

<b>Year 9 – Maths</b>	
<b>Summary of curriculum</b>	The Smiths Wood Year 9 Mathematics curriculum is based on the White Rose Maths KS3 scheme of work. This is a recognised scheme, based on research and covering the requirements of the KS3 national curriculum. The foundations that students gain in year 9 are necessary to access the GCSE curriculum and overlap with much of the content of the first 5 units of the Edexcel foundation GCSE.
<b>Main topics/skills</b>	<p>3D Shapes: Everything in the real world is 3-dimensional. Even a piece of paper, although thin and with a small volume, is in fact a 3D object. In year 9 we learn about the different 3D shapes that exist and learn to calculate the volume and surface area of them.</p> <p>Probability: Calculating probabilities can help you work out if games are fair. Modelling probabilities by experimenting can help scientists predict the outcomes of random events. Car insurers use probability to assess how likely a driver is to have an accident.</p> <p>Presenting data: Displaying data in a graph makes it easier to interpret. For example, if a bar chart is used to display the hours of sunshine per day in a number of holiday destinations, you can see at a glance which destination is the sunniest. Students will need an understanding of graphs as they are used everywhere in life for example to show house price change as you move further away from the city.</p> <p>Inequalities: Inequalities are used to compare quantities. This topic is closely interleaved with solving equations and can also be used to express upper and lower bounds for an amount.</p> <p>Pythagoras: Lots of jobs require the use of Pythagoras (engineers, builders, architects, landscapers etc.) It is something that will reoccur multiple times through GCSE and A-level study.</p> <p>Transformations: To transform something means to change it. In maths we deal with rotation, reflection, translation and enlargement.</p>
<b>Assessment throughout the year</b>	Students are set by attainment based on their end of year 8 assessment and GL assessment. Students are assessed by a block assessment at the end of each topic and at the end of year 9 students are assessed using GCSE style questions in preparation for KS4.
<b>How parents can support their child's learning from home.</b>	Start to encourage your child to take responsibility for ensuring that they have <i>learned</i> and remembered the content covered. Stress the need to complete additional practice at home or to ask for extra support from their teacher if they are unsure of anything.
<b>Stretch &amp; Challenge opportunities</b>	Stretch and challenge starts in the classroom, however in addition high attaining students are given the opportunity to enter the UKMT Maths Challenge.
<b>Useful websites</b>	Homework is set weekly on <a href="http://www.sparxmaths.com">www.sparxmaths.com</a>

