

## Alverton Knowledge and Skills - Computing

### Key Knowledge and Skills

Using and applying technology effectively;  
developing programming skills; e-safety.

	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
<b>Technology in the real world</b>	Use different font sizes, colours and images to communicate meaning. Use appropriate language in an email.	Use search technologies safely and effectively.  Use different font sizes, colours and images purposefully. Open, send and save emails. Know how to use digital tools responsibly to communicate.	Use search technologies effectively to collect, analyse and evaluate digital content. Use digital devices to combine different software and present data and information.
<b>Programming</b>	Know what algorithms are and how they are used.  Write and test simple programs.  Use logical reasoning to make predictions.	Design and write programs, including decomposing, to achieve specific goals.  Use logical reasoning to explain simple algorithms.	Design, write and debug programs to solve problems, control simulations and physical systems. Use sequences, repetition, variables, inputs and outputs. Detect and correct errors in algorithms and programs.
<b>Purposeful Application</b>	Use technology to create, organise, store, manipulate and retrieve data.    Recognise how IT is used beyond school.	Select and use technology to collect and present data and information.  Create and implement a range of programs to accomplish given goals. Understand computer networks including the internet.	Select, use and combine software to collect, analyse, evaluate and present data appropriately.  Design a range of programs.  Understand computer networks for collaboration and communication.
<b>E-Safety</b>	Know what to do if they need help because of something online.  Know what personal information is and why they need to keep it private. Use technology safely and respectfully.	Recognise unacceptable behaviour online. Know how to deal with and report inappropriate content and contact.  Continue to use technology safely and responsibly.	Use technology safely, respectfully responsibly, recognising appropriate behaviour and knowing how to report concerns.