

## Whitworth Community High School Computer Science Department

<b>Teacher in Charge/Faculty Leader:</b> Mr B Hanif	<b>Year 8 Learning Overview</b>
<b>Organisation of the classes:</b> Computer Science is taught in groups based on ability. Students will have 1 lesson a week for an hour.	
<b>Key Concepts:</b> Throughout the course of the year Computer Science will help students to understand how it is used in the real world in a variety of different contexts. It will help them to gain the skills and knowledge necessary to be competent and confident users of technology.	<b>What skills do I use in this subject?</b> Listening to instructions. Learning new software. Being creative with software. Breaking problems down into manageable parts.
<b>What will you be learning?</b> Over the course of the year students will learn how about System Security, the foundations of programming using Python, logic gates, binary and website development.	<b>How will you be learning?</b> Independent research. Question and answer sessions. Whole class and small group discussions.
<b>How will your learning be assessed?</b> Assessment will take place twice every half term. The first assessment will be formative in which the students will produce a piece of work relating to the topic of study. The second assessment will be summative in which the students will complete an end of topic examination.	<b>Home Learning:</b> Students will get 3 home learning booklets over the course of the academic year. They will have a week in which this must be completed and handed back to their subject teachers. There will occasionally be homework set to finish off any outstanding tasks or extension tasks to make further progress.
<b>Equipment needed?</b> Students would benefit from having a laptop and access to the internet.	<b>How can your parents support your learning?</b> Where possible, students can log in to Google Classrooms at home which will allow parents to view the work completed during Computer Science lessons. They could assist in the completion of tasks by offering guidance if required.
<b>SMSC Links – Focus on Aspirations:</b> Throughout the course of Year 8 students will be given an insight into the variety of professions Computer Science is required for. They will also be shown examples of technological products that rely on Computer Science.	<b>What extracurricular activities or enrichment opportunities are available?</b> During open days and evenings, students will be required to act as ambassadors for the subject. They will be required to speak to both potential students and parents, giving them an insight into the subject. There will be an after school coding club that all students can join. When entering local and national competitions, students will be invited to participate in groups against other schools.