



OCR
Oxford Cambridge and RSA



EPCHS MATHEMATICS DEPARTMENT: LEARNING JOURNEY YEAR 10



ENLARGEMENT & SIMILARITY

- Scale Factors
- Enlargement
- Similar triangles
- Similar areas

AREA & VOLUME

- Fraction, decimal, percentages equivalence
- Percentage calculations
- Multiples

Area
Surface area
Volume

SHAPES & TRANSFORMATIONS

- Properties of shapes
- Symmetry
- Congruence
- Reflection
- Rotation
- Combined

TRIGONOMETRY

- Pythagoras
- Right-angle trigonometry
- Exact trigonometric values
- Trigonometric graphs

FURTHER ALGEBRA SKILLS

- Formulae
- Inequalities

Summer Term

- PROBABILITY
- Probability scale
- Single events
- Sample space
- Expected outcomes
- Venn diagrams
- Relative frequency
- Tree diagrams
- Conditional probability

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 fractions

CONSTRUCTION & LOCI

- Measuring & drawing lines & angles
- Geometric notation
- Constructing triangles
- Standard constructions
- Loci

ANGLES

- Polygons
- Bearings
- Angles
- Circle theorems

TRANSLATION & VECTORS

- Translations
- Vectors

FUNCTIONS & EQUATIONS

- Functions
- Linear equations
- Quadratic equations
- Simultaneous equations
- Iteration

MEASURES & ESTIMATION

- Units of measurement
- Rounding & approximation
- Compound measures

RATIO & PROPORTION

- Proportional reasoning
- Direct & reverse proportion
- Scale diagrams
- Ratio

ALGEBRA SKILLS

- Algebraic notation
- Simplifying expressions
- Expanding & factorizing
- Algebraic fractions

SEQUENCES

- Linear
- Geometric
- Quadratic
- Special sequences

NUMBER

- Factors
- Multiples
- Primes
- Powers
- Roots & Surds
- Standard form

Autumn Term

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