LEARNING JOURNEY Multiples of Solving Continuing a Substitution Recap Algebraic **Sequences** Equations sequence **Expressions** MILL Linear or Generating a non-linear? KKK sequence -Position to ern ASSESSMENT Using the nth rule Finding the nth 111 term term 111 **Plotting Graphs** Plotting a Linear or Expressing algebraic straight line **Plotting** Non-linear? relationships by >> graph from an coordinates Using the generate coordinates equation using a rule equation ASSESSMENT 114 **Gradients and** Investigating (Drawing a intercepts y = mx + cgraph from a 1 gradient and Finding the point gradient Finding the Finding the v Finding the gradient Finding the >>>> equation of a intercept from **>>** from an equation y-intercept linear line the equation

MATHS

Patterns appear all around us in the real world. Patterns such as the way turtle shells look or the formation of seeds in a sunflower can all be explored through maths. As mathematicians we use maths to try and make sense of these patterns. Graphs is the core theme of the entire year and this half term will consolidate your understanding of ratio and proportion, whilst building on your algebra skills from Year 8. This half term we will be looking at graphs in an abstract way. We will use the skills you develop to help us understand real-life graphs next half term.

VOCABULARY: Sequence, Term, Position, Term to term, Position to term, Integer, Arithmetic, Non-arithmetic, Geometric, Linear, Non-linear, Ascending, Descending, Periodic, Curve, Line segment, Line, Intercept, Equation, Substitute, Gradient, Plot, Coordinate

TUDOR HABITS AND VALUES

Graphs are a difficult concept to try and understand. They can be very abstract. As mathematicians we need to show grit and determination to help us work through these difficult concepts.