

Ks3 Computing Learning Journey

**WELCOME TO
COMPUTING AT
LHS**

**YEAR
7**

Using the school network:
Introduction to the compute lab and how to use the school network appropriately

E-Safety
Students will learn how social media has impacted society, both positively and negatively and will learn what their digital footprint is. They will also learn how to stay online

Introduction to Binary
Students will learn what a binary number is and how to convert it to denary and vice versa

Modelling data, spreadsheets:
Sorting and filtering data and using formulas and functions in spreadsheet software

Introduction to Computational Thinking
Students will be introduced to the key concepts of programming using Flowol



Hardware, Software & Networks

Students will learn about Hardware and Software devices along with input and output devices. They will also recognise what a network is and study the different types.



Data Representation & Adobe Photoshop :
Students will develop a knowledge of images by using 1 bit image representation. They will then go on to create a logo in Photoshop

Binary and Boolean Logic
Students will revisit converting binary to denary and vice versa. They will also learn to calculate Hexadecimal numbers and look at AND, OR and NOT gates

**YEAR
8**

Introduction to Python programming:
Applying the programming constructs of sequence, selection and iteration in Python



Advanced Spreadsheet:
Using spreadsheets to model and solve real world problems using



Creating Websites using HTML
Students will learn how the internet works before going to create their own website using HTML



Programming essentials and Scratch
Students will use Flowol to solve real life problems and then applying the programming constructs of sequence, selection and iteration in Scratch



**YEAR
9**

Advanced Python programming:
Applying the programming constructs of sequence, selection and iteration in Python



Data Representation and Adobe Photoshop.
Students will learn how can different file types (sound, image, and text) can be represented. They will also learn what a Vector is. Finally they will create a leaflet, manipulating images using Adobe Photoshop



Enterprise and entrepreneurship
Learners will explore how new business ideas occur and the risks and rewards in running a business.

Binary addition and Truth Tables:
Students will learn binary arithmetic as well as being able to complete truth tables,

Animation:
Students will use Blender to create 2D and 3D Animation

**YEAR
11**

**YEAR
10**

GCSE Computer Science
Or
WJEC in Level 2 vocational Qualification ICT

**Ks4
Pathway**