Year 7 - Computing Curriculum

Curriculum Theme
Developing digital literacy

Introductory unit

Who am I presentations, combining text and graphics. Familiarisation with the system, email and folders

1. Cinema Project

Learners will work to a brief, designing adverts and documents for specific audiences. They will explain the choices they made and how their documents will appeal to the target audience

2. Clear Messaging in Digital Media

Learners will work between different applications to create a poster and slides on a given theme. The unit is designed so that learners can concentrate on applying skills that they may have previously learnt as well as those learnt in the unit.

3. Gaining Support for a cause - Using Media to Communicate

Students will develop a deeper understanding of information technology and digital literacy by using their skills across the unit to create a blog post about a real world cause that they are passionate about and would like to gain support for.

4. Scratch

Learn programming skills in a student friendly environment, develop sequencing, variables, selection, and count-controlled iteration skills.

5. Food Truck

Students are required to design and make a variety of documents designed to establish the Food Truck business of their dreams!

6. Programming

Learners will learn how to create their own subroutines, develop their understanding of decomposition, learn how to create and use lists, and build upon their problem-solving skills by working through a larger project at the end of the unit.
The students will develop further programming skills using the BBC microbits.

Progressing into year 8

Year 8 - Computing Curriculum

Curriculum Theme
Building Computational Thinking

Year 7 recap

Student's guide to the school combining text and graphics

1. Computer Systems

This unit takes learners on a tour through the different layers of computing systems: from programs and the operating system, to the physical components that store and execute these programs, to the fundamental binary building blocks that these components consist of.

2. Stop Motion Animation

This unit gives the students the chance to explore their own interests, creating a story through images. They will design a storyboard and evaluate the animations produced by other members of the group

3. Internet Safety

Research internet safety and create an information page about the key themes – Staying Safe Online

4. Research Unit - Kenya

Learn about a country far away from here, focussing on the wildlife, population, climate and landscape. Combine text and images in a presentation

5. Keswick Residential

Research the activities available that would excite a group of year 8 students on a school trip to Keswick. Complete a spreadsheet to explore costs and write a letter to parents/carers to seek permission to attend.

6. Code Combat - Python

Students follow the self led programming tutorial with a game type user interface. Students will work at their own pace to develop their knowledge of the Python language.

Progressing into year 9

Programming Hour of Code

There are fun activities for students of all ages, created by many partners for a variety of subjects.

Year 9 - Computing Curriculum

CUMBRIA FUTURES FEDERATION

Curriculum Theme
Applying skills to different scenarios

Year 8 recap

Hour of code

There are fun activities for students of all ages, created by many partners for a variety of subjects. The learners develop skills in Python and Java to create computer games in a step by step, user friendly interface.

1. : Exploring User Interface Design Principles and Project Planning Techniques

A local theme park requires a digital information point. The digital information point will be used by visitors to find the location and details of attractions, facilities and special events. The information point will be accessed using touch screens positioned around the park. The audience for the information point will be adults, families with young children and visitors with accessibility needs.

2. Binary

Humans use symbols to record, process and transmit information. Introduce binary digits to your learners as the symbols computers use to perform these tasks and focus on the representation of text and numbers.

3. Data collection

Students will produce a report on how businesses collect data and how it may be used in their businesses.

4. Modelling

Students will demonstrate modelling skills, creating documents to replicate scenarios and explain the effects of changing variables.

5. Internet Safety

Students will produce an assembly to be performed to younger students in the school. The content must be suitable for the purpose and convey the key themes of internet safety.

6. History project

Research a figure from the past and explain what you admire about them OR research a period of history and produce a fact file for other people in your year group