What Computing looks like at Church Drive Primary School

We plan our creative curriculum so the children build a sense of belonging and being in the world.

Curriculum Intent	
	What a computing lessons looks like in our school: Computing is split into three areas – Computer Science, Digital Literacy and Information Technology. ***This is our philosophy:*** High quality modelling and scaffolding of skills leading to… • Fluency and capability of the skill with a range of applications and software both on iPads and laptops as well as other electronic equipment • Working at Greater Depth, specifically problem solving, programming and data handling. • Cross-curricular links wherever possible. • Children building on from basic skills, developing resilience and confidence with programming, multimedia and its purpose, collection and input of data creating resilient and confident digital natives. • Select pupils applying to become Digital Leaders, learning new skills and disseminating these to class teachers and peers. ***E-Safety (within Digital Literacy)*** • Children begin to understand the step which they must take in order to remain safe on line • Children understand steps they take after encountering something which makes them feel uncomfortable. Overall we strive for pupils to become confident digital natives as well as supportive, respectful and responsible members of society, both on line and off line. ***This is the knowledge and understanding gained at each stage:*** ***By the end of EYFS pupils will:*** • Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. ***By the end of Key Stage 1 pupils will:*** • 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. ***By the end of Key Stage 2 Pupils will:*** • 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.
Curriculum Implementation	***This is how it works:*** • Planning for programming is through a set of overt sessions • Opportunities for cross curriculum development in all units with foundations based on the overt lesson teaching. Cross curricular opportunities include a wide range of programs such as: J2 Data, Tinkercard and paint.net Support from Hi Impact for staff which is also used for CPD • Digital Leaders are trained and deliver teaching and learning to staff and pupils. ***Digital Literacy (E-safety)*** • Safe browsing and acceptable behaviour on line lessons will feature in every year group • Taught at an overt level each half term through RSHE • Revisited at the start of each overt computing lesson • Scenario discussed at the start of a discreet computing lesson • Discussed also as and when situations arise • Parental and family E-safety sessions ***Information Technology***

	• Children are exposed to a range of Software(laptops) throughout their learning journey • Apps and software include: ***Computer Science*** • Use of simple directional and programmable robots (Beebots) • Use of Code Studio as an introduction to programming in KS1 and continued into KS2 with a progression of skills ***This is what Adults do:*** • Planning is both overt and discreet building on previous learning, skills and experiences. • Create a learning environment rich in resources • Learning walks, pupil voice and staff audit • Whole school CPD • Raised profile of computing in clubs and Digital Leaders ***This is how we support and ensure access for all children:*** • Work may be scaffolded so that children are able to meet the learning objective. • Clear targets are highlighted and prioritised • Teacher and self-assessment to quickly identify those who may need more help in specific areas. • Small group/1-1 adult support, where necessary • Children who have SEND or EAL needs are taught key vocabulary prior to/at the start of the topic. • Seating children alongside good role models to support one another • By providing visual/practical prompts. • Teaching lessons using a range of different techniques ***This is how we challenge:*** • Work may be differentiated to support further challenge for those who need it. ***This is how we support staff:*** • Identification of CPD need • Use of staff meetings and Digital Leaders • Small sessions and immediate support as and when • Use of Hi Impact Computing Services
Curriculum Impact	***This is what you might typically see:*** • Happy and engaged learners • Open ended investigations- low threshold/high ceiling tasks • Paired/group work • A range of different activities including practical use of technology • Engagement and perseverance • Self-motivated children

• Resilient learners
• Children talking positively about computing, sharing and reflecting on their learning and how it relates to real life situations

This is how we know how well our pupils are doing:
• Lessons are planned based on computing skills which are specific for each year group
• Photographic and video evidence/QR codes

This is the impact of the teaching:
• Confident children who can talk about computing
• Children who are enjoying their learning in computing
• Depth of understanding/application in different contexts
• Children ready for the next step in education
• Confident and resilient digital natives who are responsible, respectful and supportive citizens both on and off line.
• A clear understanding of how to remain safe when on line in and outside of school.