KS3 MATHS

Immanuel MATHS — You can count on us

IMMANUEL COLLEGE

Y7

DESCRIBE, CONTINUE AND USE SEQUENCES

UNDERSTAND EQUALITY

WRITE, ORDER AND COMPARE NUMBER TO 1 BILLION

SEQUENCES / ALGEBRAIC NOTATION / EQUALITY AND EQUIVALENCE

PLACE VALUE & ORDERING / FRACTION, DECIMAL, PERCENTAGE EQUIVALENCE

USE AND MANIPULATE ALGEBRAIC NOTION

SOLVE SIMPLE EQUATIONS

CONVERT BETWEEN FRACTIONS, DECIMALS AND PERCENTAGE

ADD AND SUBTRACT FRACTIONS

SOLVE POBLEMS WITH AREA USING MULTIPLICATION AND DIVISION

DIRECTED NUMBERS / ADDITION AND SUBTRACTION OF FRACTIONS

PROBLEM SOLVING WITH FOUR OPERATIONS / FRACTIONS AND PERCENT OF AMOUNTS

PERFORM OPERATIONS ACROSS ZERO

SOLVE POBLEMS WITH MONEY AND TIMETABLES USING ADDITION

CONSTRUCT ANGLES AND SHAPES

BASICS OF PROBABILITY

CONSTRUCTION / GEOMETRIC REASONING

DEVELOP NUMBER SENSE / PROBABILITY / PRIME NUMBERS AND PROOF

ANGLE PROPERTIES

NUMBER PROPERTIES

Y8

MULTIPLICATION AND DIVISION OF SIMPLE FRACTIONS

COMPARE RATIONS AND FRACTIONS

SAMPLE SPACE DIAGRAMS

VENN DIAGRAMS

NUMBER TYPES

PRIME NUMBERS AND PROOF / PROBABILITY

RATIO AND SCALE / MULTIPLICATIVE CHANGE / MULTIPLYING AND DIVIDING FRACTIONS

TWO WAY TABLES

SETS

CONJECTURES

CONVERSION GRAPHS

CURRENCIES

WRITE AND RECOGNISE RATIO

FRACTIONS AND PERCENTS OF AMOUNTS

CALCULATE IN STANDARD FORM

EXPANDING BRACKETS

FORM AND SOLVE EQUATIONS

GENERATE SEQUENCES

FRACTIONS AND PERCENTAGES / STANDARD FORM

BRACKETS, EQUATIONS AND INEQUALITIES / SEQUENCES

CONVERSION BETWEEN FRACTIONS/ DECIMALES/ PERCENTAGES

CONVERSION BETWEEN ORDINCARY NUMBERS AND STANDARD FORM

FACTORISE SINGLE BRACKETS

FORM AND SOLVE INEQUALITIES

NTH TERM AND INDEX LAWS

IDENTIFY OUTLIERS

RANGE OF CHARTS

SET UP STATISTICAL ENQUIRY

BASIC CONSTRUCTION

DATA CYCLE / MEASURES OF LOCATION

ANGLES IN PARALLEL LINES AND POLYGONS / AREA

Y9

KNOW AND USE DIFFERENT AVERAGES

CARRY OUT STATISTICAL ENQUIRY

AREA AND PERIMETER RULES

ANGLE PROPERTIES

GRADIENTS AND INTERCEPTS

LINE EQUATIONS

CONJECTURES AND BINOMINLAS

LANGUAGE OF SHAPES

SURFACE AREA AND VOLUME OF SHAPES

CONSTRUCTING ANGLES AND SHAPES

REASONING WITH ALGEBRA

CONSTRUCTING IN 2 & 3 DIMENSIONS

LINES AND REAL LIFE GRAPHS

EQUATIONS AND INEQUALITIES

REARRANGING FORMULA

THE 100 GRID

2D/3D SHAPES

SKETCHING 2D/3D SHAPES

LOCUS OF DISTANCES FROM POINTS

TRANSLATIONS AND REFLECTIONS

ANGLES

ADDING, SUBTRACTING, MULTIPLYING, DIVIDE

PROBLEM SOLVING

REASONING WITH GEOMETRY

REASONING WITH NUMBER

TRIANGLES AND PYTHAGORAS

ROTATIONAL SYMMETRY

COMPOUND INTEREST, VAT, EXCHANGE RATES, UNIT PRICING PROBLEMS

HCF AND LCM

INTEGERS, REAL AND RATIONAL NUMBERS

ENLARGEMENT AND SIMILARITY

'BEST BUY' PROBLEMS

RELATIVE FREQUENCY

PROBABILITY

INEQUALITIES

REASONING WITH PROPORTION

REPRESENTATIONS & REVISION

SCALE FACTOR

DIRECT AND INVERSE PROPORTION

CONVERSION GRAPHS

OUTCOMES AND INDEPENDENT EVENTS

QUADRATIC GRAPHS

PROGRESS ONTO YEAR 10 - KS4