# CURRICULUM CONTENT

#### 1) Computation and number

- Operations with whole numbers
- Negative numbers
- Calculating with fractions
- Calculating with decimals
- Fractions and decimals
- Rounding off numbers
- Indices
- Standard form
- Number bases
- Ratio and proportion

#### 2) Measurement

- Length
- Areas of triangles and quadrilaterals
- Circles
- Area
- Arcs and sectors
- Surface area
- Volume
- Measurement and scales

#### 3) Consumer arithmetic

- Money management
- Profit and loss
- Interest and investment
- Hire purchase and mortgages
- Rates and taxes

#### 4) Algebra 1

- Basic algebra
- Binary operations
- Linear equations
- Linear inequalities
- Simultaneous equations
- Word problems

## 5) Investigations and problem solving

- Patterns and sequences
- Investigations

### 6) Sets

- Union, intersection and complement
- Venn diagrams with three sets
- Finding the number of subsets
- Solving problems

## 7) Geometry

- Angles
- Symmetry
- Classifying shapes
- Polygons
- Constructions
- Solids
- Circle theorems

## 8) Functions 1

- Mapping diagrams
- Function notation
- Functions, relations and graphs
- Working with functions-conversions

### 9) Graphs 1

- Reading and plotting graphs
- Linear relations
- Equations of lines

## 10) Trigonometry 1

- Right-angled triangles and Pythagoras' theorem
- Sines, cosines and tangents
- Bearings
- The sine and cosine rules

## 11) Statistics

- Collecting data
- Organizing data
- Displaying data
- Averages-measures of central tendency
- Measures of dispersion

# 12) **Probability**

- The idea of probability
- Experimental probability
- Theoretical probability
- Expected values

### **13)** Transformations 1

- Translations
- Rotations
- Reflections
- Enlargements
- Similar triangles
- Congruency

