

A pile of colorful wooden number tiles (0-9) scattered on a light surface. The tiles are in various colors including orange, pink, blue, green, and purple. The numbers are printed in white or contrasting colors on the tiles. The tiles are stacked and overlapping, creating a sense of depth and movement.

# How to support your child with A Level Mathematics

Jo Locke

# What will they be learning?

## **Pure Mathematics**

6 lessons a fortnight with Mrs. Locke:

- Algebra
- Graphs
- Calculus
- Trigonometry

## **Applied Mathematics**

3 lessons a fortnight with Mrs. Gould:

- Statistics
  - Probability
  - Summary statistics
  - Statistical distributions
- Mechanics:
  - Forces and Newton's laws
  - Constant acceleration formulae
  - Variable acceleration



## Details of the course:

- We use the Edexcel exam board. At the end of the two years, your child will sit three exam papers. All papers allow the use of a calculator.
- Paper 1: Year 1 and Year 2 Pure mathematics content
- Paper 2: Year 1 and Year 2 Pure mathematics content
- Paper 3: Year 1 and Year 2 Applied content

# What is expected of them?

- We recommend that for every hour spent in the classroom learning, the students consolidate this with one hour of independent study time. This can either be completing more questions to aid their fluency, answering exam questions, watching videos online for some more worked examples.
- This should be individual to each student and their needs. We want the students to become independent learners so this will not always be directed, but students should take on the ownership of ensuring this is completed.



# What is expected of them?

- The students will have homework and private study work each week.
- These will alternate between the two teachers
- Students should ensure that this is completed within the deadline and to their highest standard.
- Work will be recorded on Edulink



# What is expected of them?

- Students will have a topic test at the end of most units.
- They will be told a couple of weeks in advance of this so that they have time to prepare.
- These dates will also be posted to teams.



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# How can you help them?

- Try to ensure that they have the correct equipment – calculator and textbook are the most important. Please let Mrs. Locke know if there are any difficulties in getting these.
- Have the conversation with them about any upcoming unit tests – have they started revision? Do they know specifically which topics they will need to revise?
- Check with them that they have done work after the lesson to consolidate the new knowledge learnt that lesson.
- After a unit test – do they know which areas they are strong at, and any room for improvement?



# Resources

- The textbook – these have excellent questions. There will be so many that we haven't had a chance to do in class.
- Exam questions – there are thousands of exam questions online. Please tell your child to ask for the links if they're not sure where to find them.
- Websites – there are a huge number of websites that support A level Mathematics

# What will they be learning? (Further maths)

They will start off by learning pure maths. This includes:

- Complex numbers
- Matrices
- Proof
- Vectors

They will then move onto studying applied mathematics. This will include:

- Statistics
  - More statistical distributions
  - Hypothesis testing
  - Chi-Squared tests
  - Quality of tests