Hill View Primary School Progression in Computing

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| ***Key Stage 1*** |
|  | **Create Programs** | **Algorithms** | **Reasoning** | **Using Technology** | **Uses of IT beyond school** | **Safe Use** |
| **Year 1** | Create, store and retrieve digital content | Create a series of instructions and plan a journey for a programmable toy |  | Use a website and a camera Record sound and play back | Talk about some of the IT uses in their own home | Use technology safelyKeep personal information private |
| **Year 2** | Write a simple program and test it | Understand that algorithms are used on digital devices | Predict what the outcome of a simple program will be (logical reasoning) | Understand that programs require precise instructions Organise, retrieve and manipulate digital content | Know how technology is used in a school and outside of school | Know where to go for help if concerned |

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| ***Key Stage 2*** |
|  | **Create Programs** | **Develop Programs** | **Reasoning**  | **Networks** | **Search engines** | **Using Programs** | **Safe Use** |
| **Year 3** | Write programs that accomplish specific goals | Design a sequence of instructions, including directional instructions | Discern when it is best to use technology and where it adds little or no value | Navigate the web to complete simple searches | Use a range of software for similar purposesCollect and present information | Understand what computer networks do and how they provide multiple services | Use technology respectfully and responsiblyKnow different ways they can get help if concerned |
| **Year 4** | Give an ‘on-screen’ robot specific instructions that takes them from A to B | Experiment with variables to control models | Make an accurate prediction and explain why they believe something will happen (linked to programming) | Know how to search for specific information and know which information is useful and which is not | Select and use software to accomplish given goals | Produce and upload a podcast | Recognise acceptable and unacceptable behaviour using technology |
| **Year 5** | Use technology to control an external device | Develop a program that has specific variables identified | Analyse and evaluate information reaching a conclusion that helps with future developments |  | Understand how search results are selected and ranked | Combine sequences of instructions and procedures to turn devices on and off | Understand that they have to make choices when using technology and that not everything is true and/or safe |
| **Year 6** | Write a program that contains more than one attribute | Develop a sequenced program that has repetition and variables identified | Design algorithms that use repetition and 2-way selection |  | Be aware that some search engines may provide misleading information  | Present the data collected in a way that makes it easy for others to understand | Be increasingly aware of the potential dangers in using aspects of IT and know when to alert someone if feeling uncomfortable |