KS1 - Computing Curriculum

Pupils should be taught to:

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| understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions |
| create and debug simple programs |
| use logical reasoning to predict the behaviour of simple programs |
| use technology purposefully to create, organise, store, manipulate and retrieve digital content |
| recognise common uses of information technology beyond school |
| use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. |

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| Year 1 | Year 2 |
| Computer skills | Using and applying computer skills |
| Using and applying computer skills | Art |
| Word processing | Presentation Skills |
| Paint | Preparing for programming using Turtle Logo |
| Programming using Scratch | Programming using Turtle Logo and Scratch |
| E-Safety | E-Safety |

KS2 - Computing Curriculum

Pupils should be taught to:

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| design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts |
| use sequence, selection, and repetition in programs; work with variables and various forms of input and output |
| use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs |
| understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration |
| use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content |
| select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information |
| use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. |

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| Year 3 | Year 4 | Year 5 | Year 6 |
| Programming using Turtle Logo | Programming using Turtle Logo | Programming using Scratch | Programming using Scratch |
| Word Processing | Programming using Scratch | Programming using Flowl | Programming using Kodu |
| Drawing and Desktop Publishing | Photo and text editing | Sound | Spreadsheets |
| Internet Research (search engine, online communication) | Animation | Google Sketch-up | Film Making |
|  |  | Internet Research (what makes a webpage?) | Website Design |
| E-Safety | E-Safety | E-Safety | E-Safety |
| |  | | --- | | **ADDITIONAL WHOLE SCHOOL INFORMATION:** (displays, website, theme weeks, initiatives, community links, competitions, etc.) | | **Community Cohesion, enrichment and extra-curricular**: School takes part in National Events (science and technology week). Children compete in interschool, local and national events and competitions. Pupils and staff have worked with computing experts from a local secondary school. Staff have received CPD and pupils have had the opportunity to engage in workshops. ESafety work as part of anti- bullying week. Input from South Yorkshire Police workshops for parents and pupils.  **Theme Weeks**: Esafety Day. Computing and IT are often encorporated into most of the theme weeks held in school, Science and Technology week, Arts week etc.  **PLT challenges**: Many of our half termly PLT challenges have a computing or computer safety focus  **Pupil Premium/Dis:** Any events or activities in school requesting a voluntary contribution PP funding is used to ensure engagement from all PP|Dis students. Teachers are aware of the individuals making up this group within the class and monitor progress and attainment closely.  **G&T/Challenge:** All Science activities are differentiated. During Interfaith and philosophy week pupils have the opportunity to work on a range of projects facilitated by teaching staff. Teachers are aware of the individuals making up this group within the class and monitor progress and attainment closely.  **SEN/Inclusion:** All lessons are differentiated and the school’s inclusion policy followed. Teachers are aware of the individuals making up this group within the class and monitor progress and attainment closely. | | | | |
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