Students are learning about Sequences at this point in Year 7 because this topic provides opportunity to explore beauty within Maths. Being able to recognise patterns from number and diagrams helps with the fundamentals of problem solving.

## Previous topic: Averages

Next topic: Ratio and proportion
Next algebra topic: algebraic manipulation (in year 8)

## Core knowledge/skills/concepts

## Content:

- Find the next term or missing terms in simple linear sequences (including pattern sequences)
- Recap simple algebraic substitution
- Identify different types of sequence (linear, geometric, Fibonacci etc)
- Generate terms of a sequence using a term to term or position to term rule
-Write an expression to describe the nth term of a linear sequence
-Use substitution to generate a specific term in a sequence given the nth term
-Use the nth term of a sequence to deduce if a given number is in a sequence


## Year 7 Maths <br> Term 5 Sequences

## Essential vocabulary

## arithmetic

consecutive
expression
finite
geometric
generate
infinite
linear sequence
nth term
position to term
quadratic sequence
rule
sequence
substitute
term
term to term

## Threshold concepts

- Find the next term or missing terms in simple linear sequences (including pattern sequences)
- Recap simple algebraic substitution
- Generate terms of a sequence using a term to term or position to term rule
-Write an expression to describe the nth term of a linear sequence


## Opportunities for reading

## How and when will the core learning be assessed?

Mid-topic Assessment, End of Topic Assessment, and Assessment 3 (May)

## Links to other topics/subjects

Art: fibonacci sequence and golden ratio looking at proportions in sculptures, building and nature Link to algebra topics and also problem solving questions (pattern spotting)

