



EPCHS MATHEMATICS DEPARTMENT:

LEARNING JOURNEY YEAR 11





ENLARGEMENT & SIMILARITY

Scale Factors Enlargement Similar triangles Similar areas

PERCENTAGES

Surface area Fraction, decimal, percentages equivalence Percentage calculations Multipliers

AREA & VOLUME Area

SHAPES &

Properties of shapes Symmetry Congruence Reflection Rotation Combined

TRIGONOMETRY

Pythagoras Right-angle trigonometry TRANSFORMATIONS Exact trigonometric values Trigonometric graphs Sine & cosine rules

FURTHER ALGEBRA SKILLS Inequalities

Summer Term

Spring Term

GRAPHS & TABLES Coordinates Linear graphs Quadratic graphs Special graphs

Real-life tables & graphs

STATISTICS

Data collection Averages & measures of spread Diagrams & charts

DECIMALS

Place value Fraction to decimal conversion Calculating with decimals

FRACTIONS

Fraction equivalence Comparing fractions Calculating with fraction:

TOP TIPS FOR PARENTS

- **Use of Sparx Maths**
- Ensure pupils have a Calculator fx-83-GT-CW
- Ensure pupils have protractor and compass
- Purchase the Collins OCR GCSE revision workbook

ENRICHMENT

- Sparxmaths.uk
- Corbettmaths.com
- **UKMT** challenge
- Mathsgenie.co.uk
- OCR past papers

FUNCTIONS & EQUATIONS

Functions Linear equations Quadratic equations Simultaneous equations

Units of measurement Rounding & approximation Compound measures

RATIO & PROPORTION

Proportional reasoning MEASURES & ESTIMATION Direct & reverse proportion

ALGEBRA SKILLS

Algebraic notation Simplifying expressions **Expanding & factorising** Algebraic fractions

SEQUENCES Linear Geometric

Special sequences

NUMBER

Factors Multiples Primes Powers Roots & Surds Standard form

Autumn Term