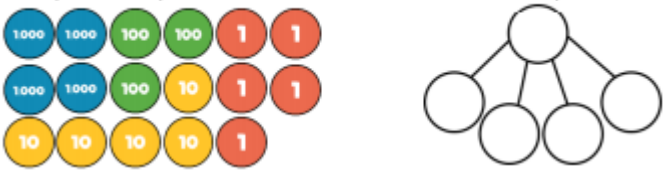
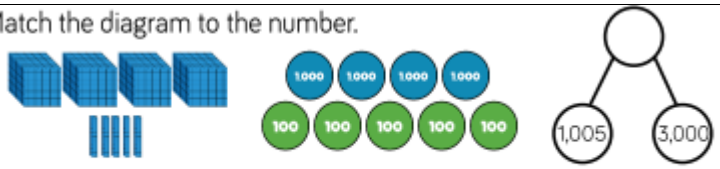
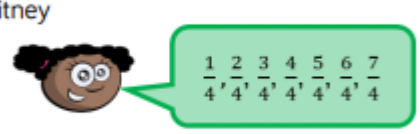
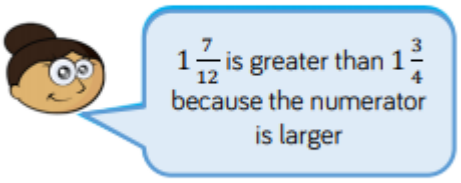
West Berkshire 'Maths Talk' Counts Summer Challenge: Year 5

1 August 2020	Complete the part-whole model for the number represented. 
2 August 2020	Create four 4-digit numbers to fit the following rules: • The tens digit is 3 • The hundreds digit is two more than the ones digit • The four digits have a total of 12
3 August 2020	Match the diagram to the number.  4,005 4,500 4,050
4 August 2020	Tommy says he can order the following numbers by only looking at the first three digits. 12,516 12,832 12,679 12,538 12,794 Is he correct? Explain your answer.
5 August 2020	Whitney says: Do you agree with Whitney? Explain why.

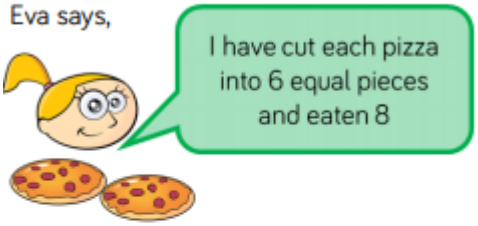
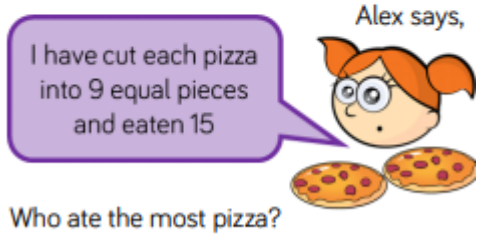
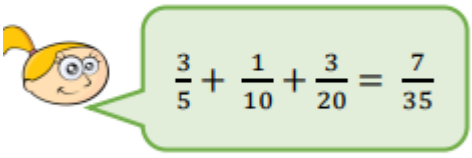
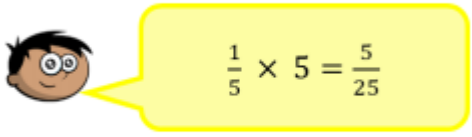
Source Credit: White Rose Maths

6 August 2020	Describe the value of the digit 7 in each of the following numbers. How do you know? 407,338 700,491 25,571
7 August 2020	**True or False?** • The temperature outside is −5 degrees, the temperature inside is 25 degrees. The difference is 20 degrees. • Four less than negative six is negative two. • 15 more than −2 is 13 Explain how you know each statement is true or false.
8 August 2020	What is the missing 4-digit number? |	Th	H	T	O | |	___	___	___	___ | | + | 6 | 3 | 9 | 5 | | 8 | 9 | 4 | 9 |
9 August 2020	Work out the missing numbers. |	?	4	?	3	? | | + | 2 | ? | 5 | ? | 2 | | 7 | 8 | 5 | 2 | 9 |

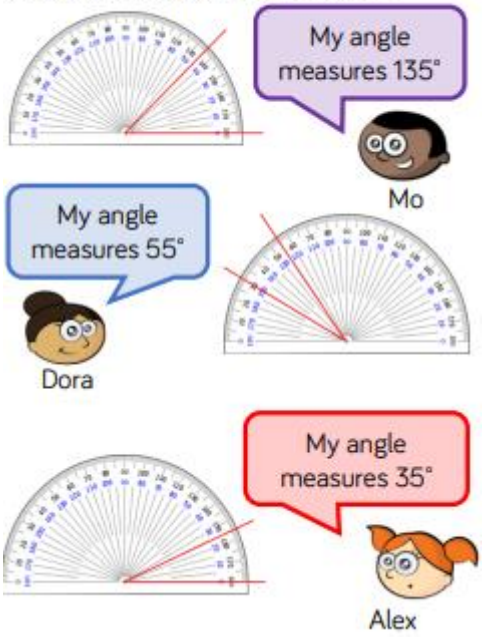
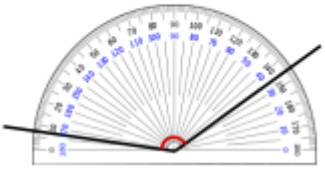
Source Credit: White Rose Maths

10 August 2020	**Spot the mistake** • $\frac{27}{5} = 5\frac{1}{5}$ • $\frac{27}{3} = 8$ • $\frac{27}{4} = 5\frac{7}{4}$ • $\frac{27}{10} = 20\frac{7}{10}$ What mistakes have been made? Can you find the correct answers?
11 August 2020	Three children are counting in quarters. Whitney  $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}, \frac{4}{4}, \frac{5}{4}, \frac{6}{4}, \frac{7}{4}$ Teddy $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}, 1, 1\frac{1}{4}, 1\frac{1}{2}, 1\frac{3}{4}$ Eva $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}, 1, 1\frac{1}{4}, 1\frac{2}{4}, 1\frac{3}{4}$ Who is counting correctly? Explain your reasons.
12 August 2020	Dora looks at the fractions $1\frac{7}{12}$ and $1\frac{3}{4}$ She says,  $1\frac{7}{12}$ is greater than $1\frac{3}{4}$ because the numerator is larger Do you agree?
13 August 2020	Put these angles in order of size. Explain how you know. a b c d

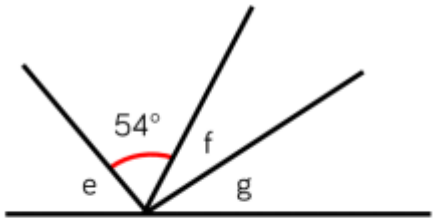
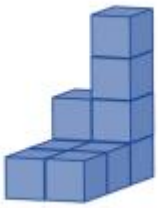
Source Credit: White Rose Maths

14 August 2020	Eva and Alex each have two identical pizzas. Eva says,   Who ate the most pizza? Use a drawing to support your answer.
15 August 2020	Eva is attempting to answer: $\frac{3}{5} + \frac{1}{10} + \frac{3}{20}$  Do you agree with Eva? Explain why.
16 August 2020	Jack has added 3 fractions together to get an answer of $\frac{17}{18}$ What 3 fractions could he have added? Can you find more than one answer?
17 August 2020	Amir is multiplying fractions by a whole number.  Can you explain his mistake?

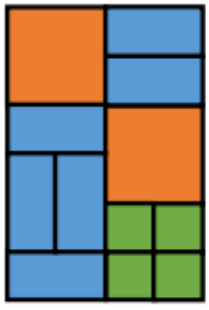
Source Credit: White Rose Maths

18 August 2020	Which angle is the odd one out? 180° 45° 79° 270° Could another angle be the odd one out for a different reason?
19 August 2020	Three children are measuring angles. Can you spot and explain their mistake? 
20 August 2020	Rosie is measuring an obtuse angle. What's her mistake? 
21 August 2020	**Always, sometimes or never true?** • Two acute angles next to each other make an obtuse angle. • Half an obtuse angle is an acute angle. • 180° is an obtuse angle

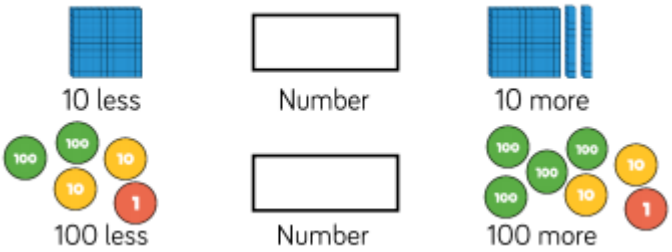
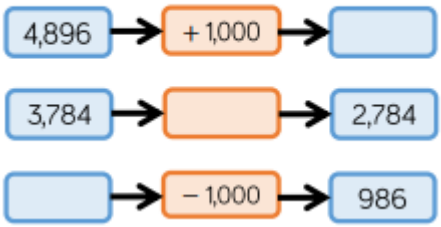
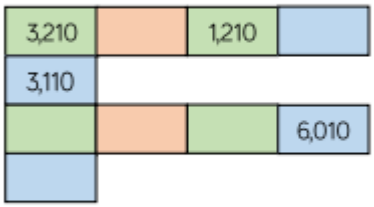
Source Credit: White Rose Maths

22 August 2020	 • The total of angle f and g are the same as angle e • Angle e is 9° more than the size of the given angle. • Angle f is 11° more than angle g Calculate the size of the angles.
23 August 2020	Eva has built this solid:  Tommy has built this solid: Eva thinks that her shape must have the greatest volume because it is taller. Do you agree? Explain your answer.
24 August 2020	Amir buys 2,500 grams of potatoes and 2,000 grams of carrots. He pays with a £5 note. How much change does he get?

Source Credit: White Rose Maths

25 August 2020	A 10 pence coin is 2 mm thick. Eva makes a pile of 10 pence coins worth £1.30 What is the height of the pile of coins in centimetres?
26 August 2020	Three children are running a race. • Whitney finishes the race in 3 minutes 5 seconds. • Eva finishes the race in 192 seconds. • Alex finishes the race in 2 minutes and 82 seconds. Who finishes the race first?
27 August 2020	Dexter has taken a bite of the chocolate bar. The chocolate bar was a rectangle. Can you work out how many squares of chocolate there were to start with?
28 August 2020	 Each orange square has an area of 24 cm². Calculate the total orange area. Calculate the blue area. Calculate the green area. What is the total area of the whole shape?

Source Credit: White Rose Maths

29 August 2020	Put the correct number in each box. 
30 August 2020	Complete the missing boxes: 
31 August 2020	Fill in the boxes by finding the patterns: 

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