

COMPUTING CURRICULUM AT SCOTT BROADWOOD

Our Computing Curriculum at Scott Broadwood

Intent: With technology playing such a significant role in society today, we believe computing and 'digital literacy' is a skill children must be taught if they are to be able to participate effectively and safely in this increasingly digital world. A high-quality computing education equips pupils to use creativity to understand and change the world. Ensuring our children have the knowledge, skills and understanding to operate and use computers yet also allowing children to research and broaden their knowledge in other curricular areas by using a computer. Computing also ensures children become 'digitally literate'; able to use and develop their ideas through information and communication technology at a level building them towards the future workplace and as active participants in a digital world.

Implementation: At Scott Broadwood we use the 'Teach Computing' curriculum; an innovative progression framework where computing content has been organised into interconnected networks and has been created by subject experts, using the latest pedagogical research and teacher feedback. Building on the knowledge and understanding taught in discrete Computing lessons, pupils are equipped to use computers in a cross-curricular way. The children at Scott Broadwood have access to hardware (chrome books, tablets, programmable equipment) and software that they need to develop knowledge and skills of digital systems and their applications. As well as opportunities underpinned within the scheme of work, children also spend time further exploring the key issues associated with online safety. They will use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact. Even our children in Early Years provision will be exposed to the understanding of internet safety as they explore the world around them and how technology is an everyday part of their learning and understanding of the world.

Impact: Children at Scott Broadwood are digitally literate and able to join the rest of the world on its digital platform. They are equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly, safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online. As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception <i>Adapted to respond to the needs and interests of children.</i>	People / My Body		The Natural World: Animals and Habitats		The Natural World Plants and Food	
KS1 Cycle A 2024-2025	How do we live a healthy life? <i>Scientist</i> <i>Engineer</i> <i>Artist</i>	How can we help? <i>Artist</i> <i>Musician</i>	How are schools the same? <i>Geographer</i> <i>Artist</i> <i>Scientist</i>	What could my classroom be made of? <i>Scientist</i> <i>Engineer</i> <i>Historian</i> <i>Artist</i>	What did Brunel do for Great Britain? <i>Historian</i> <i>Engineer</i> <i>Scientist</i>	How do plants grow near me? <i>(4 weeks)</i> <i>Scientist</i> <i>Geographer</i> <i>Artist</i> What is home? <i>(1 week block with trip)</i> <i>Scientist</i> <i>Geographer</i> <i>Artist</i>
KS1 Cycle B 2025-2026	What do artists do? <i>(4 weeks)</i> <i>Artist</i> How does my school change? <i>(3 weeks – engage, immerse, know how)</i> <i>Scientist</i> <i>Artist</i> <i>Geographer</i>	What is my hat made of? <i>Scientist</i> <i>Engineer</i> <i>Artist</i>	How does my school change? <i>(1 week – Winter)</i> Where is my school? <i>Geographer</i> <i>Scientist</i> <i>Musician</i>	Who helps who? <i>Historian</i> How does my school change? <i>(1 week – Spring)</i>	How do we move around? <i>(4 weeks)</i> <i>Engineer</i> <i>Geographer</i> <i>Scientist</i> How could we play in different ways? <i>Historian</i>	How could we play in different ways? <i>Historian</i> How does my school change? <i>(1 week – Summer)</i> What grows near me? <i>Scientist</i> <i>Geographer</i> <i>Engineer</i> <i>Artist</i>

Every unit of work in the Teach Computing Curriculum contains: a unit overview; a learning graph, to show the progression of skills and concepts in a unit; lesson content — including a detailed lesson plan, slides for learners, and all the resources you will need; and formative and summative assessment opportunities. <https://teachcomputing.org/curriculum/key-stage-1>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Computing Systems and Networks – Technology around us	Data and Information – Grouping Data	Programming A – Moving a robot	Programming B – Programming animations	Creating media – Digital Writing	Creating media – Digital Painting
Year 2	Computing Systems and Networks – IT around us	Creating Media – Digital Photography	Programming A – Robot algorithms	Data and Information – Pictograms	Creating Media – Digital Music	Programming B – Programming Quizzes

Unit summaries

	Computing systems and networks	Creating media	Programming A	Data and information	Creating Media	Programming B
Year 1	Develop your learners' understanding of technology and how it can help them. They will become more familiar with the different components of a computer by developing their keyboard and mouse skills, and also start to consider how to use technology responsibly.	Explore the world of digital art and its exciting range of creative tools with your learners. Empower them to create their own paintings, while getting inspiration from a range of other artists. Conclude by asking them to consider their preferences when painting with, and without, the use of digital devices.	This unit introduces learners to early programming concepts. Learners will explore using individual commands, both with other learners and as part of a computer program. They will identify what each floor robot command does and use that knowledge to start predicting the outcome of programs. The unit is paced to ensure time is spent on all aspects of programming and builds knowledge in a structured manner. Learners are also introduced to the early	This unit introduces pupils to data and information. They will begin by using labels to put objects into groups, and labelling these groups. Pupils will demonstrate that they can count a small number of objects, before and after the objects are grouped. They will then begin to demonstrate their ability to sort objects into different groups, based on the properties they choose. Finally, pupils will use their ability to sort objects into different	Promote your learners' understanding of the various aspects of using a computer to create and change text. Learners will familiarise themselves with typing on a keyboard and begin using tools to change the look of their writing, and then they will consider the differences between using a computer and writing on paper to create text.	This unit introduces learners to on-screen programming through ScratchJr. Learners will explore the way a project looks by investigating sprites and backgrounds. They will use programming blocks to use, modify, and create programs. Learners will also be introduced to the early stages of program design through the introduction of algorithms.

			stages of program design through the introduction of algorithms.	groups to answer questions about data.		
Year 2	How is information technology (IT) being used for good in our lives? With an initial focus on IT in the home, learners explore how IT benefits society in places such as shops, libraries, and hospitals. Whilst discussing the responsible use of technology, and how to make smart choices when using it.	Learners will learn to recognise that different devices can be used to capture photographs and will gain experience capturing, editing, and improving photos. Finally, they will use this knowledge to recognise that images they see may not be real.	This unit develops learners' understanding of instructions in sequences and the use of logical reasoning to predict outcomes. Learners will use given commands in different orders to investigate how the order affects the outcome. They will also learn about design in programming. They will develop artwork and test it for use in a program. They will design algorithms and then test those algorithms as programs and debug them.	This unit introduces the learners to the term 'data'. Learners will begin to understand what data means and how this can be collected in the form of a tally chart. They will learn the term 'attribute' and use this to help them organise data. They will then progress onto presenting data in the form of pictograms and finally block diagrams. Learners will use the data presented to answer questions.	Learners will explore how music can make them think and feel. They will make patterns and use those patterns to make music with both percussion instruments and digital tools. They will also create different rhythms and tunes, using the movement of animals for inspiration. Finally, learners will share their creations and compare creating music digitally and non-digitally.	This unit initially recaps on learning from the Year 1 Scratch Junior unit 'Programming B - Programming animations'. Learners begin to understand that sequences of commands have an outcome and make predictions based on their learning. They use and modify designs to create their own quiz questions in ScratchJr and realise these designs in ScratchJr using blocks of code. Finally, learners evaluate their work and make improvements to their programming projects.