

# MATHEMATICS REVISION TOPICS FOR THE SUMMER 2018 C.E. EXAM FOR YEAR 8

NON CALCULATOR PAPER LEVEL 2 – some of these topics may appear in the calculator paper!

## NUMBER

FOUR RULES OF NUMBER – money problems and decimals

BIDMAS

PRODUCT OF PRIME FACTORS – including associated calculations

□ ORDERING FRACTIONS, DECIMALS AND PERCENTAGES

□ PROPERTIES OF NUMBER

□ PERCENTAGES AND FRACTIONS, OF A QUANTITY

□ EXPRESS ONE NUMBER AS A PERCENTAGE OR FRACTION OF ANOTHER NUMBER

□ RATIO AND PROPORTIONAL CHANGE

□ FOUR RULES OF FRACTIONS – word problems

□ SEQUENCES

## ALGEBRA

□ SUBSTITUTION

□ SOLVING EQUATIONS

## SHAPE AND SPACE

□ CALCULATIONS ASSOCIATED WITH ANGLES AND PARALLEL LINES

□ TRANSFORMATIONS – including reflection, rotation and translation and enlargement

□ CLASSIFYING 2D SHAPES – naming and recognizing 2D shapes

□ SURFACE AREA AND VOLUME

□ CONSTRUCTING 2D SHAPES AND OTHER CONSTRUCTIONS

## HANDLING DATA

□ CONSTRUCTING PIE CHARTS – using degrees, fractions or percentages

□ PROBABILITY – using tables or possibility spaces

□ AVERAGES – using frequency tables

□ AVERAGE SPEED

□ CONVERSION GRAPHS

# MATHEMATICS REVISION TOPICS FOR THE SUMMER 2017 C.E. EXAM FOR YEAR 8

**CALCULATOR PAPER LEVEL 2** – some of these topics may appear in the non calculator paper!

## NUMBER

EFFECTIVE USE OF THE CALCULATOR – including significant figures, decimal places and rounding

PERCENTAGE CALCULATIONS – using word problems

SEQUENCES

PROPORTIONAL CHANGE AND RATIO

## ALGEBRA

SIMPLIFYING ALGEBRAIC EXPRESSIONS – including brackets and factorising

GRAPHS OF STRAIGHT LINE EQUATIONS – using a table of values

FORMING AND SOLVING ALGEBRAIC EXPRESSIONS

## SHAPE AND SPACE

CONSTRUCTING TRIANGLES

INTERNAL AND EXTERNAL ANGLE CALCULATIONS

CIRCLE CALCULATIONS

NETS, SURFACE AREA, VOLUME, AREA AND PERIMETER

CALCULATIONS ASSOCIATED WITH ANGLES AND PARALLEL LINES

TRANSFORMATIONS – including reflection, rotation, translation and enlargement

BEARINGS

## DATA HANDLING

PROBABILITY

SCATTER GRAPHS

AVERAGES – including the use of tables

PIE CHARTS

## MEASURES

METRIC AND IMPERIAL MEASURES

AVERAGE SPEED

### LEVEL 3 PUPILS SHOULD ALSO INCLUDE:-

- TRIAL AND IMPROVEMENT
- MULTIPLYING AND DIVIDING FRACTIONS USING MIXED NUMBERS
- NTH TERM OF SEQUENCES
- SOLVING HARDER LINEAR EQUATIONS – including fractions with brackets
- GRAPHS INCLUDING QUADRATICS
- SIMULTANEOUS EQUATIONS
- INEQUALITIES
- PYTHAGORAS' THEOREM
- VOLUME OF A RIGHT CYLINDER
- COMPOUND MEASURES – average speed of multi stage journeys