



Upton Infant School's Computer Science Curriculum Rationale

Brilliant computer scientists...

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology

Computer Science Curriculum – Multimedia

Reception

Year One

Year Two

Intent

Brilliant Computer Scientists in Reception will learn how to interact with a range of computer software and understand its purpose. They will understand how to explore simple programmes to broaden their knowledge of technology in the home and in school.

Brilliant Computer Scientists in Year One will learn how to use a range of computer programmes to create and store digital content and understand how to login, save and find a document.

Brilliant Computer Scientists in Year Two will learn how to use a range of computer programmes confidently to organise, manipulate and retrieve digital content.

Planning considerations for teachers

- Do the children have the opportunity to explore with a range of media: Such as toys with buttons, remote controls, tablets and sound systems – in addition to programmable toys?
- Do children know how to use tools on selected software?
- Do children know the functions of the technology and how to use it?
- Do children know the uses of everyday technology and use interactive toys to support their learning?
- Is everything charged / working for planned lessons?

- Is the planning for Multimedia taught in the Autumn Term?
- Do children have the opportunity to explore technology using: graphics, text, sound recording, video and presentation?
- Is the multimedia selected of good quality and purposeful? (Purplemash, 2create etc)
- Is everything charged / working for planned lessons?

- Is the planning for Multimedia taught in the Autumn Term?
- Do children use a range of technology (such as graphics, text, sound recording and videos) to present their ideas?
- Do children use multimedia for a purpose / audience?
- Is everything charged / working for planned lessons?

Skills and Knowledge

Brilliant computer scientists...

- Can use a mouse to click, drag and select.
- Can push buttons to select function.
- Can select tools on drawing programme.
- Can use a sound buttons and **Ipads** to record and recall their thoughts and ideas.
- Can take a photo of their learning using an Ipad.
- Understand the different parts and functions of a computer.
- Know how to use appropriate tools for different tasks.
- Know how to operate a range of digital media.

Brilliant computer scientists...

- Use various tools to create graphics (such as brushes, pens, rubbers, stamps and shapes).
- know how to select the print function from a drop down menu and print off their work
- Use a keyboard including spacebar, backspace, arrow keys and return when typing when working on **Microsoft Word**.
- Use **Netbooks** to capture photos and videos of children's projects and learning **using Purple Mash – Portraits Software**
- Understand the keyboard functions on a computer.
- Knows how to select the appropriate tool for the correct purpose.
- Know the correct steps to follow a drop down menu.
- Know that some medias can be used to capture photos and videos.

Brilliant computer scientists...

- know how to save, retrieve and print their work
- Use a keyboard including delete key and start to use two hands when typing.
- Can record, retrieve and edit a short video **using Purple Mash – 2Create a Story software**
- Can take, retrieve and edit a photo **using Purple Mash – 2Create a Story Software**
- Know that work previously saved can be retrieved and manipulated.
- Know the correct steps to follow a drop down menu.
- Understand the keyboard functions on a computer.

Next steps:

- Knows that digital media can be used for a purpose and present their ideas to a target audience.

Our promise to make computing brilliant ...

Every child in Reception will have the opportunity to learn how to explore age appropriate software e.g Sound buttons, Ipads & computers.
Tapestry – Show and Share (school and home learning)

Every child in Year One will have the opportunity to learn how to explore a range of multimedia. E.g. Cameras, Ipads, Learnpads and laptops.

Every child in Year Two will have the opportunity to learn how to present their work to a target audience. (e.g. recall learning from wider curriculum subjects with another year group)



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