# Upper Juniors Cycle B Computing



#### Autumn Term A

Computing Systems - Communication

Identify how to use a search engine; describe how search engines select results; explain how search results are ranked; recognise why the order of results is important, and to whom; recognise how we communicate using technology; evaluate different methods of online communication.

# Summer Term B Programming B - Sensing

Create a program to run on a controllable device; explain that selection can control the flow of a program; update a variable with a user input; use a conditional statement to compare a variable to a value; design a project that uses inputs and outputs on a controllable device; develop a program to use inputs and outputs on a controllable device.

## <u>Autumn Term B</u> Creating Media – 3D Modelling

Use a computer to create and manipulate three-dimensional (3D) digital objects; compare working digitally with 2D and 3D graphics; construct a digital 3D model of a physical object; identify that physical objects can be broken down into a collection of 3D shapes; design a digital model by combining 3D objects; develop and improve a digital 3D model.

### Summer Term A

Programming A - Variables in Gaming

Define a 'variable' as something that is changeable; explain why a variable is used in a program; choose how to improve a game by using variables; design a project that builds on a given example; use my design to create a project; evaluate my project.

## Spring Term A

Creating Media - Webpage Creation

Review an existing website and consider its structure; plan the features of a web page; consider the ownership and use of images (copyright); recognise the need to preview pages; outline the need for a navigation path; recognise the implications of linking to content owned by other people.

# Spring Term B Data and Information - Introduction to Spreadsheets

Identify questions which can be answered using data; explain that objects can be described using data; explain that formula can be used to produce calculated data; apply formulas to data, including duplicating; create a spreadsheet to plan an event; choose suitable ways to present data.