



## Mathematics

### Key skills developed in this work:

- Diagnostically assess your skills (being able to identify your strengths and weaknesses)
- Independence (address your own areas of difficulty)
- Develop and refine key mathematical concepts from Key Stage 4 that are used and applied in Key Stage 5
  - a) Number
  - b) Basic Algebra
  - c) Quadratic Equations
  - d) Algebra I
  - e) Graphs
  - f) Trigonometry and Vectors
  - g) Statistics and Probability

### Website links:

Head Start to A-Level Maths available for **free download** via Amazon:

[https://www.amazon.co.uk/Head-Start-Level-Maths-2017-2018-ebook/dp/B06XD29GX2/ref=sr\\_1\\_1?crid=K2DOQHR1H4L0&keywords=head+start+to+a+level+maths&qid=1585509199&s=books&prefix=head+start+to+%2Cstripbooks%2C263&sr=1-1](https://www.amazon.co.uk/Head-Start-Level-Maths-2017-2018-ebook/dp/B06XD29GX2/ref=sr_1_1?crid=K2DOQHR1H4L0&keywords=head+start+to+a+level+maths&qid=1585509199&s=books&prefix=head+start+to+%2Cstripbooks%2C263&sr=1-1)

### Appropriate additional reading:

17 maths equations that changed the world  
The Simpsons and their Mathematical secrets  
Alex's Adventures in Numberland  
Alex through the Looking Glass  
The Music of Primes  
Humble Pi  
Maths on the Back of an Envelope  
How Many Socks Make a Pair?  
Professor Stewart's Cabinet of Mathematical Curiosities  
The Code Book

### Tasks to complete:

1. Complete the diagnostic test available at the front of the book and mark your work
2. For the areas you got wrong, complete the appropriate sections of the textbook to practise and refine your skills – there are worked examples to help and practice questions. Ensure you mark them and keep practising until you get them right and are confident using the skill.

The page numbers linking to each different concept are stated on the diagnostic test, next to the title.

3. You can complete more than your areas of difficulty.

All of the concepts covered in the book are skills that you need to be able to apply in the A level course, not simply do.