



Subject	Mathematics (Higher Tier)		
Title/Topic	Format	Length	Date & Time
Paper 1 – Non Calculator	Written Exam	1 hour 30 minutes	Wed 15 March 12.40pm
Paper 2 – Calculator Allowed	Written Exam	1 hour 30 minutes	Wed 16 March 12.40pm

This assessment will test my knowledge on...

This assessment information lists topics that you may be tested on. **Not all topics will be on your test.** The foundation assessment is for students in 11X1, 11X2, 11X3, 11Y1 & 11Y2.

Number

- Surds
- Product rule for counting
- FDP conversion
- Recurring decimals
- Laws of indices
- Standard form
- HCF & LCM
- Upper and lower bounds
- Powers and roots
- Fractions of amounts
- Negative numbers

Algebra

- Coordinates
- Gradients & tangents
- Sketch curves
- Speed-time
- Composite & inverse functions
- Linear & Fibonacci sequences, triangular numbers
- Double inequalities
- Change the subject
- Factorisation
- Difference of two squares
- Linear equations, equations of circles
- Solve quadratics
- Form and solve equations

Ratio

- Share in a given ratio
- Ratios to fractions
- Speed
- Vectors
- Percentage of amounts
- Reverse percentages
- Ratio in the form $n:1$ and $1:n$

Geometry

- Pythagoras and Trigonometry
- Sine Rule and Cosine Rule
- Exact Trigonometric values
- Transformations
- Circle theorems
- Tangents
- Volume of shapes / Area of 2D shapes
- Vectors
- Bearings
- Proof
- Arc length and areas of sectors
- Invariant points

Statistics

- Histograms
- Mean, median, mode and range
- Quartiles
- Two-way tables, Venn diagrams, frequency tables, bar charts
- Cumulative frequency & box plots

Probability

- Conditional probability, dependent & independent events, relative frequency, mutually exclusive probabilities.



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

To prepare for this assessment:

1. Study carefully the topic list provided for you above. **Work through each of the Sparx Maths tasks as part of your homework.** After half term, your teacher will give you a list of sparx tasks you can attempt in addition to your homework to help you prepare for your mock.
2. Complete the weekly past paper tasks as part of **Project 25**. It is important you attempt all questions, check your answers using the available mark scheme and then write in any corrections from the mark scheme with your red pen. Record your performance on the summary sheet in your booklet, marking on any questions you want your teacher to review or revisit.
3. **Study the knowledge organisers** booklet provided to you. You should use the technique of **'look, cover, check'** to ensure you can recall all of the key facts and techniques for the identified topics.
4. **Listen attentively during your Past Paper sessions** which will take place in your Project 25 Friday lessons each week. Your teacher will provide you with a number of key tips to help you succeed. They will highlight questions on the content listed above.

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

Project 25 Papers.
Revision Workbooks.

You can access revision lessons on Sparx Maths and Hegarty Maths.

www.sparxmaths.uk/student

www.hegartymaths.com