



As a Year 6 Computer Scientist I will know...

Computing systems and networks - Communication

that data is transferred across networks using agreed protocols
 that connections between computers allow access to shared stored files
 that data is transferred in packets
 that computers connected to the internet allow people in different places to work together
 the opportunities that technology offers for communication and collaboration
 explain which types of media can be shared through the internet
 that communicating and collaboration using the internet can be public or private

Creating media - 3D modelling

that 3D models can be created on a computer
 that a 3D environment can be viewed from different perspectives
 that digital tools can be used to manipulate 3D objects
 how placeholders can create holes in 3D objects
 that artefacts can be broken down into a collection of 3D objects

Creating media - Web page creation

the relationship between HTML and visual display
 that web pages can contain different media
 that web pages are written by people
 that a website is a set of hyperlinked web pages
 Different components of a web page layout
 The importance of ownership and use of images (copyright)
 recognise the need to preview pages
 Recognise the need for a navigation path
 the implications of linking to content owned by others

Data and information - Spreadsheets

Identify questions that can be answered using spreadsheet data.
 Explain what an item of data is in a spreadsheet
 Outline that there are different software tools to work with data.
 Explain how the data type determines how a spreadsheet can process the data.
 Explain that formulas can be used to produce calculated data.
 Recognise cells can be linked
 Explain why data should be organised in a spreadsheet
 Recognise that cell's value automatically updates when the value in a linked cell is changed
 Evaluate results in comparison to the question asked

Programming A - Variables in games

Define a variable as something that is changeable and identify examples.
 Explain a variable can be used in a program (scoreboard)
 Explain a variable has a name or a value
 Recognise that a value of a variable can be used by a program and its value can be updated.
 Variables can hold numbers or letter, you can define the way a variable is changed and recognise that it can be set as a constant
 Explain the importance of setting up a variable at the start of a program.
 Explain that there is only one value for a variable at any one time and if you change the value of a variable you cannot access the previous value

Project Evolve

self image and identity
 online relationships
 online reputation
 online bullying
 managing online information
 health, wellbeing and lifestyle
 privacy and security
 copyright and ownership



As a Year 6 Computer Scientist I can...

● Computing systems and networks - Communication

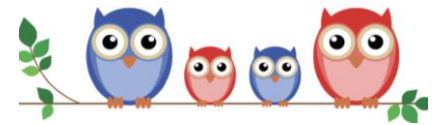
- Outline methods of communicating and collaborating using the internet
- Choose methods of internet communication and collaboration for given purposes
- Evaluate different methods of online communication and collaboration
- Decide what you should and should not share online

Creating media - webpage creation

Review an existing website
Create a new blank webpage
Add text to webpage
Set the style of text on a webpage
Embed media in a webpage
Change appearance of text
Add pages to website
Preview a webpage
Insert hyperlinks between pages and to other sites

Programming A

Identify a variable in an existing program
Experiment with the value of an existing variable
Choose a name that identifies the role of the variable to make it easier for humans to understand
Decide where in a program to set up a variable
Update a variable with a user input
Use an event in a program to update a variable
Use a variable in a conditional statement to control the flow of a program
Use the same variable in more than one location in the program



As a Year 6 Computer Scientist I can...

Creating media - 3D modelling

- To position 3D shapes relative to one another
- To use digital tools to modify 3D objects
- To combine objects to create a 3D digital artefact
- To use digital tools to accurately size 3D objects
- To construct a 3D model which reflects a real world object

Data and Information - Spreadsheets

- To calculate data using a formula for each operation
- To use functions to create new data
- To use existing cells within a formula
- To choose suitable ways to present spreadsheet data