Ivington School
Computer Progression

Classes integrate the curriculum with assistance from local computing expertise, TT Education- Progression in Computing and the Herefordshire Computing Curriculum Progression in order to plan a bespoke computing curriculum relevant to the children of our school.

KS1 National Curriculum	KS2 National 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	**Pupils should be taught to:** • 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

PROGRESSION IN COMPUTING

Year	COMPUTER SCIENCE	INFORMATION TECHNOLOGY	DIGITAL LITERACY
1	• Understand what algorithms are ▪ Create simple programs ▪ Understand that algorithms are implemented as programs on digital devices ▪ Recognise common uses of information technology beyond school	▪ Use technology purposefully to create digital content ▪ Use technology purposefully to store digital content ▪ Use technology purposefully to retrieve digital content	• Use technology safely • Keep personal information private
2	▪ Understand that programs execute by following precise and unambiguous instructions ▪ Debug simple programs ▪ Use logical reasoning to predict the behaviour of simple, programs	▪ Use technology purposefully to organise digital content ▪ Use technology purposefully to manipulate digital content	• Use technology respectfully • Identify where to go for help /support when have concerns about content or contact on the internet or other online technologies
3	▪ Write programs that accomplish specific goals ▪ Use sequence in programs ▪ Work with various forms of input ▪ Work with various forms of output	▪ Use search technologies effectively ▪ Use a variety of software to accomplish given goals ▪ Collect information Collect data ▪ Design and create content ▪ Present information	• Use technology responsibly • Identify a range of ways to report concerns about contact
4	▪ Design programs that accomplish specific goals ▪ Design and create programs ▪ Debug programs that accomplish specific goals ▪ Use repetition in programs ▪ Control or simulate physical systems ▪ Use logical reasoning to detect and correct errors in programs ▪ Appreciate how search results are selected	▪ Select a variety of software to accomplish given goals ▪ Select, use and combine internet services ▪ Analyse / Evaluate information ▪ Present data ▪ Understand the opportunities computer networks incl. internet, offer for communication	• Identify a range of ways to report concerns about content • Recognise acceptable/unacceptable behaviour
5	▪ Solve problems by decomposing into smaller parts ▪ Use selection in programs ▪ Work with variables ▪ Use logical reasoning to explain how simple	▪ Combine variety of software to accomplish given goals ▪ Select, use and combine software on a range of digital devices	• Be discerning in evaluating digital content

	algorithms work ▪ Use logical reasoning to detect & correct errors in algorithms ▪ Understand how computer networks can provide multiple services, such as the World Wide Web	▪ Design and create systems ▪ Analyse data	
6	▪ Understand computer networks, including the internet ▪ Appreciate how search results are ranked	▪ Understand the opportunities computer networks including the internet offer for collaboration ▪ Evaluate data	• Be discerning in evaluating digital content