

Alsager School An Achieving School - A Caring Community

# **KS3 MATHEMATICS**

#### Curriculum Manager: Mrs Alison SUTCH

**Teaching Staff**: Miss Rowe, Mr. Askew, Mrs Bourne, Mr. Buttery, Mr. Barry, Mr. Bhankarally, Mrs Nolan, Mrs Ryan, Mrs Watts, Mrs Lyons, Mrs Terry and Mrs Williams

#### **Overview:**

The Mathematics Faculty at Alsager School is forward looking and dynamic. Problem solving and reasoning skills are at the core of our curriculum and pupils are afforded the opportunity to master a range of non-routine skills using creativity, fluency and confidence. There is a strong emphasis on the development of mental and oral mathematics skills, with a direct interactive teaching method. Calculators are used where appropriate, and some topics involve the use of computers. Investigation work is incorporated into the course, and the students are encouraged to deepen their understanding with homework.

Year 7 and 8 students are entered for both the Junior and Intermediate UK Mathematics Trust (UKMT) challenges with notable successes each year.

We aim to help students gain confidence in their abilities, to work on their own or to ask for help as appropriate, to persevere with problems and above all, to enjoy their Mathematics.

Year 7 Scheme of Work		
<ul> <li>Autumn <ul> <li>Types of number</li> <li>Place value, estimation and rounding</li> <li>Multiples, integer and roots</li> <li>Prime factorisation</li> <li>Fractions and Decimals</li> <li>Ordering and comparing integers, decimals and fractions</li> <li>Standard form</li> </ul> </li> </ul>	<ul> <li>Simplifying and manipulating expression, equations and formulae</li> <li>Addition and subtraction strategies including fractions</li> <li>Multiplication and division strategies including fractions</li> </ul>	<ul> <li>Solving Linear Equations</li> <li>Consolidation and Review</li> </ul>
Year 8 Scheme of Work		
<ul> <li>Autumn Term</li> <li>Understanding multiplicative relationships</li> <li>Fractions</li> <li>Ratios</li> <li>Percentages</li> </ul>	<ul> <li>Spring Term</li> <li>Trigonometric Functions</li> <li>Trigonometry in contexts</li> </ul>	<ul> <li>Summer Term</li> <li>Arithmetic Sequences</li> <li>Non-arithmetic sequences</li> <li>Coordinates, Equations and Graphs</li> </ul>

# Other useful information:

## Equipment

Students will need a pen, pencil, ruler, compass and protractor for all Maths lessons. Pupils will also require a scientific calculator – **Casio fx-83GT** is recommended.

#### **Online Resources**

<u>www.mathswatchvle.com</u> : Mathswatch can be used to access tutorial videos and questions on all maths topics on the KS3 Maths syllabus.

Each pupil has been given a unique username and password which is recorded in their planner at the beginning of the academic year.

<u>www.mymaths.co.uk</u> Mymaths can be used to access online lessons for all maths topics on the KS3 syllabus.

School Username: Alsager School Password: pentagon

Pupils may also be set work specifically by their class teacher from this site and will have a unique username and password to access this work.

<u>www.corbettmaths.com</u> Corbettmaths has a lot of helpful videos and worksheets where pupils can select a specific topic they would like to work on.

www.bbc.co.uk/bitesize

# How parents can help

- Ask your child to teach you something they have learnt in Maths that week.
- Check that all homework is fully completed each week and encourage your child to seek help should misunderstandings arise.
- Encourage your child to set aside time each week for independent mathematics consolidation and revision.
- Encourage your child to take advantage of online resources mentioned above
- Encourage your child to make revision cards with key formulas and concepts.
- Quiz your child on the material they learned during the term and/or in preparation for an assessment.
- Quiz your child on where they can use the Maths they have learnt that week in real life scenarios.