Topic Description - Term1
Constructions and Pythagoras
Understand and use Pythagoras's theorem
Use Pythagoras's theorem in real life contexts
Construct triangle1(ASA, SAS)
Constructing triangle2(SSS, RHS)
Using compasses and ruler to construct:
bisector of an angle
mid-point and perpendicular bisector of a line segment
Perpendicular bisector of a line.
Draw the locus of point from a given rule.
Sequences
Describe a linear sequence using a term to term rule
Find a position to term (nth) rule for a linear sequence.
Explore triangular and square numbers
describe a general sequence using a recursive formula
Explore the long term behaviour of a sequence defined re
Multiplicative thinking(Ratio and Proportions)
understand and use ratio notation including reduction to simplest form
Describe proportion using fraction notation and calculate fractional change
Solve problems involving ratio
Solving problems using direct proportion
Interpret maps and scale drawings
Solving problems involving proportional reasoning, including financial problems

Topic Description – Term2
Measures,Perimeter and Area
Convert between metric units and imperial units
Understand whether a formula represents a length, area or volume
Calculate and solve problems involving perimeters of 2-D
shapes (including circles) and composite shapes
Calculate and solve problems involving area of 2D shape including area of circle
Calculate surface area and volume of prisms
Use compound units such as speed, density and pressure to solve problems
Expression
Know and use the index laws
Multiply brackets in two linear expressions(including expansion of two linear brackets)
Factorise expressions by taking common factors(including difference of two squares)
Formulae and Equations
Substitute values in formulae to find unknown
Solve linear equations that involve brackets(including solving equations and real life problems)
Solving equations with fractions
Fractions , decimals and percentages (We are Not doing recurring decimals and reciprocals)
Add, subtract, multiply and divide fractions (including mixed numbers).
Find percentages increases and decreases
Solve percentages problems using a decimal multiplier(including reverse percentages)
Calculate a repeated percentage increase and decrease

Topic Description- Term3

Graphs
Find gradient and plotting graphs of linear functions
Find equation of straight-line graphs
Plot and interpret distance time graphs
Plot and interpret real-life and time series graphs.

Whole numbers and decimals - Decimals calculations
Round numbers to a given number of significant figures
Use rounding to make estimates
Find the upper and lower bounds of a calculation or measurement
Know and use the correct order of operations
Use a range of mental and written strategies for mental decimal calculations
Use a calculator for complex calculations
Interpret the calculator display

Probability
Evaluate uncertainty and risk in real situations
Identify and calculate probabilities for independent events
Use tree diagrams to calculate probabilities
Calculate probabilities from experimental data.
Calculated probabilities using a Venn diagram

Equations
Solve simultaneous equations by elimination
Solve simultaneous equation by drawing graphs
Solve linear equalities with one variable
Find approximate solution to equations using trial - and - improvement.