| Subject | Mathematics | | |
|---|---|---|---|
| **Title/Topic** | **Format** | **Length** | **WC** |
| Paper 1 – Non-Calculator | Written Assessment | 45 minutes | 21 November |
| Paper 2 – Calculator Allowed | Written Assessment | 45 minutes | 21 November |
| Paper 3 – Calculator Allowed | Written Assessment | 45 minutes | 21 November |

## My Advent assessment will test my knowledge on…

Students in **10X1, 10X2, 10Y1, 10Y2** will sit the higher tier papers and will be tested on the core concepts as well as the higher tier content. Students in **10X3, 10X4, 10Y3 & 10Y4** will be tested on the core concepts only.

**Unit 1 – Congruency, Similarity & Enlargement Core Concepts**
- Enlarge shapes by a positive and fractional scale factor
- Solve problems with similar shapes
- Solve problems with congruent triangles

*Higher Tier Content*
- Enlarge shapes with negative scale factors
- Solve problems with area and volume of similar shapes

**Unit 2 – Trigonometry Core Concepts**
- Use sine, cosine and tangent to find missing side lengths
- Use Pythagoras' theorem to solve problems in right angled triangles

*Higher Tier Content*
- Solve problems using the sine rule and cosine rule in non-right angled triangles
- Solve problems involving trigonometry and Pythagoras in 3D shapes
- Find the area of non right-angled triangles using trigonometry

**Unit 3 – Represent Solutions of Equations & Inequalities Core Concepts**
- Form and solve one and two-step equations
- Solve problems with inequalities (including on number lines)
- Find solutions with straight line graphs
- Solve equations and inequalities with unknowns on both sides

*Higher Tier Content*
- Represent solutions to inequalities on a graph
- Solve quadratic equations by factorisation

**Unit 4 – Simultaneous Equations Core Concepts**

- Solve pairs of linear simultaneous equations
- Form a pair of linear simultaneous equations given information
- Solve linear simultaneous equations graphically

*Higher Tier Content*

- Solve a pair of simultaneous equations, one linear, one quadratic
- Solve simultaneous equations (linear / quadratic) graphically

## What should I do to revise and prepare for this assessment?

To prepare for this assessment:

1. Look at the **results from your knowledge checks** which are recorded at the back of each of your workbooks and also on go4schools. Look to see which small steps you dropped marks on. **Re-watch the lesson videos** available on the school website and revisit the questions on these topics in your workbook. Focus in particular on any small steps which are listed as core concepts above.

2. **Complete your revision workbook** that your teacher has provided you. You should work through all the questions in your revision workbook, checking your work using the answers provided. You could ask your parent or relative to check your work with you, and discuss the areas you need to revisit. This revision workbook must be **completed in full and handed in to your teacher** for checking the day of your first assessment.

3. **Read carefully through your lesson notes** in each workbook. Look out for the key information that you have written down or highlighted that your teacher said was an important learning point.

4. **Study the knowledge organisers** for the units being tested. They can be found at the back of each of the workbooks that you have completed so far. You should use the technique of **'look, cover, check'** to ensure you can recall all of the key facts and techniques.

5. **Listen attentively during your Immersion Revision Session** which will take place the week before your assessment. Your teacher will provide you with a number of key tips to help you succeed. They will revisit the core concepts listed above.

## What useful websites/resources could I use to help me prepare?

All Year 10 Advent Resources and solutions (including the workbook) can be found here:

www.delisle.org.uk/4757/year-10-maths-advent

You can also access revision lessons on Hegarty Maths. Use the links in your workbook to direct you to the most appropriate videos.
https://www.hegartymaths.com