CLC Projects

These are some of our most popular projects but we are happy to tailor projects for your class.

ROBOTICS

Lego WeDo (Years 3-4)
Build a model using Lego and write programs to download to it to make it come alive. Introduces inputs, sensors and outputs as well basic mechanical engineering principles.

Lego Mindstorms (Years 5-6)
Build and program robots using industry standard programming techniques. Program inputs, outputs and sensors to allow your robot to react to the environment.

Algorithms with BeeBots, Apps and BlueBots (KS1)
Children will learn to control simple robots (BeeBots) using basic programming and explore directional language and giving instructions. They will complete further on-screen activities using programming apps or software. Year 2 children will use more advanced planning and programming tasks using BeeBots and BlueBots.

CODING

Introduction to Computer Programming
An introduction to Computer Programming and computational thinking using activities both on and off the computer. A selection from a wide range of software and apps will be used to introduce pupils to key concepts such as selection, variables, loops, debugging, inputs and outputs.

Coding with the Microbit
Use block code or JavaScript to code the digital display on the microbit. The various sensors, inputs and outputs can turn the microbit into a weather station, control motors and even play tunes. Pupils will learn the concept of programming variables by programming the microbit to be the Hogwarts Sorting Hat or a Fortune Teller!

Microbit Buggy
An extension for pupils with a good level of coding. Program the microbit to control your car - driving, headlights and siren.

Coding with Scratch
Scratch has become the most popular means of getting children into coding. Through Scratch the key concepts of designing, writing and debugging programs can be introduced in a fun and engaging way. For KS1 Scratch Junior is used.

Game Design UKS2
Using 3D Game Design Software Design and code a 3D game or world using Co-spaces or Mission Maker.

EYFS

Early Programming
Activities with a variety of robots and control toys to encourage early sequencing skills. This is reinforced by apps and software designed to introduce problem solving and sequencing.

Music Technology
The projects offer a opportunities to compose music in a range of genres from electronic dance music to contemporary minimalism and 12-tone technique; add music to video and produce music intended for performance by live musicians.

Animation
Storyboard a short narrative or explanatory sequence, create scenes and backgrounds then export to iMovie for post-production final editing and add music and sound effects. This can be used done using stop motion animation or other animation apps and software.

Online Publishing (Website/Blog/App)
Using appropriate software or an online service pupils research a topic and consider purpose, audience, and design for their online presentation. This can be combined with some HTML learning.

Making a News Programme, Documentary Advert
Understanding film, storyboarding, capturing film and editing to produce a finished video on a curriculum topic. Green Screen techniques can also be incorporated.

Publishing for KS1
Developing literacy and IT skills to create an e-book including images, drawings and audio. Stories can be authored and retold or processes explained.

TinkerCad
Design in 3D for great STEAM projects. Design a house, a village or even Shakespeare's Globe Theatre!

Understanding Computer Networks
How does your computer link to the Internet? How does the Internet actually work? Who controls it? How does Google catalogue the World Wide Web? These are the things our children need to know to be in control of their digital identity and consumption.

Online Research Skills and Understanding AI
These include being discriminatory in their use of the web, starting to understand plagiarism and appreciating copyright and responsible usage of online materials. Evaluating websites for reliability and responsible use of Social Media. Investigate how AI uses Machine Learning, Computer Vision and Generative AI.

Data Handling
Topic based data handling progressing from creating pictograms and simple graphs in KS1 to exploring the functionality of spreadsheets and databases in KS2.

Data Logging with the Microbit
Use a preprogramed Microbit to log environmental conditions, produce graphs and interpret data.