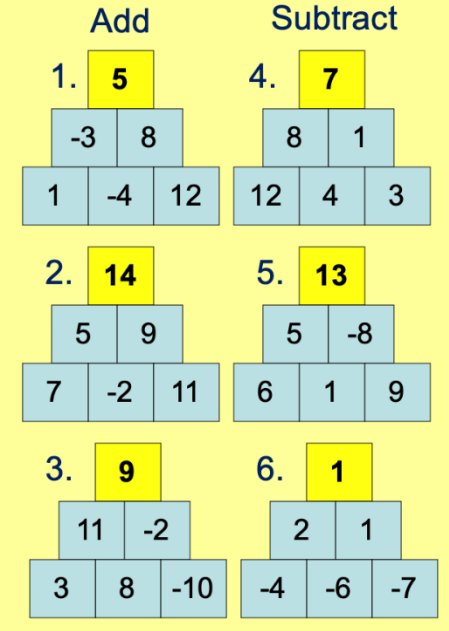
Year 4 Learning from Home
Summer 2, Week 8 – Answers

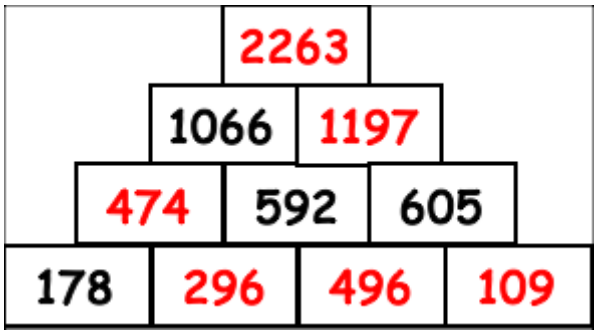
Year Four
Monday 20th July 2020
Maths, Arithmetic – Subtraction

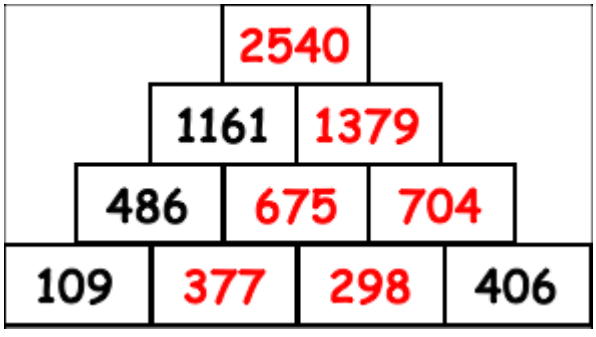
Challenge 1



Secret code – enigma

Challenge 2





Year Four
Tuesday 21st July 2020
Maths, NRich problems

Challenge 1 - Buying a Balloon

First we made a list of all the possible coins Lolla might have used to pay the clown. These were 1p, 2p, 5p, 10p, 20p, 50p, £1 and £2.

If Lolla paid using only 1p pieces, she would have paid 6p, which we thought was too little for a balloon.

If she paid using only £2 coins, she would have paid £12, which we thought was far too much for a balloon.

Then we looked at how many different prices Lola could have paid using exactly two different types of coin.

With the 1p and the 2p she could have paid 7p, 8p, 9p, 10p or 11p.

With the 1p and the 5p she could have paid 10p, 14p, 18p, 22p or 26p.

Here we thought we saw a pattern. We started off with five 1p coins and one of the other type of coin, and then to get the next largest amount we took away one 1p coin and added another of the other type of coin. So, as we did above, to go from 10p (five 1p coins and one 5p coin) to 14p (four 1p coins and two 5p coins) we took away 1p and added 5p. This is the same as adding 4p.

With the 1p and the 10p the smallest amount she could have paid was five 1p coins and one 10p coin, which makes 15p. 10p - 1p = 9p so we need to add 9p to 15p to get the next smallest amount of money - this is 24p, which is four 1p coins and two 10p coins.

Having found this pattern, we then split into groups to look at how many different prices Lola could have paid using exactly three different types of coin.

Here are some of our results:

With the 1p, the 2p and the 5p, she could have paid 11p, 12p, 13p, 14p, 15p, 16p, 17p, 19p, 20p or 23p.

With the 5p, the 10p and the 50p, she could have paid 80p, 85p, 90p, 95p, £1.25, £1.30, £1.35, £1.70, £1.75 or £2.15.

Challenge 2 – Which symbol?

$$16 + 18 = 34$$
$$47 - 28 = 19$$
$$18 \div 2 = 9$$
$$30 = 10 \times 3$$

$$51 - 36 = 15$$
$$51 = 36 + 15$$

$$45 \div 5 = 9$$
$$45 = 5 \times 9$$

$$27 + 36 = 63$$

$$70 - 14 = 56$$
$$70 = 14 + 56$$

$$7 \times 5 = 35$$

$$50 \div 5 = 10$$
$$50 = 5 \times 10$$

Year Four
Wednesday 22nd July 2020
Maths, WRM challenge

1. Jack – 0.37
   Freya – 0.3

2. 0.8, 0.9, 1
   $1\frac{3}{4}$, 2 , $2\frac{2}{4}$

3. 30
   3
   Any of the following:
   265, 266, 267, 268 or 269

4. <
   <
   =

5. £1.02

6. 4 ones and 2 tenths
   4.2