23. Cans of pop are 60p each. I have £2. How many cans of pop can I buy? 	3:21
6. 603 - 10 =	3:6	16. Circle $\frac{4}{1}$ of the marbles. 	3:14		
7. 723 - 312 =	3:7	17. What is $\frac{1}{4}$ of 12?	3:15	24. Draw the hands to show twenty five minutes past eight. 	3:22
8. Circle the best **estimate** to 48 + 89: 110 120 130 140	3:8	18. $\frac{1}{3}$ _ $\frac{?}{6}$ 	3:16		
9. One orange costs twenty pence. How much will five oranges cost?	3:9	19. Add the fractions. $\frac{2}{9}$ + $\frac{5}{9}$	3:17	25. How many minutes are equal to 180 seconds?	3:24
10. What is the missing number? ☐ - 23 = 9	3:9	20. Write the smallest fraction. $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{4}$ $\frac{1}{2}$	3:18		

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure and Geometry	
1. What is the missing number? 18 27 36 ☐ 54	1	11. 66 ÷ 6 =	6	21. There are 650 millilitres of liquid in a jug. How much more liquid needs to be added to make 1 litre?	11
2. What is the missing number? 49 ☐ 63 70 77	1	12. Two factors of 32 add up to 33. What are they?	6		
3. What is 1,000 **more** than 2,350?	2	13. 314 x 7 =	6	22. What is the perimeter of this rectangle? 1cm 	12
4. Round this number to the nearest 10: 3,275	4	14. In a class of 18 there are 2 girls for every 1 boy. How many are boys?	6		
5. What is 2 – 9?	2	15. $\frac{?}{3}$ _ $\frac{5}{1}$ 	7	23. At lunch, Kirsty has a starter and a main meal. She pays with a £20 note. How much change does she get? All Starters £4.95 All Mains £9.90	12
6. What is the value of the **3** in this number? 3,296	3	16. What is the missing number? ☐ 2.00 2.01 2.02 2.03	8		
7. Write the number 67 in Roman numerals.	43	17. $\frac{5}{1}$ + $\frac{8}{1}$	10	24. How would 6:15pm be shown on a 24 hour digital clock? ☐ :	11
8. 3,912 + 1,129 =	5	18. Write 0.25 as a fraction.	10		
9. Write the sum to check 492 + 210 = 702: 702 - ☐ = ☐	5	19. 45 ÷ 10 =	8	25. What is the special name for this type of triangle? 	12
10. I have £2. I spend £1.15 then 65p. How much do I have left?	5	20. Round 5.6 to the nearest whole number.	9		