COMPUTING

These keystones must be used alongside the National Curriculum and Development Matters.

Computing – EYFS

1	Recognise common uses of information technology in the home and school environment.
2	Use simple technology through exploration.
3	Programme and control simple technology e.g beebots and remote-controlled cars
4	Begin to understand how to use online technologies safely.

Computing – Year 1

1	Recognise common uses of information technology in the home and school environment
2	Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies
3	Predict the behaviour of simple programs e.g. Beebots
4	Begin to understand how to use online technologies safely.

Computing – Year 2

1	Recognise common uses of information technology beyond school
2	Use technology safely and keep personal information private
3	Create and debug simple programs- Scratch
4	Debug simple programs by using logical reasoning to predict the actions instructed by the code
5	Introduce Onenote and Sway as a way of collaboration and to develop typing skills, compare the uses of each program
6	Import pictures and create presentations

Computing – Year 3

1	Use logical reasoning to explain how a simple algorithm works, including use of decomposition and sequence. Recognise there may be errors.
2	Use software or search engines effectively and safely, including search tools. Discuss opportunities for online communication.
3	To present information in an effective way, using images, text formatting and copy+ paste short cuts.
4	Identify ways to keep safe when using ICT, how to make good choices and show respect for individuals.
5	Use a variety of software to collect and present data and information.
6	Use 'fill' and 'positions' coding tools to create structures.
7	Apply logical reasoning and identify errors.
8	Use block coding to program Microbits.

Computing – Year 4

1	Assist in the design and writing of programs, including selection and reputation, that accomplish specific goals and begin to identify and correct errors in algorithms and programs (debug).
2	Create and use hyperlinks. Discuss the reliability of information on the web.
3	Make judgements in order to stay safe and respectful and become a good digital citizen whilst communicating with others online. Identify potential risks.
4	Use a variety of software to collect, analyse and present data and information.
5	Use 'fill' and 'positions' coding tools to create structures.
6	Apply logical reasoning and identify errors in own code.
7	Programme a robot to complete specific tasks, by creating sequencing algorithms.

Computing – Year 5

1	With support, produce algorithms by using logical and accurate sequences of instructions. Begin to use variables to increase programming possibilities.
2	Use technology safely and responsibly, recognising acceptable content sharing and understanding, safe searching, age appropriateness, cyber-bullying and how to respond to spamming.
3	Explore how a variety of digital software can enhance communication and collaboration, through presentations and explanations for a specific purpose.
4	Select, use and combine a combination of software to achieve a desired goal.
5	Collaboratively explore sequence, selection and repetition in programs to test complex algorithms.
6	Evaluate projects to ensure that a specific goal has been achieved and identify the programming improvements to be made.

Computing – Year 6

1	Independently produce algorithms by using logical and accurate sequences of instructions. Recognise the need to use a variable and how to use operators and variables to stop a program.
2	Select an appropriate tool online communication and collaboration. Understand and acknowledge copyright.
3	Explain the possible consequences of online sharing, excessive time spent online and being disrespectful to others online.
4	Use a variety of software on different digital devices to collect, analyse, evaluate and present data and information and to act upon feedback.
5	Understand the importance of digital footprints and ensure the sources researched are legitimate
6	Independently design a coding project using sequences and variables, progressing to testing and debugging using logical reasoning
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