CRACKING CALCULATIONS 2

Dig1t® games

Choose a prime number greater than 3.

Divide by 6.

Write down the remainder.

Do this with several prime numbers over 3. (make sure they are prime!).

What do you notice?

Challenge: What does this tell you about prime numbers?

Think of a number and then add 1 to it. Write your answer down.

Subtract 1 from the same number you first thought of and write this answer down too.

Work out the product of the 2 numbers you have written down.

Add 1 to your answer and then square root the result.

Do this again a few times but think of a different number to start with each time.

What do you notice about the numbers you start and end with?

Challenge: Would the same thing happen if you added and subtracted 2 (instead of 1) in the first two instructions?

Which of the other instructions would you need to change to make the same thing happen.

Dig's Tips:

"Write down what you are doing and record your results.
This will help you to spot patterns and lead to further understanding."

I've left this space blank for working, if you need it.