SAFFRON VALLEY COLLEGIATE
BE READY, BE RESPECTFUL, BE SAFE

Saffron Valley Collegiate Maths Learning Journey (Foundation)

Strand key: Number | Algebra | Geometry | Probability | Statistics | Ratio & Proportion | Revision | Assessment

11 YEAR

Content recap — So that.... — Explain why.... — Exam questions — Question familiarity

FLUENCY REVISION — **REASONING** — **MOCKS AND EXAM STYLE** — **REVISION AND COMMUNICATION** — **GCSE / F.S. EXAM**

Ongoing assessment — Use of online platform — Prove that... — Understanding mark schemes — Intervention groups

Simultaneous equations — Expanding brackets — Expanding brackets — Expanding brackets — Expanding brackets

FURTHER ALGEBRA

Show odd and even numbers algebraically

Writing column vectors — Arc Length — Sector area — Geometric proof — Approximate solutions of a graph — Turning Points — Pythagoras — Real life graphs — Mid point — Straight-line graphs

SIMILARITY & VECTORS — **PERIMETER AREA & VOLUME 2** — **INDICES** — **QUADRATIC GRAPHS** — **RIGHT-ANGLED TRIANGLES** — **GRAPHS**

Represent vectors graphically — Identify congruent shape — Surface area and volume of complex shapes — Four operations involving index law — Difference of two squares — Expanding brackets — Trigonometry

10 YEAR

Plans and elevations — Rate of pay

Parallel and perpendicular lines — Type of data, primary, secondary, quantitative and qualitative — Area and perimeter 2D shape — Volume and prisms — Enlargement — Translation — Scale model, real life

Interior and exterior angles in a polygon

ANGLES — **AVERAGES & RANGE** — **PERIMETER, AREA & VOLUME** — **TRANSFORMATIONS** — **RATIOS** — **LOCI & BEARINGS** — **MULTIPLICATIVE REASONING**

Venn diagrams — Properties of quadrilaterals — Averages from a table — Surface area — Reflection — Rotation — Direct and inverse proportion — Construction — Bearings — Compound measures

PROBABILITY — Tree diagrams

9 YEAR

Pie charts — Scatter graphs — Forming sequences — Nth term rule — Changing the subject — Four operations with fractions — Mixed and improper fractions — Forming Expressions — Substitution — Indices Powers & Roots — Decimals

GRAPHS, TABLES & CHARTS — **EQUATIONS, INEQUALITIES & SEQUENCES** — **FRACTIONS & PERCENTAGES** — **ALGEBRA** — **NUMBER**

Averages — Unknown on both sides — Calculator & Non Calculator percentages — Expanding and Factorising — Integers & Place values

8 YEAR

Square & Cube Numbers — Sums with integers /decimals — Collecting Like Terms — Expanding brackets — Best Buy — Percentages — Fraction of Amounts — Sharing in a Ratio — Perimeter – Area of 2D shapes

OPERATING WITH NUMBER — **ALGEBRA** — **MULTIPLICATIVE REASONING** — **FRACTIONS & RATIO** — **GEOMETRY**

Factors Multiples & Primes

Fractions Decimal & Percentages

BIDMAS BODMAS — Negatives — Forming Expressions — Factorising — Solve Linear Equations — Conversion Graph — Simplifying Ratio — Angles & general Properties of 2D Shapes

NUMBER PROPERTIES

Rounding & Estimation

7 YEAR

Schemes of Learning are designed to ensure students' progress based on understanding and readiness for the next stage. Stretch and challenge are at the heart of the curriculum

Students will be able to solve problems and apply their knowledge to routine and non-routine problems

Induction Assessment (BKSB) Math Baseline Assessment (Edexcel, Sparx)

Topic Test and termly assessments are designed to assess knowledge and maximise progress

Manipulatives will be used to help students develop concrete, Pictorial and abstract understanding

Students will develop CONCEPTUAL UNDERSTANDING and become FLUENT mathematicians leading to the ability to RECALL and APPLY knowledge rapidly

Michael Thompson (2024)