MATHEMATICS

Foundation

SPRINGFIELD SCHOOL

SKILLS

Year 11

- Use of relevant maths vocabulary
- Consistently applying maths knowledge to GCSE exam style questions
- Breaking down multi-step or more complex questions to identify the knowledge covered
- Applying knowledge to real-life situations
- Focus on revision techniques

Year 10

- Use of relevant maths vocabulary
- Continuing to apply existing knowledge to more challenging topics
- Continuing to apply maths knowledge to GCSE style questions
- Continuing to apply knowledge to real-life situations
- Focus on revision techniques for year 11

Year 9

- Use of relevant maths vocabulary
- Applying existing knowledge to more challenging topics
- Start applying maths knowledge to GCSE style questions
- Use of mathematical equipment: protractor & compasses
- Applying knowledge to real-life situations

Year 8

- Use of relevant maths vocabulary
- Returning, strengthening & extending key skills/knowledge from Y7
- Applying learnt knowledge to problem solving style questions

Year 7

- Introduction & use of relevant maths vocabulary
- Reinforcing existing numeracy skills
- Practising new concepts like algebra
- Further practice on written calculation methods
- Introduction to the 'balance method' for solving equations & inequalities

KNOWLEDGE

The future
-Study maths at A level and degree level
- Confidently use maths in their adult life (either within financing or within their chosen career)

Focused Revision

Based on mock analysis

Yr 11

Column Vectors | Non-Linear Graphs | Transformations and Similarity | Linear Gra | Sequences | Probability | Angles, Pythagoras & Trigonometry

Yr 10

Indices and Standard Form | Algebraic Graphs, Solving Equations and Inequalities | Fractions | Constructions & Angles | Ratio, Proportion & Percentages | Pythagoras & Trigonometry | Measures | Perimeter, Area & Volume | Manipulating Algebra | Statistics | Properties of Number

Expanding, factorising and completing the square

Representing data

Yr 9

Statistics | Graphical Representations | Trigonometry | Standard Form | Expressions and Formulae | Non-Linear Sequences | Probability | Pythagoras | Similarity and Congruence

Fibonacci, quadratic and geometric sequences

Finding Scale Factors, using congruency rules

Yr 8

Constructions | Angles and Polygons | Perimeter, Area and Volume | Representing Data and Averages | Percentages and Proportion | Linear Graphs | Sequences | Solving Equations | Estimation and Rounding

Angles in parallel lines, interior and exterior angles

Ungrouped and grouped data

Mean, Median, Mode and range

y=mx+c, finding the gradient and the y intercept

Solving linear equations with one variable

Yr 7

Transformations | Ratio | Fractions | Perimeter and Area | Coordinates | Expressions and Equations | Arithmetic | Number Properties | Place Value

Squares, cubes, roots and primes, including prime factorisation