# YEAR 8 - MATHEMATICS FINAL EXAM PORTIONS - MAY 2023

## 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 factorizing 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 Drawings7.2 Constructing shapes7.3 Constructions 17.4 Constructions 27.5 LOCI

## 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 shapes9.5 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**

1.3 Standard form

#### **Unit 2 – Quadratics**

2.2 Expanding

#### Unit 3 – Inequalities, equations formula

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

#### **Unit 4 – Estimating Statistics**

4.3 Estimating Statistics

#### Unit 5 – Multiplicative reasoning

5.4 Arcs and sectors of circles

#### **Unit 8 – Graphical solutions**

8.1 Simultaneous equations

## **Textbook : 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 Ratios8.3 Sharing in a given Ratio8.4 Proportion8.5 Proportional reasoning8.6 Using the unitary method

## Unit 10 – Sequences and graphs

10.1 Sequences10.2 The nth term10.3 Pattern Sequences

## Note:

All the works done in PPT, textbook, notebook and worksheets.

## **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)

2. Understanding and applying mathematical processes