Ashleigh Primary School Computing National Curriculum Coverage

	Information Technology	**Computer Science**
Year 1	**How can we save memories on a computer/tablet?** • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school	**Can you tell a machine what to do?** • create and debug simple programs • use logical reasoning to predict the behaviour of simple programs
Year 2	**Can we write on a computer?** • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school	**Can we talk to computers?** • 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
Year 3	**Do computers have brains?** • understand computer networks including the internet; how they can provide multiple services, such as the world wide web • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	**Can we tell a computer what to do?** • design, write and debug programs that accomplish specific goals • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Year 4	**How are films made?** • 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	**How do electrical appliances work?** • 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
Year 5	**Can computers talk to each other?** • 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 • 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	**How do alarms work?** • 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
Year 6	**Are computers good at Maths?** • 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	**How is a computer game made?** • 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

E-Safety curriculum (taught throughout units and in PSHE lessons):

• 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 (KS1).
• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact (KS2).