# FINAL EXAMINATION MAY/JUNE 2022 MATHEMATICS PORTION YEAR 8

PAPER 1: NON - CALCULATOR - 60 MARKS - 1 HOUR 15 MINS

PAPER 2: CALCULATOR - 40 MARKS - 45 MINS

# Text book: KS3 Maths Progress Delta 2

# Unit 1 – Factors and powers

- 1.1 Prime factor decomposition
- 1.2 Laws of indices
- 1.3 Powers of 10
- 1.4 Calculating and estimating

#### Unit 2 – Working with powers

- 2.1 Simplifying expressions
- 2.2 More simplifying
- 2.3 Expanding and factorising expressions
- 2.4 Substitution and solving

#### Unit 3 – 2D shapes and 3D Solids

- 3.2 Surface area of prisms
- 3.3 Volume of prisms
- 3.4 Circumference of a circle
- 3.5 Area of a circle
- 3.6 Cylinders
- 3.7 Pythagoras' Theorem

#### Unit 4 – Real life graphs

- 4.3 Distance-time graph
- 4.4 Rates of change

#### **Unit 5 – Transformations**

- 5.1 Reflection and translation
- 5.2 Rotation
- 5.3 Enlargement
- 5.4 More enlargement

# Unit 6 – Fractions, decimals and percentages

- 6.1 Recurring decimal
- 6.2 Using percentages
- 6.3 Percentage change
- 6.4 Repeated percentage change

#### **Unit 7 – Constructions and Loci**

- 7.1 Accurate Drawings
- 7.2 Constructing shapes
- 7.3 Constructions 1
- 7.4 Constructions 2

#### **Unit 8 – Probability**

- 8.1 Comparing probability
- 8.2 Mutually exclusive events
- 8.3 Estimating probability
- 8.4 Experimental probability
- 8.5 Probability diagrams

# **Unit 9 – Scale drawings and measures**

- 9.4 Congruent and similar shapes
- 9.5 Solving geometry problems

# Unit 10 - Graphs

- 10.1 Plotting linear graphs
- 10.2 The gradient
- 10.3 y = mx + c
- 10.4 Parallel and perpendicular lines

# Text book: KS3 Maths Progress Delta 3

#### Unit 1 – Powers and roots

- 1.2 Indices
- 1.3 Standard form

# **Unit 2 – Quadratics**

2.2 Expanding

# Unit 3 – Inequalities, equations formula

- 3.2 Using index laws
- 3.3Solving equations
- 3.4Changing the subject

# **Unit 4 – Estimating Statistics**

4.3 Estimating Statistics

# **Unit 5 – Multiplicative reasoning**

5.4 Arcs and sectors

#### **Unit 8 – Graphical solutions**

8.1 Simultaneous equations

# <u>Textbook</u>: KS3 Maths Progress Delta 1 – Revision

# **Topics** Unit 1 - Analyzing and displaying data

- 1.2 Averages and range
- 1.3 Grouped Data
- 1.4 More Graphs
- 1.5 Pie Charts

# **Unit 5- Angles and shapes**

- 5.1 Angles and parallel lines
- 5.2 Triangles
- 5.3 Quadrilaterals
- 5.4 Polygons

# **Unit 8 - Multiplicative reasoning**

- 8.2 Writing Ratios
- 8.3 Sharing in a given Ratio
- 8.4 Proportion
- 8.5 Proportional reasoning
- 8.6Using the unitary method

# **Unit 10 – Sequences and graphs**

- 10.1 Sequences
- 10.2 The nth term
- 10.3 Pattern Sequences

#### *Note:*

#### All the works done in notebook and worksheet

# **GL Progress Test in Mathematics**

GL Progress Test in Math assesses pupil's current knowledge and skills appropriate to age related expectations.

# **GL PTM assesses**

- 1. Mathematical content knowledge (Full Year portion as given above)
- 2. Understanding and applying mathematical process.