Computer Science aims to engage, endeavour and excel all our students to develop into responsible digital users, that are creative, exploratory, independent and inquiring whilst using computational problem solving skills to solve, test and evaluate solutions for the 21st Century Digital Age.

Topics to be covered in Year 8

	Term 1	Term 2	Term 3
Topics to be covered	Cyber security Intermediate UK Bebras Challenge 2024 Computational Thinking HTML Website creation / Google site web design and XRay Goggles web page inspector Hour of Code	Introduction to Textual Programming with Python Advanced Data handling using Excel spreadsheets **Mid-Year Exam using MS Teams** **Revision**	App creation with App Lab Scratch block coding Blender 3D modelling & animation **EOY Exam using MS Teams** **Revision**
Skills to be developed	**Hour of Code** Prevention of social engineering and network threats Limiting your digital footprint Exploring ICT laws and legislation - GDPR, DPA Assess individual online behaviours by exploring social networking profiles to examine safe and potentially unsafe choices Set strong Passwords to prevent CMA from others Create linked Google sites website with linked interactive webpages Use Cyber Explorers to enhance of understanding of network threats and measures to prevent	**Python programming** Create Variables Use conditional statements Strings Integers Functions Loops **Data handling Spreadsheets** Basic arithmetic formula Sum /average function If statements Charts Vlookup Conditional formatting	**Mobile App Inventor Creation** Create Save Retrieve Block Code Test Debug Preview Share QR codes Use Blocky/JavaScript **Blender Skills** Sculpting Brush technique Meshing Resolution

Year 8 Useful Resources

Website Links

http://www.bbc.co.uk/education

http://www.bbc.co.uk/education/subjects/zvc9q6f

https://www.w3schools.com/html/

https://teach-ict.com/2016/ks3/ks3_home.html

http://www.bing.com/search?q=cisco+binary+game&src=IE-SearchBox&FORM=IESR02

https://www.cyberexplorers.co.uk/pdf/Cyber-Explorers_Lesson-Plans.pdf

https://code.org/learn

https://www.codecademy.com/learn/all

https://www.w3schools.com/python

https://scratch.mit.edu/

Marking, Assessment and Feedback

Over the course of an academic year students will complete a number of progress paths, formal test using MS form quiz assessments, these will be used to assess where students are in their learning journey. The UK Bebras computational challenge will be taken. This is assessed externally.

Information from these assessments could be used when making decisions regarding reporting student progress home and predicting outcomes. Current guidelines mean that we cannot provide as much detailed written feedback as it typical. As a result of this, we will during lessons, evaluate students' learning through a range of activities including quizzes, class discussions, detailed questioning and other strategies. Through this, students will know where they are in their learning journey and what they need to do next to make further progress. Teachers will continue to provide planned written feedback on selected pieces of work.

Homework

Homework will be set using the online platform https://www.go4schools.com/

Contact Information

If you would like to get in contact, please contact your child's teacher on the email address below:

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