**AS Mathematics Induction Work 2015**

Congratulations for choosing to study mathematics in the sixth form at Little Heath School. It is brilliant that you have shown an interest in being considered for the AS level course. It is very important that you have acquired the skills needed to access the AS course so that you can be successful in September. As you are aware, Mathematics is quite unlike other subjects in so far as the best way to improve your skills is to practice them regularly until they become an intrinsic part of you. To this end I would like you to complete the following tasks so you keep your mathematical skills at their sharpest over the long summer break.

You need to use the Mymaths website to help you remember how to do certain topics. Mymaths is easy to access giving you the opportunity to look at an on-line, sometimes interactive lesson, before completing a homework task.

On the opposite page there is a self assessment sheet which you should fill in at the end of each session to keep a record of your level of confidence in each session and whether you feel that extra study is necessary.

Remember that you have more than six weeks off, during which time you are unlikely to get better at mathematics unless you practice.

You should use Mymaths to improve your skills.

[www.Mymaths.co.uk](http://www.Mymaths.co.uk)

login: **little heath** password: **square**

If you have any questions, please contact me via email

Jbyrne2@littleheath.org.uk

You do not have to complete all the work, however you must make sure that you know how to do each of the topics successfully. If you have any difficulty in completing certain topics you must seek the help of your mathematics teachers in September.

Please mark your level of confidence after completing each section.

1. I feel confident that I have mastered this skill
2. I can complete most of the skills but I am not absolutely confident. I should complete some more of this topic.
3. I feel unsure of this topic and should do more work.
4. I have no idea what to do. I must do some more work and seek the teachers’ advice.

**Name:**

**Mymaths/Booster Packs/A – A\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number:** Surds 1 and 2 | 1 | 2 | 3 | 4 |
|  Indices 1, 2, 3 | 1 | 2 | 3 | 4 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Manipulating Algbra:** Simplifying 2 | 1 | 2 | 3 | 4 |
|  Brackets  | 1 | 2 | 3 | 4 |
|  Rearranging 1, 2 | 1 | 2 | 3 | 4 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Algebraic Fractions:** Cancelling | 1 | 2 | 3 | 4 |
|  Adding | 1 | 2 | 3 | 4 |
|  Multiplying | 1 | 2 | 3 | 4 |

**Equations with fractions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Quadratics:** Factorising | 1 | 2 | 3 | 4 |
|  Using the Formula | 1 | 2 | 3 | 4 |
|  Completing the square | 1 | 2 | 3 | 4 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Simultaneous Equations:** Quadratic simultaneous equations | 1 | 2 | 3 | 4 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pythagoras & Trigonometry:** 3D Trigonometry | 1 | 2 | 3 | 4 |
|  Sine and Cosine rule  | 1 | 2 | 3 | 4 |
|  Area of a triangle | 1 | 2 | 3 | 4 |