



Cedars Park Primary School

Computing Long Term Plan



Intent

At Cedars Park, we value the computing curriculum. We ensure that our curriculum is accessible for all to enable learners to make progress from their own individual starting points, including those with Special Educational Needs (SEN). We believe computing is a crucial part of children's learning, as technology is now essential to our lives. We aim to equip the children with 'computational thinking' skills, so as to enable them to participate effectively in this digital world and provide them with all the necessary tools to achieve their highest potential in adult life. Computational thinking provides insight into many areas of the curriculum and allows us to solve problems and design systems. We believe that children who can think computationally are better able to conceptualise, understand and use computer-based technology, and so are better prepared for today's world and the future.

The national curriculum outlines the three strands of computing that children should be taught: computer science, information technology and digital literacy. Within computer science, children at Cedars Park learn the main vocabulary, including programming, algorithm, debug, repetition and coding. In each year group, they practically explore writing code and creating programs, as well as using logical reasoning to explain how algorithms work. Information technology is the strand that focuses on understanding the internet, using search technologies efficiently and collect, evaluate and present data and information. Finally, within digital literacy, we aim to provide children with the tools to stay safe online. In a world where any information is accessible at all times, and any information can be posted and shared by anybody, we value strongly the importance of equipping children at Cedars Park with the knowledge and tools to discern reliable facts from ones that are not. We believe it is crucial that children understand the importance of sharing information online and are able to consistently make safe choices online.

Implementation

Children learn how computers and computer systems work, as well as design and build programs, develop their ideas using technology and create a range of content. Computing is a practical subject and at Cedars Park, we value its aspects of invention, resourcefulness and resilience, which are thus encouraged. Computing lessons take place using laptops, Chromebooks or iPads. Purple Mash is a key resource used by teachers and children to ensure that a consistent platform is utilised in order to enable children to build on their skills and knowledge, year on year. As well as stand-alone computing lessons, children are constantly accessing computing equipment during the day, including reading books online, completing cross curricular tasks and presenting their work in a digital form. Teachers plan a different unit of work for each half term and coverage of all three strands of the computing curriculum is ensured. Some aspects of digital literacy, with a focus on e-safety, are covered in PSHE lessons as well as whole school assemblies. The school's teaching and curriculum is tailored to meet individual pupils' needs, including those with SEN. If appropriate, reasonable adjustments to the curriculum will be implemented in order for our pupils to achieve and make progress from their own individual starting points. For some pupils with SEN, technology is a vital adaptation in order for them to access the wider curriculum. As such, it is essential that all pupils receive high quality teaching to equip them with the necessary skills for living in a modern society.



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Impact

The impact of our computing curriculum can clearly be seen in projects that children create as well as presentations or documents created as digital content. Programs that children write code for are saved digitally (on Purple Mash) and accessed by teachers to ensure achievement of learning objectives. Children have the opportunity to self-assess the content they have created, as well as peer-assess. In each year group, children use past learned skills and apply them to new software and coding programs that they are exploring.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Early Years	Our Computing curriculum for the EYFS is centred around play-based, unplugged (no computer) activities that focus on building children's listening skills, curiosity and creativity and problem solving. Technology in the Early Years can mean: ● taking a photograph with a camera or tablet ● searching for information on the internet ● playing games on the interactive whiteboard ● exploring an old typewriter or other mechanical toys ● using a Beebot ● watching a video clip ● listening to music Allowing children the opportunity to explore technology in this carefree and often child-led way, means that not only will they develop a familiarity with equipment and vocabulary but they will have a strong start in Key Stage 1 Computing and all that it demands.					

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Year 1	Exploring Purple Mash and Creative computing	Data Explorers	Creating and Following Instructions and Making beats	Animated Stories	Coding	Technology Around Us
Year 2	The Internet and Route explorers	Coding	Questioning	Creating Pictures	Making Music And Presenting Ideas	Spreadsheets
Year 3	Touch Typing	Coding	Email	Branching Databases And Route Planners	Spreadsheets	Presentations
Year 4	Effective searching	Coding	Sound Stories And Unpacking Hardware and Software	Logo And Introduction to AI	Animation	Composing Beats
Year 5	Coding	Game Creator	Databases And Concept Maps	Quizzing	Spreadsheets	Word Processing
Year 6	Graphing And Data Detectives	Coding	Spreadsheets	Blogging	Networks And Introduction to Python	3D Modelling