

Computing

Year 8 Overview

By the end of Year 8 students will have been exposed to concepts such as text-based programming, how the world of work uses ICT and an extension on binary including binary pixels, binary sound and addition. Students will take a deep dive into networks and how they help shape the world as we know it as well as E-safety topics where students learn how to stay safe on the ever changing online environment.

Unit	Curriculum Plan
1	Python programming - A more in-depth view of python using text-based programming to further their knowledge. Students will learn how to do maths on Python, as well as using "For" loops and "while" loops and adapting them to fit different criteria.
2	My digital world - Students start this topic learning about the importance of saving files properly, this helps them with all subjects in school. They then look in depth at how to find trustworthy websites and how to search the internet more effectively. Students then look at copyright and how to avoid dangers online, giving them tools to deal with Cyber abuse and who to report this to.
3	The impact of ICT on society - Students look at ICT in the workplace and how many workers now work from home due to updated technology. As students move through the topic they look at how websites collect information and how they use it to sell customers products.
4	Binary - Students look at binary to denary conversions, binary addition and how binary is used for displays on screens. Students get the opportunity to make their own binary pixel art and look into how binary is used whenever we use a mobile phone to call or voice note.
5	Networks - This topic explores what a network is and the uses of networks including how the network of all networks works the Internet! Students look at how the internet, and the world wide web is different and how webpages use the internet to function.

Independent study:

In the lead up to assessment points students will be encouraged to focus on revision and retrieval practice to support assessment preparation.

Useful links:

[KS3 Computer Science - BBC Bitesize](#)
[OAKS National Academy](#)

Assessments:

There are two formal assessment points during the year:

January – Formal assessment covering the key knowledge and skills from the first two units.

June – Formal assessment covering the key knowledge and skills from all units studied throughout the year.