Homework Focus: To find prime numbers

Definition – a prime number is a number greater than 1 than can only be divided by itself and 1

1. Which are the prime numbers in this sequence?

   4, 5, 9, 17, 29, 35, 43

   2, 13, 16, 23, 30, 37

2. Which numbers are in the wrong column?

Prime Numbers	Composite Numbers (numbers than be divided by other numbers other than itself and 1)
71, 21, 97, 17	47, 32, 84, 61

3. **True or false. You <u>MUST</u> explain your reasoning.**
   - All prime numbers are odd.
   - 99 is the largest prime number under 100
   - 83 is a prime number
   - 2 is the only event prime number.
   - If the units digit is 9, the number will be a prime number.

Website to help you with this - https://www.mathsisfun.com/definitions/prime-number.html

Homework Focus: To recognise and use squared numbers

Definition – a squared number is when the same number is multiplied by itself. E.g. 2 x 2 = 4. We use ² symbol to show this.

1. **Calculate:**
   a) 3 squared
   b) 7^2
   c) 6 squared + 9 =
   d) 9^2-10 =

2. Circle the squared numbers in the sequences below.

11	16	21	22	36

25	9	10	23	46

62	64	66	68	60

3. Complete the table.

$\underline{}^{2}$	4 x 4	
5^2		
		64

4. 61 is the sum of two squared numbers.
   What could they be?

Website to help you with this - https://www.mathsisfun.com/definitions/square-number.html

Homework Focus: To recognise and use cubed numbers

Definition – a cubed number is when the same number is multiplied by itself and then itself again. E.g. 2 x 2 x 2 = 8. We use ³ symbol to show this.

1. Write down the cube numbers in the sequence
   3, 9, 8, 12, 15, 6, 64, 18, 21

   Solve the calculations
2. $5^3 + 2^3 =$
3. $4^3 - 3^3 =$

Use the **>, < or =** symbols to complete the statements in your books below.

4. 24 _____ 8^3
5. 10^3 _____ 1,000
6. 215 _____ 5^3

7. **Which one is the odd one out.**
   $3^3 + 23 =$
   $4^3 - 14 =$
   $2^3 + 32 =$

Website to help you with this - https://www.mathsisfun.com/definitions/cube-number.html