

Year 6 – Summer Block 3 – Statistics
Good morning, Year 6. It's 14th May 2020

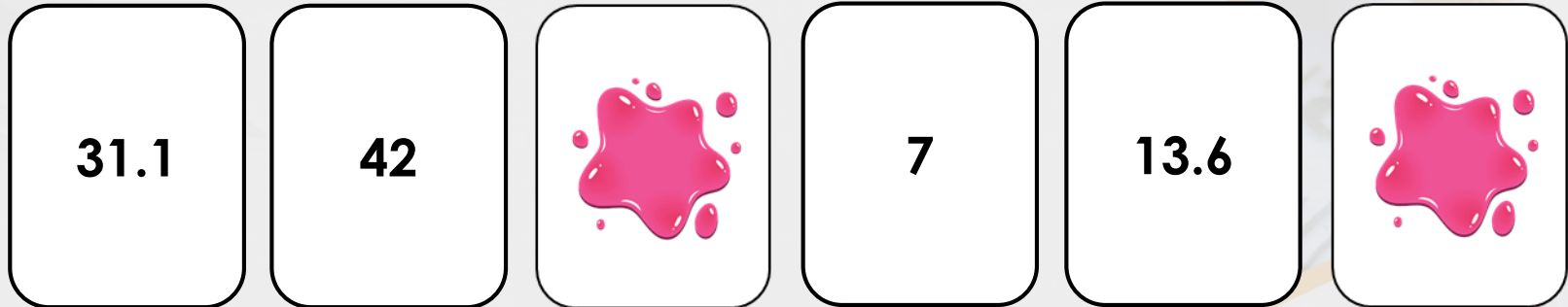
Part 3: Reasoning & Problem Solving

WALT Calculate the Mean

*See my notes in green to
help you.*

Problem Solving 1

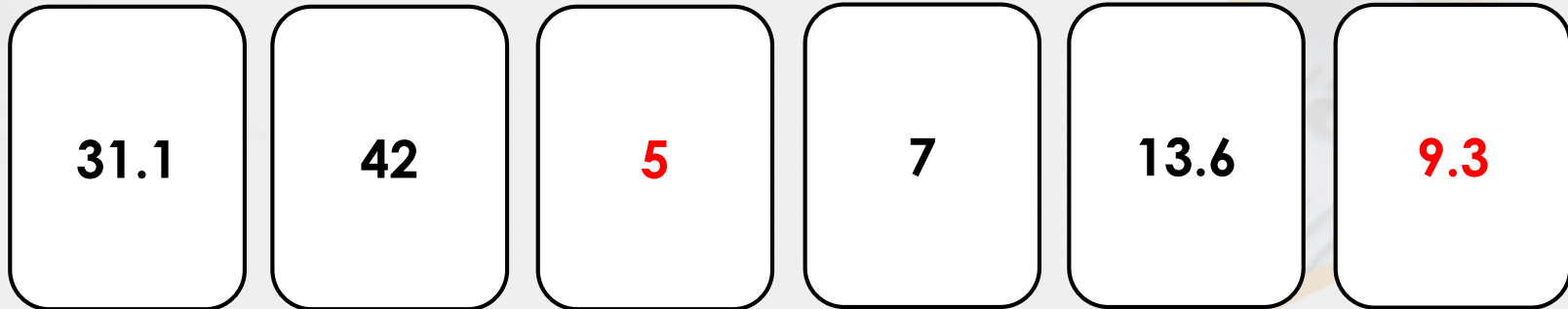
Leigh knows that the mean of his cards is 18.



He spilled paint on 2 of his cards.
What could the missing numbers be?

Problem Solving 1

Leigh knows that the mean of his cards is 18.



He spilled paint on 2 of his cards.
What could the missing numbers be?

Any two numbers with a sum of 14.3, e.g. 5 and 9.3

Because, working backwards from the mean, 18×6 (as 6 is the number of cards) = 108. So, 108 is the grand total. The numbers we know have a sum of 93.7 and the difference between 108 and 93.7 is 14.3.

Problem Solving 2

Four friends are trying to work out the mean of their spending money. Shauna gets £4 less than Ellie. Ellie gets £3 more than Asif. Asif gets £6 less than Max who gets £20.



What is their mean spending money?

Problem Solving 2

Four friends are trying to work out the mean of their spending money. Shauna gets £4 less than Ellie. Ellie gets £3 more than Asif. Asif gets £6 less than Max who gets £20. *Work backwards from Max!*

Max=£20, Asif=£14, Ellie=£17, Shauna=£13



What is their mean spending money?

$$£20 + £14 + £17 + £13 = £64$$

$$£64 \div 4 = £16$$

Reasoning 1

**Winston is calculating the mean of five numbers:
13, 61.4, 23.6, 19 and 3.**



To work out the mean, I found the sum of the four largest numbers and then divided them by the small number.

Do you agree with Winston? Why?

Reasoning 1

**Winston is calculating the mean of five numbers:
13, 61.4, 23.6, 19 and 3.**



**To work out the mean, I
found the sum of the four
largest numbers and then
divided them by the small
number.**

**Do you agree with Winston? Why?
Winston is incorrect because...**

Reasoning 1

Winston is calculating the mean of five numbers:
13, 61.4, 23.6, 19 and 3.



To work out the mean, I found the sum of the four largest numbers and then divided them by the small number.

Do you agree with Winston? Why?

Winston is incorrect because to calculate the mean, you must find the sum of all the numbers and then divide by the amount of numbers.

Well done! It's over to you now.

Go to Part 4 and choose your Star Challenge! Normal rules apply: page 1 will give you an easier challenge, page 2 will be about the same as what we've just practised and page 3 will be more of a stretch.

You only need to do the first set of questions on your chosen Star Challenge – the 'A' questions. If you want extra practice, you can then do the next set of questions – the 'B' questions. When you finish, don't forget to mark your answers before sharing, so I can see where you need help.