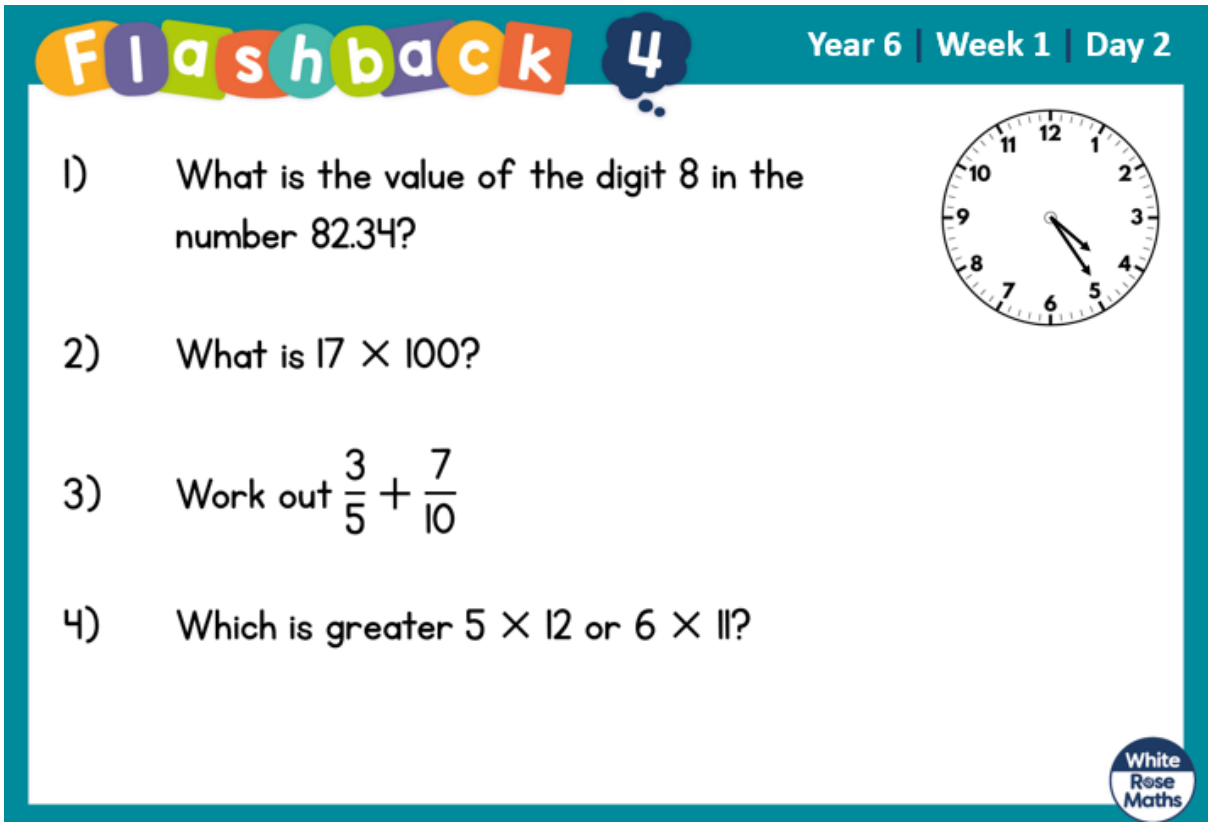
Day 2

Warm up:



Square and Prime numbers

Watch the following clip and answer the example questions on the website:

https://www.bbc.co.uk/bitesize/articles/zvv6t39

If you cannot watch the video, read the information below.

Prime numbers

Prime numbers are special numbers that can only be divided by themselves and 1.

19 is a prime number. It can only be divided by 1 and 19.

9 is not a prime number. It can be divided by 3 as well as 1 and 9.

The prime numbers below 20 are:

2, 3, 5, 7, 11, 13, 17, 19

Don't forget, the number 1 is not thought of as a prime number.

Square numbers

A square number is a number multiplied by itself. This can also be called 'a number squared'. The symbol for squared is ².

$2^2 = 2 \times 2 = 4$

$3^2 = 3 \times 3 = 9$

$4^2 = 4 \times 4 = 16$

$5^2 = 5 \times 5 = 25$

The square numbers up to 100 are:

1, 4, 9, 16, 25, 36, 49, 64, 81, 100

Practice

Activity 1

Practice activities

1. Answer these.

a) $3 \times 3 = 3^2 =$ _____

b) $10 \times 10 = 10^2 =$ _____

c) $4 \times 4 = 4^2 =$ _____

d) $6 \times 6 = 6^2 =$ _____

e) $2^2 =$ _____

f) $12^2 =$ _____

g) $5^2 =$ _____

h) $7^2 =$ _____

i) $8^2 =$ _____

j) $1^2 =$ _____

k) $9^2 =$ _____

l) $11^2 =$ _____

2. Investigate the number of factors for each of the square numbers in practice activity 1.

Complete this sentence:

Square numbers always have an _____ number of factors.

Activity 2

2a. Make all of the possible prime numbers using the digits cards below.

2	6
5	3

3b. Whose statement is correct?

Isaac

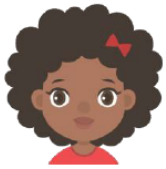
The prime number before 83 has a digit sum of 15.

The prime number before 83 has a digit sum of 16.

Lottie

Explain why.

4a. Asha says,



The sum of the 9th and 11th prime number is greater than the sum of the 8th and 10th.

Is she correct? Explain why.