

## KSI - Computing Curriculum

Pupils should be taught to:

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.

| 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.   |

| 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 Flow1                   | 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 incorporated 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.