

Computing & Digital Media

Computers play a pivotal role in our society and in our everyday lives. Our curriculum at Cornwallis Academy aims to help students be equipped to use technology as they grow up, as well as future proofing them to be safe and confident users of computers in their future careers. We aim for students to develop their computational thinking, problem solving skills and creativity so that they develop the ability to understand and change the world through application of their knowledge and skills to real-world scenarios.

In Key Stage 3, students will study the 3 inter-related strands within the subject of computing (computer science, digital literacy and information technology) largely through project-based learning. Computing at Key Stage 4 teaches Creative iMedia, which leads into Key Stage 5 where students can choose to study Digital Media.

Year 7 Computing

Students study computing on rotation for two terms during the academic year.

	ROTATION 1	ROTATION 2	ROTATION 3
TERM 1 & 2	PRODUCTION	DRAMA	COMPUTING
TERM 3 & 4	DRAMA	COMPUTING	PRODUCTION
TERM 5 & 6	COMPUTING	PRODUCTION	DRAMA

In the first term, students will study Digital Citizens and Digital Apprentices. In the second term, students will study Step Up!

Content of study	Digital Citizens	Digital Apprentices	Micro:bit
What are the aims and objectives of this term?	Lesson 1: 1. Understand the routines and expectations 2. Know how to log on, create and save a document. 3. Demonstrate your problem-solving skills Lesson 2: 1. Know how to log on from home 2. Familiarise yourself with Teams 3. Complete a survey and a quiz Lesson 3: 1. Identify how to get help with keeping safe online.	Lesson 1: 1. Insert an image 2. Create shapes 3. Insert text 4. Duplicate and move slides Lesson 2: 1. Group objects 2. Change colours 3. Create animation Lesson 3: 1. Create transitions 2. Add a front cover and an end page 3. Complete the project	Lesson 1: 1. Understand the purpose of the micro:bit and what it can do 2. Create a 5 x 5 image and display it on your micro:bit 3. Create a Guess the Number game Lesson 2: 1. Use the micro:bit to develop understanding of creating programs 2. Create a program to "Guess the direction" Lesson 3: 1. Use the micro:bit to develop understanding of problem solving

	2. Explain how much trust to put in people online. 3. Describe and assess the benefits and the potential risks of sharing information online. 4. Assess when to act and explain what to do if you are concerned about your own or someone else's online relationship.		2. Use the micro:bit to develop understanding application documentation 3. Create a program for a Safe Lock System Lesson 4: YAP – Complete an assessment Lesson 5 and 6: 1.What is a Tamagotchi? 2.Identify how a Tamagotchi might work using a micro:bit 3.Turn the micro:bit into a basic Tamagotchi
What previous knowledge is required?	Students arrive at Cornwallis Academy with completely different starting points in Computing based on their experiences at home and at primary school both in terms of subject knowledge and use of devices. This unit does not expect more than a basic understanding of how to use a computer. Some basic principles of E-Safety and online relationships are expected to have been taught at primary school.	This unit does not expect any previous knowledge of PowerPoint although it is anticipated that some students have been exposed to it at primary school, but not all features or functions will have been used.	Students should have had some exposure to basic block-based programming in primary school through programs such as Scratch or Purple Mash. Knowledge of PowerPoint from their previous unit of work will support the completion of evidencing their work.
How will this term's content help with future learning?	This unit is designed to introduce students to the computer systems at Cornwallis Academy as well as gain an understanding of their knowledge across a variety of Computing topics through the baseline assessment quiz. This will then support teachers in tailoring content to students' starting points to ensure that basic digital literacy skills are grounded from the start of school. This will help them in all	This unit of work is based around creating an adventure story book through building skills in Power Point. This program is used across all subjects in the school and through giving students a grounding in this, it is hoped that this will enable them to support their digital literacy and learning across all subjects in school.	This unit of work is designed to teach the basic concepts of creating simple programs as part of real-world scenarios as well as to build on their Power Point skills from the previous unit of work. This will support other units of work in the future as they get used to using Teams and Power Point and micro: bits – supporting the widening use of multiple platforms in Computing and enhancing their digital literacy skills.

	subjects at school as well as support them to get used to using multiple platforms within Computing.		Using a micro: bit will support engagement in the subject through practical hands-on programming and support them with further concepts of programming in Year 8. It will also support students to engage with creative thinking and problem-solving, which are skills needed for all Key Stages.
Resources	https://www.thinkuknow.co.uk/11_13/ https://www.youtube.com/watch?v=byngcwjO51U https://www.youtube.com/watch?v=YOGeEcebQ3M https://www.bbc.co.uk/bitesize/topics/zkgcwmn/articles/zdn3d6f https://makecode.microbit.org/		
Links to the national curriculum	• Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems • Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users • Create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability • Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.		
Assessments	Students are assessed in their first term of their rotation in the Digital Apprentices final adventure story book that they create. In the second term of their rotation, they are assessed on their programming in lesson 4 of Micro:bit!		