

Curriculum Overview

Subject: Computing

Year Group: 8



Students are introduced to text based programming in year 8 and also investigate computer networks. In term 2, they look at mobile app development and learn to create vector graphics and then finally students build on their coding experience as they create programmatic images, animations, interactive art, and games. Students are encouraged to articulate and record specialist terms to develop their understanding of the subject.

TERM 1	TERM 2	TERM 3
KNOWLEDGE/SKILLS <ul style="list-style-type: none"> Understand the difference between the internet and the World Wide Web. Use a textual programming language to solve a variety of computational problems Understand how instructions are stored and executed within a computer system 	KNOWLEDGE/SKILLS <ul style="list-style-type: none"> Build a product to meet client specifications Use event driven programming to create a product Combine multiple tools and techniques to create a vector graphic 	KNOWLEDGE/SKILLS <ul style="list-style-type: none"> Use a coordinate system to place elements on the screen. Create and use a sprite Use conditionals to react to changes in variables and sprite properties Build a platform jumper game
KEY ASSESSMENTS Half term 1: Networks summative assessment Half term 2: Python summative assessment	KEY ASSESSMENTS Half term 1: Mobile Apps summative assessment Half term 2: Graphics summative assessment	KEY ASSESSMENTS Half term 1: Images and animations summative assessment Half term 2: Game Creation summative assessment

Extended reading suggestions and external resources:

BBC Bitesize Key Stage 3 Computer Science <https://www.bbc.co.uk/bitesize/subjects/zvc9q6f>

Join the weekly code-along using open projects based on a weekly theme, with different levels available for all abilities
<https://www.raspberrypi.org/at-home/>

Programming tutorials with easy to follow instructions. <https://www.codecademy.com/>