Examination Scope: MATHEMATICS (Extended Tier)

Year: 10

TERM 3 EXAM

Preparation:

Topics in the assessment are listed below. It is essential that your son/daughter builds on their successes so far this year by focusing on these topics and filling in any gaps that they may have in their knowledge.

In the time between now and the exam please ensure that your son/daughter prepares in a ***quiet place away from any distractions***.

Revision:

- **Do a question from a different topic every day in the run up to the exam**.
- Use the questions that they know are right from their classwork, homework and classroom assessments. That way they can check that their answer and method are correct.
- Work with another student and check each other's understanding. Test each other's knowledge of key facts and formulae.
- Look on MyiMaths or other websites such as BBC Bitesize to help them check their understanding.
- Use past papers from Cambridge up to 2014
- *Ask their teacher if they are unsure of anything*.

Exam Materials:

Writing equipment (Pen that writes in black ink, pencil, eraser and sharpener).
Scientific calculator (Algebraic or graphical calculators are not permitted).
Geometry set comprising of a pair of compasses, ruler and protractor.

Exam Date	Exam Type	Exam Length
Friday 24th May	Calculator paper	120 mins

Topics to Revise:

A mixture of short and long Cambridge questions which rely on prior KS3 knowledge and require answers on the following topics:

Manipulate directed numbers
Expand brackets and factorise expressions
Algebraic fractions
Linear equations
Simultaneous equations
Units of mass, length, area, volume and capacity
Volume and surface area of 3D shapes
Vectors
Transformations
Pythagoras' Theorem and Trigonometry in all types of triangles
Advanced trigonometry (sine rule, cosine rule and area of a triangle)
Bearings
Sketching linear graphs and quadratic graphs
Graphs, graphical solutions
Manipulate fractions (multiply, divide, add, subtract)
Equation of a line
Areas and perimeters of shapes
Solving linear equations
Solving quadratic equations using the quadratic formula
Indices
Matrix calculations including finding the inverse

Exam Advice:

- ✓ When stuck on a question move on to the next one and come back to it.
- ✓ Try to write something for every question. No answer means no marks awarded.
- ✓ Check answers for any careless mistakes. For example, check your 4's don't look like 9's.
- ✓ Cross out mistakes and write the solution again neatly. Only cross out working if there is something to replace it.
- ✓ Only round an answer if the question says to do so.
- ✓ SHOW ALL WORKING OUT. Students who show their working out receive at least 10% higher marks than those who do not.