## Knowledge Summary

Year 7 - 9 Term 4 2023/24

## Maths



## Questions/Knowledge to deepen understanding

- How do you find the highest common factor and lowest common multiple of a set of 3 numbers?
- Explain why the LCM of a set of numbers isn't always the product of the numbers.
- Why does the sequence of square numbers go odd, even, odd, even? Is this also true for cube numbers?
- Link to proof with algebra


## Essential Questions/Knowledge

- Is two the only even prime number?
- Why is it called a square number? How many roots does a square number have?
- What is a prime number?
- What is an odd number, what is an even number?
- Why is it called a cube number?
- Is 1 a prime number? If not, why not?
- What is the difference between a factor and a multiple?
- When doing prime factor decomposition, does the order of the factors matter?
- What is the difference between HCF and LCM?
- What does product mean?
- What is a triangular number? Can you list the first 5?


## Key Concepts

- Use of the word product, express, prime factor
- Point out that multiples are always the same as the number or bigger.
- Point out that factors are always the same as the number or smaller.
- Point out that a square number is not doubling the number it is multiplying it by itself.
- Point out that a cube number is not multiplying the number by 3 , it is multiplying it by itself 3 times.


## How students will be assessed on their knowledge

- Diagnostic Questions
- Pre-summative Assessment - feed forward or summative assessment - feed forward
- Summative Assessment - End of term assessment


## Tier 2 and 3 vocabulary linked to the unit

- Exponent
- Factor
- Multiple
- Prime
- HCF/LCM
- Product
- Common
- Decomposition

