Computing Policy

Policy Document Status			
Date of Policy Creation	10 June 2024	**Chair of Governors**	Gill Stubbs
Adoption of policy by Governing Board	10 July 2024	**Executive Headteacher**	Denise Garner
Inception of new Policy	11 July 2024	**Staff Member Responsibility**	Linzi Garner
Date of policy review	10 June 2025	**Day Care Manager**	Shelley Thursfield

The nature of Computing

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to
put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Curriculum Intent

We believe Computing expands a child's ability to interact with the world around them and provides a new set of skills for self-expression and communication which will help equip children with the confidence and capability to use computing throughout their later life. We aim to encourage a child's natural sense of wonder about the world in which they live. Our Computing curriculum is designed to inspire children's curiosity and encourage them to share their responses to what they see, hear, feel, and experience. We want them to achieve personal fulfilment and satisfaction in the works they produce. We believe that it cultivates important skills that benefit a child's development in their early years. It can help children to develop hand-eye coordination, and design. It can also help children to develop their decision-making skills and reduce anxiety. It inspires and encourages children to use computational thinking and creativity to understand the world. The curriculum is planned so children are given opportunities to play and gain hands on experience. This will equip children with the knowledge and skills they need to teach children how to be responsible, competent, confident, and creative users of information technology (IT)

Curriculum Implementation

- the computing curriculum is sequenced and well-structured with clear end points. knowledge is built on overtime and learning is broken down into component parts to allow children to know and remember more.
- pedagogical choices are designed to develop the practical, theoretical, and disciplinary knowledge intended in each lesson.
- classroom activities are clear about what is to be learned (the curriculum object) and enable children to practise it.
- teaching approaches take account of children's level of expertise.
- when children learn skills for the first time, teachers make sure they have enough opportunities to practise.
- as children become more proficient in areas of practical knowledge, classroom activities become increasingly varied and open ended.
- teachers' direct children's attention to the main concepts, themes, and ideas that they are exploring.

- subject specific vocabulary is included in curriculum planning, so children acquire a visual language. This 'language' helps children to express a huge variety of ideas.
- when on educational visits we ensure children have enough prior knowledge to make these experiences meaningful.
- teachers make subject-specific adaptations to activities for children with SEND, where appropriate, instead of excessive adaptations to the curriculum or lowering expectations
- the curriculum allows time for children to develop socially, to learn how to negotiate and collaborate to bring expansive ideas to life.

Role of the Computing subject leader

The role of the subject leader is to:

- develop good working relationships, to instil confidence by sharing expertise and knowledge and to be open to suggestions.
- have an overview of computing in the Early Years Foundation Stage and Key Stage 1 and monitor the implementation of the National Curriculum
- lead staff professional development so they have the knowledge and skills to teach computing.
- attend professional development and read research articles to keep up to date with developments in teaching computing in early years and primary.
- review long, medium- and short-term planning to ensure it is relevant.
- update and manage resources.
- Speak with children to measure the impact of the curriculum.
- work with other professionals and establishments
- Devise an action plan in response to monitoring and keep a PowerPoint portfolio of how art is taught in school and standards.
- keep parents and governors informed about standards in computing.
- Ensure staff are using SENSO in lessons to monitor children in lessons.
- To ensure SENSO filtering is being reviewed regularly by DSL.

The computing subject leader will keep a portfolio of examples of work to show progression in concepts and processes. Records in the form of photographs and samples of work are both records of practice and used as a staff resource.

Teaching and Learning

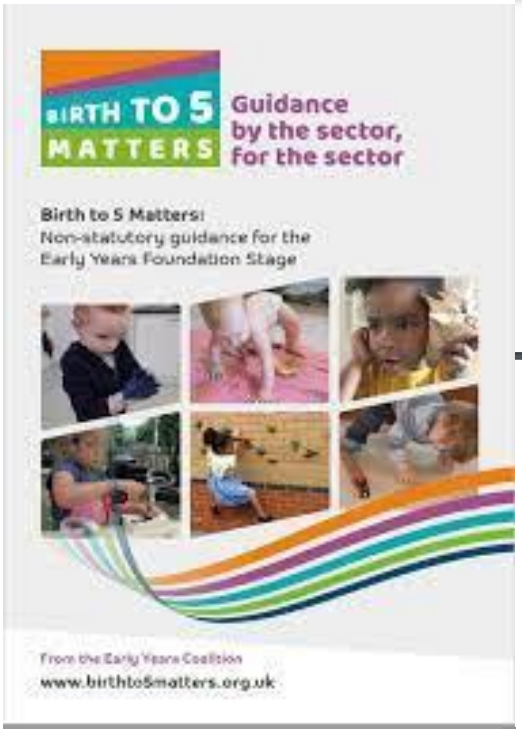
In Nursery and Reception, we teach **Technology** as one of the seven areas of learning set out in the Birth to 5 Matters to develop a child' computational thinking, IT, Online Safety and Computer Science.

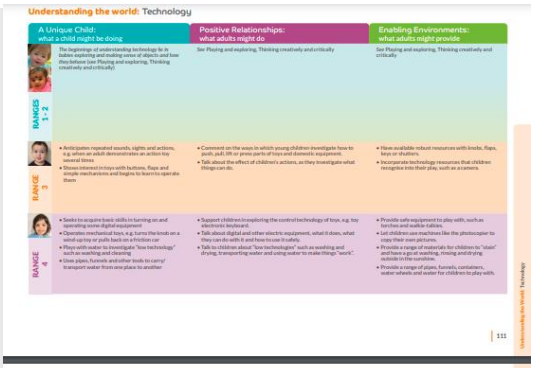
Early Years Foundation Stage

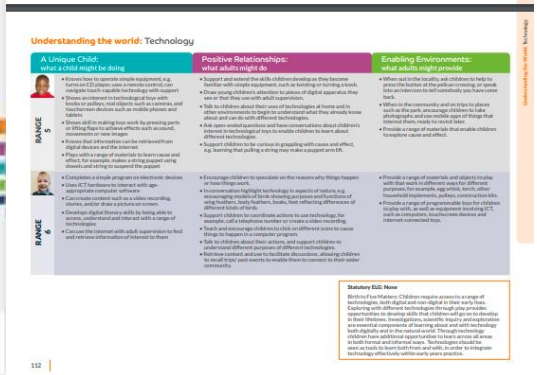
Our Computing and online safety curriculum includes the youngest learners in our school and nursery settings. We plan purposeful ways for our children to create with video, photographs, digital images, sound recordings and control devices like floor robots. We use a range of resources to support our curriculum: **Barefoot Teaching** resources which help develop the children's computational thinking, **Hello Ruby** resources and **Project Evolve**. They also learn social skills, rules and responsible

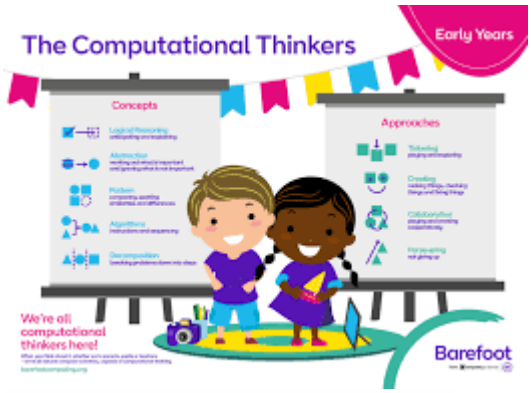
use when using devices and the internet. All of this is done with **The Characteristics of Learning** in mind, *Playing and Exploring*, *Creating and Thinking Critically*, *Active Learning*, making purposeful links to all areas of learning.

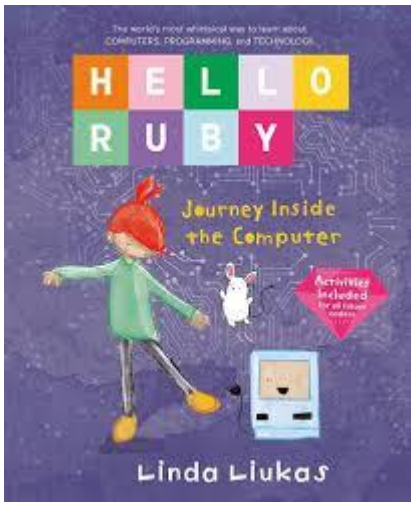
In Early Years we use stories and **Project EVOLVE** resources which provide knowledge, skills, behaviours, and attitudes over 8 strands that cover aspects of staying safe online.











PROJECT EVOLVE

USING RESOURCES

Key Stage 1

In Key Stage 1 we follow the National Curriculum for **Computing**
'The national curriculum provides children with an introduction to the essential knowledge that they need to be educated citizens. It introduces pupils to the best that has been thought and said and helps engender an appreciation of human creativity and achievement.'

National Curriculum Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms, and data representation.
- can analyse problems in computational terms and have repeated practical experience of writing computer programs to solve such problems.
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- are responsible, competent, confident, and creative users of information and communication technology.

Attainment targets

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study. The computing Knowledge and Skills grid has clear attainment by the end of each year group.

Subject content

Key stage 1

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.

Spiritual, Moral, Social, and Cultural (SMSC) development

The teaching of computing offers opportunities to support the personal development of our children. Groupings allow children to work together and discuss their ideas and feelings about their own work and the work of others in a sensitive way. They are given opportunities to collaborate and co-operate across a range of activities and experiences. Being imaginative and creative helps children to gain an understanding of themselves and others. They also develop an understanding of different times, cultures, and religions through learning about famous computer scientists. They develop a sense of global citizenship by using the Internet and email. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse, and they also gain a knowledge and understanding of the interdependence of people around the world.

Teachers and other adults in school promote the following attitudes during lessons:

- co-operation with others.
- caring for materials and themselves.
- respect for other people's work and opinions.
- self-respect and confidence in their own ideas.
- willingness to 'have a go'.
- perseverance,
- open mindedness,
- curiosity,
- critical reflection,
- awareness of re-using and recycling materials.

Environments

Each classroom has access to laptops, computer mice and headphones and one iPad with an iPad lead. Every teacher has a desktop/laptop computer, IWB, and visualizer.
For whole class teaching there is a laptop trolley with 30 laptops and computer mice which is timetable weekly for computing lessons.

Hardware	Software	Subscriptions
colour printer and scanner	Purple Mash which incorporates: ✓ a word processing package ✓ painting/drawing software ✓ a multimedia program.	ten town
digital cameras		phonics play
tuff Cam cameras		Mathletics
digital blue microscope		bug club
visualizers		purple mash
iPad		espresso

robots (Bee-Bots, Cubetto, Ozobot, remote control cats and cars)	✓ database programs ✓ control programs ✓ photo editing software ✓ video editing software	Calm Brain
bee bot mats		Floppy Phonics
laptops		

Technician

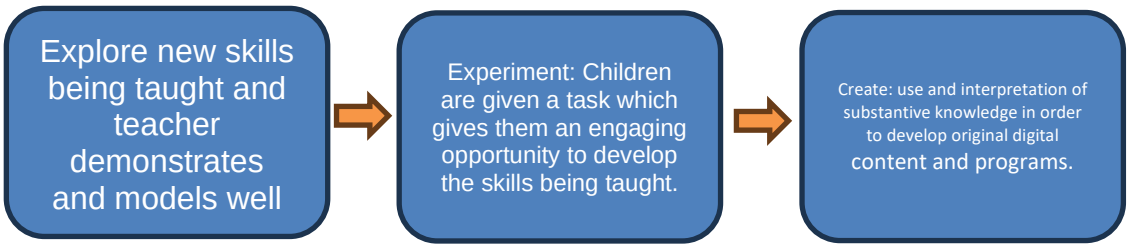
The school employs a qualified technician. He is responsible for installation of new software, maintenance of hardware and offers support to staff where difficulties arise. The technician is in school every two weeks for a full day.

Assigned Computer Scientist

Each year group is assigned at least one Computer Scientist so that the children gain knowledge of a range of different Computer Scientists and how they became famous in the computing world. Teachers have access to computing legends to help children learn about the history of their assigned computer scientist. When planning their learning sequence, teachers will research and assign additional artists which coincide with their chosen learning outcomes *(see appendix 1).*

Planning

Teachers follow medium term planning which is reviewed annually by subject leaders and teachers. Lessons include time for children to:



Staff use a variety of teaching and learning styles in computing lessons relating to the theme children's abilities and experience.

Our planning includes opportunities for

- children to work individually, in pairs or in larger groups.
- the study of computer scientists
- first-hand experience
- visiting computer scientists to work with children to give them the experience of working with a professional
- use of a range of IT equipment
- evaluation of ideas and methods
- children to see that their work is valued, celebrated, and displayed around the school.

Early Years

Birth to Five Matters: Children require access to a range of technologies, both digital and non-digital in their early lives. Exploring with different technologies through play provides opportunities to develop skills that children will go on to develop in their lifetimes. Investigations, scientific inquiry and exploration
are essential components of learning about and with technology both digitally and in the natural world. Through technology children have additional opportunities to learn across all areas in both formal and informal ways. Technologies should be seen as tools to learn both from and with, to integrate technology effectively within early years practice.

It is important in the EYFS to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Our early years learning environments will feature computing scenarios based on experience in the real world, such as in role play e.g., a toaster and a kettle. During this play the children, when ready, will work out for themselves how they work and this may well be supported by an adult using open-ended questioning such as, “What happens when you press…?”, “How do you view…?”. Children will gain confidence and control, by making remote control vehicles move or recording information using a camera. Over the year a range of technologies will be introduced to the children in this way: metal detectors, digital magnifiers, programmable toys, MP3 recorders, video cameras and, of course, computers with appropriate software.

Our Computing and online safety curriculum includes the youngest learners in our school and nursery settings. We plan purposeful ways for our children to create with video, photographs, digital images, sound recordings and control devices like floor robots. They also learn social skills, rules and responsible use when using devices and the internet. All of this is done with The Characteristics of Learning in mind, Playing and Exploring, Creating and Thinking Critically, Active Learning, making purposeful links to all areas of learning.
In Early Years we use stories and Project EVOLVE resources which provide knowledge, skills, behaviours, and attitudes over 8 strands that cover aspects of staying safe online.

Below is the long-term plan of the learning opportunities teachers follow when they teach computing in the Early Years. Within the Early years we use the Hello Ruby resources, story books, project evolve, barefoot computing materials and a range of robots, ozo bots and cubetto robot to enhance our currciulum.

‘Love, Laugh, Learn’

Resourcefulness, Resilience, Reciprocity, Reflectiveness

Nursery	1st Half term	2nd Half Term
Autumn	**Digital Literacy- Online safety -** Seeks to acquire basic skills in turning on and operating some ICT equipment. **Computer Science-** Operates mechanical toys, e.g., turns the knob on a windup toy or pulls back on a friction car**.** Technology hunts and what toys need to operate. Can you operate some ICT equipment? **IT-** Shows an interest in technological toys with knobs and pulleys, or real objects such as cameras or mobile phones. Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movement, or new images. Control the kettle, microwave, and toaster. **IT available in continuous provision** Roleplay -kettle, toaster, microwave Lightbox Laptops Large IWB screen (Beep Beep, phase 1 early literacy) CD player	**Digital Literacy—Online Safety** Netsmartz - Router’s birthday surprise **Computer Science-** Knows how to operate simple equipment e.g., turns the CD player on and uses a remote control. Children explore programmable toys. Cars, cats **IT available in continuous provision** Roleplay -kettle, toaster, microwave Lightbox Laptops Large IWB screen (Beep Beep, phase 1 early literacy) CD player
Spring	**Digital Literacy—Online Safety** Smartie the penguin - eBook **IT-** Knows how to operate simple equipment e.g., turns the CD player on and uses a remote control. knows that information can be retrieved from computers. To use the cd player, play, pause, stop, sound, headphones. Children learn you can find out information on an iPad/computer. **IT available in continuous provision** Roleplay -kettle, toaster, microwave Lightbox Laptops Large IWB screen (Beep, Beep, phase 1 early literacy) CD player	**Digital Literacy—Online Safety** Chicken clicking story book **Computer Science -** Knows how to operate simple equipment e.g. turns the CD player on and uses a remote control**.** To control a programmable toys car, cats and complete an obstacle course. Children use the language forward, backwards and turn. **IT available in continuous provision** Roleplay -kettle, toaster, microwave Lightbox Laptops Large IWB screen (beep beep, phase 1 early literacy) CD player
Summer	**Digital Literacy—Online Safety** Netsmartz - delivery for Webster **IT-** knows that information can be retrieved from computers. Completes a simple program on the computer. Complete a simple program on the computer. Children learn to take a picture of tuff cam. Children learn you can find out information on an iPad/computer. **IT available in continuous provision** Roleplay -kettle, toaster, microwave Lightbox Laptops Large IWB screen (beep, beep, phase 1 early literacy) CD player	**Digital Literacy—Online Safety** Digi duck story: learn that staying safe online is like staying safe in the real world. **IT- Completes a simple program on the computer.** To begin to use a computer mouse and not just touch screen. **Computer Science -** Uses ICT hardware to interact with age-appropriate computer software. Give a simple instruction to Cubetto. Use the language, forward. **IT available in continuous provision** Roleplay -kettle, toaster, microwave Lightbox Laptops Large IWB screen (beep, beep, phase 1 early literacy) CD player

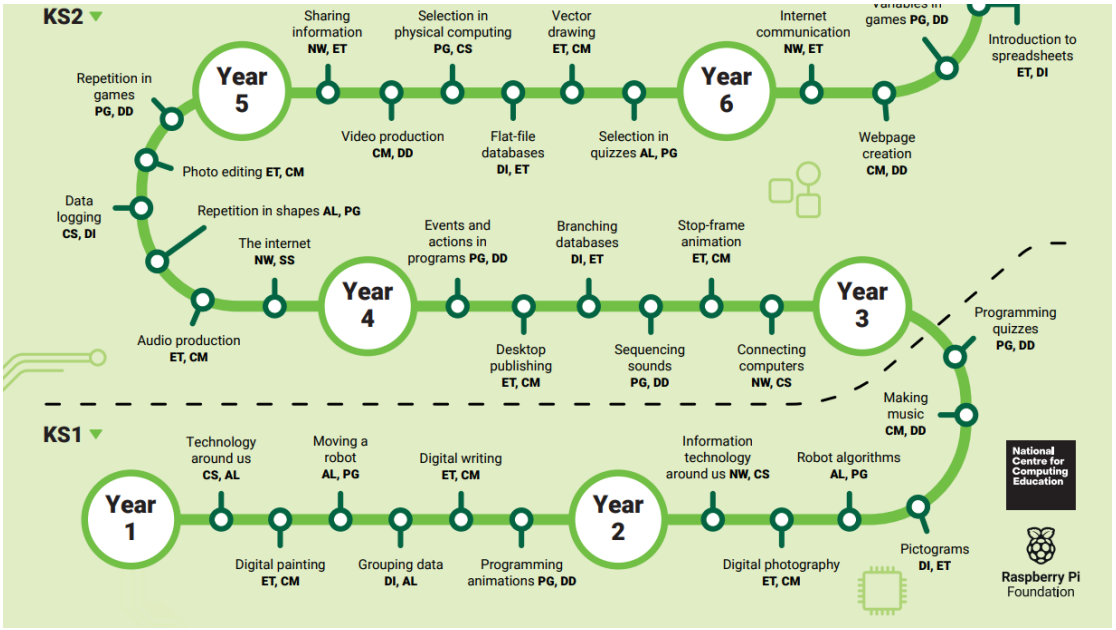
Reception	1st Half term	2nd Half Term
Autumn	**Digital Literacy—Online Safety** Smartie the penguin - eBook Project evolve-When and What: Managing Online Information **Computer Science** On/Off Button-Hello Ruby **Computational Thinking** Pumpkin Soup-Link to Harvest -Barefoot Resources **IT** Technology safari- Hello Ruby (Link with **Project Evolve**: I can recognise some ways in which the internet can be used to communicate.: Online Relationships) **IT available in continuous provision** Use a computer mouse. To complete a simple program. (Early literacy, Beep Beep, Phonics play, Purple Mash, mathematics games) Use a digital camera on Autumn walk. Roleplay toaster, microwave	**Digital Literacy—Online Safety** Netsmartz - Router’s birthday surprise **Computer Science-** Me and the computer-Hello Ruby **Project Evolve** PowerPoint: which rules are fair: Health, Well-being, and Lifestyle **Computational Thinking** Winter warmers snowmen and scarves **IT available in continuous provision** Use a computer mouse. To complete a simple program. (Early literacy, Beep Beep, Phonics play, Purple Mash, Maths games) Video camera Christmas play Roleplay toaster, microwave
Spring	**Digital Literacy—Online Safety** Jessie and Friends (Think you know) Linked to online safety day. Project evolve: Stomp your feet, spot the difference: Online Bullying Use Project evolve sayings: Responses and Reactions: Self-Image and Identity **Computer Science** Remote Control-Hello Ruby **Project Evolve** sentence starters: what are your rules? Health, Well-being, and Lifestyle Explore the ozobots **Computational Thinking** Feed the birds-Barefoot Computing (Link with the big bird watch) **IT available in continuous provision** To create a picture and use basic drawing tools. **Project Evolve** activity: Guess the file: Copy wright and ownership. Use a digital camera on Winter walk.	**Digital Literacy—Online Safety** Chicken Clicking story book. **Computer Science** Toothbrush algorithm- Hello Ruby (Link to jigsaw healthy me) **Computational Thinking** Springtime seeds- Barefoot Computing (links with science) **IT available in continuous provision** To create a picture and use basic drawing tools. To type their name on the computer. **Project Evolve**: whose is this? copy wright and ownership activity: Use a digital camera on Spring walk.

Summer	**Digital Literacy—Online Safety** Digi duck’s big decision **Project Evolve:** keep me informed: Online Reputation **Computer Science** Children explore the Cubetto programmable toys. Move forwards, backwards. **Computational Thinking** Rabbit Run-Barefoot Computing **IT available in continuous provision** To create a picture and use basic drawing tools. To type their name on the computer. Use a digital camera to take pictures of plants.	**Digital Literacy—Online Safety** Hectors World- Personal Information learn that staying safe online is like staying safe in the real world. **Project Evolve** PowerPoint: Personal or private: Privacy and Security **Computer Science** My first computer-Hello Ruby Children explore the Cubetto programmable toys. Move forwards, backwards, left, and right. **Computational Thinking** Seaside Tangrams-Barefoot Computing **IT available in continuous provision** To create a picture and use basic drawing tools. To type their name on the computer. Use a digital camera to take pictures on summer walk. To become aware of a pictogram to collect information linked to Design and Technology favourite fruit.

Building Knowledge in Key Stage 1

We use the Teach Computing Scheme and Common-Sense Media to deliver the national curriculum and aspects relating to online safety or digital citizenship. The scheme gives teachers a clear overview of lesson objectives, an outline of the lesson and the expected outcomes.

Each unit of work also shows links to the Education for a Connected World framework Education for a Connected World - GOV.UK (www.gov.uk)



Year 1	1st Half term	2nd Half Term
Autumn unit	**Digital Literacy—Online Safety** Keep it private (Common sense media planning) **IT-**Technology around us	**Digital Literacy—Online Safety** ABC searching (Common sense media planning) **IT-**Digital Painting
Spring unit	**Digital Literacy—Online Safety** E-Safety Day theme (Computing lead will share planning) **Computer Science -**Moving a robot	**Digital Literacy—Online Safety** Going places safely (Common sense media planning) **IT-**Grouping Data/Online Safety
Summer unit	**Digital Literacy—Online Safety** My creative work (See Common sense media planning) **IT-**Digital Writing/Online Safety	**Digital Literacy—Online Safety** Sending Email (See Common sense media planning) **Computer Science -**Introduction to animation

Year 2	1st Half term	2nd Half Term
Autumn unit	**Digital Literacy—Online Safety** Staying safe online (Common sense media planning) **IT** Information technology around us/Online Safety	**Digital Literacy—Online Safety** Follow the Digital Trail (Common sense media planning) **IT-**Digital Photography
Spring unit	**Digital Literacy—Online Safety** E-safety Day (Computing Lead to send planning) Use technology safely and respectfully, keeping personal information private. **Computer Science** Robot algorithms	**Digital Literacy—Online Safety** Screen out the Mean. Introduction to cyberbullying (See Common Sense Media). **IT-**Pictograms/Online Safety
Summer unit	**Digital Literacy—Online Safety** Using Keywords (See Common sense media planning) **IT-**Making music/online Safety	**Digital Literacy—Online Safety** Sites I like (See common sense media planning) **Computer Science-**Introduction to quizzes

National Centre for Computing Education

Raspberry Pi

Lesson 1: How can we paint using computers?

Introduction

This lesson introduces learners to the freehand tools available for digital painting.

Learning objectives

To describe what different freehand tools do

- I can make marks on a screen and explain which tools I used
- I can draw lines on a screen and explain which tools I used
- I can use the paint tools to draw a picture

Key vocabulary

paint program, tool, paintbrush, erase, fill, undo

Vocabulary

In the teaching of computing ensuring that children and staff are using the correct vocabulary is essential. Also, staff have access to vocabulary on planning and on an overview grid for each unit.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	**COMPUTING SYSTEMS AND NETWORKS** **Technology around us** **Online Safety** Technology, computer, mouse, trackpad, keyboard, screen, click, drag, input device, shift, spacebar, capital letter, full stop, safely, responsibly	**CREATING MEDIA** **Digital Painting** Paint program, tool, paintbrush, erase, fill, undo, Piet Mondrian, primary colours, shape tools, line tool, fill tool, undo tool, Henri Matisse, Wassily Kandinsky, feelings, colour, brush style, George Seurat, Pointillism, prefer, dislike, like	**PROGRAMMING A** **Moving a robot** Forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, plan, algorithm, route, program	**DATA AND INFORMATION** **Grouping data** **Online Safety** Object, label, group, search, image, colour, shape, property, value, data set, less, most, fewest, the same	**CREATING MEDIA** **Digital writing** **Online Safety** Word processor, keyboard, keys, letters, Microsoft Word, letters, numbers, space, backspace, text cursor, toolbar, bold, italic, underline, undo, font, toolbar	**PROGRAMMING B** **Introduction to animation** ScratchJr, Bee-Bot, command, sprite, compare, programming, programming area, block, joining, start, program, background, delete, reset, algorithm, predict, effect, change, value, block, instructions, appropriate, design
Year 2	**COMPUTING SYSTEMS AND NETWORKS** **Information technology around us** **Online safety** Information technology (IT), computer, barcode, scanner/scan	**CREATING MEDIA** **Digital photography** Device, camera, photograph, capture, image, digital, landscape, portrait, horizontal, vertical, field of view, narrow, wide, format, framing, focal point, subject, matter, flash, focus, background, foreground, editing, filter, Pixl, changed, real	**PROGRAMMING A** **Robot algorithms** Instruction, sequence, clear, unambiguous, algorithm, program, order, commands, prediction, artwork, design, route, mat, debugging	**DATA AND INFORMATION** **Pictograms** **Online safety** More than, less than, most, least, organise, data, object, tally chart, votes, total, pictogram, enter, data, tally chart, compare, count, explain, attribute, group, same, different, most popular, least popular	**CREATING MEDIA** **Making music** **Online safety** Music, planets, Mars, Venus, war, peace, quiet, loud, feelings, emotions, pattern, rhythm, pulse, Neptune, pitch, tempo, notes, instrument, create, open, edit	**PROGRAMMING B** **Introduction to quizzes** Sequence, command, program, run, program, start, predict, blocks, actions, sprite, modify, match, debug, features, evaluate

Ofsted Review

Ofsted's review of computing published in May 2022 suggest 2 domains of knowledge:

- 'This review draws a distinction between declarative and procedural knowledge in computing.
- Declarative knowledge, often referred to as conceptual knowledge in the literature, consists of facts, rules and principles and the relationships between them. It can be described as 'knowing that'.
- In contrast, procedural knowledge is knowledge of methods or processes that can be performed. It can be described as 'knowing how'.

Declarative Knowledge

Children will build on what has been taught in early years, so children become proficient in

- computer science
- information technology
- digital literacy

Developing children's declarative knowledge is necessary for when they make and create computing. This knowledge allows children to make choices based on what they know about the limits and possibilities of technology.

Children will learn about:

- **Programming**
- **Computational thinking**
- **Information technology: Digital artefacts, Computing Contexts**
- **Digital Literacy**

Children will learn important programming knowledge to enable them to become skilful programmers.
The curriculum carefully sequences knowledge related to e-safety to ensure that subject content is appropriate for children at each stage of their education.
The curriculum will teach children how to create digital artefacts.

Procedural knowledge
Teachers consider these skills in terms of procedural knowledge, as they are methods and processes that can be performed. This makes identifying the knowledge required to perform these processes skilfully much easier.

Substantive Knowledge
Substantive knowledge in computing is understanding how to use technology, how to be safe and knowing how to program. This is developed through deliberate practice and by children applying their knowledge of how to be computational thinkers.

Disciplinary Knowledge
Disciplinary knowledge in computing is the use and interpretation of substantive knowledge to develop original digital content and programs.

Assessment and recording
Teachers use the **Progression in Knowledge and Skills** document for computing, which sets out what each child is expected to learn and by when.
The children's work is assessed through informal judgements, made through observations during each computing lesson and compared against the success criteria. The children are presented with questions to help guide their thinking and to provide them with the opportunity to reflect upon the lesson and the knowledge they have gained from it. These questions are linked to the key elements of computing and support teacher judgements and generate next steps for planning.

Each child in KS1 has their own computing book. Evidence me an online profile is used in the EYFS to capture video/pictures as evidence.

Formal assessment
At the end of EYFS, Profiles are used.

For assessment purposes and report writing at end of Key Stage 1, class teachers refer to the expected National Curriculum outcomes.

Cross Curricular links
Computing plays an important part across the whole range of the National Curriculum subjects. The skills that are developed can be applied across the curriculum. For example, graphics work links in closely with work in art, and work using databases supports work in maths, while the Internet proves very useful for research in humanities subjects. Computing enables children to present their information and conclusions in the most appropriate way.IT is a major contributor to the teaching of English. Through the development of keyboard skills and the use of computers, children learn how to edit and revise text. They learn how to improve the presentation of their work by using desk-top publishing software. Many IT activities build upon the mathematical skills of the children. Children use computing in mathematics to collect data, make predictions, analyse results, and present information graphically.

Equal Opportunities

Equal opportunities are considered when we decide upon the resources we provide and the teaching strategies we employ. In our curriculum planning we ensure that all children, with due respect to their culture, religion, and background, have equal access to all areas of the curriculum, extra-curricular activities, all areas of the grounds, equipment and resources, the staff, and time to contribute to the whole class and group work.

Multicultural Dimension

Cultural diversity is seen as a rich resource by the staff. They use this resource whenever possible to support computing activities.

Computing

Computer programmes, scanners, digital cameras, printers, and websites are used to help children to create and develop their work.

Differentiation

The teaching of computing needs to consider the varied abilities, attitudes, and individual needs of the children. Computing lessons can be differentiated by outcome however, if a skill or activity is deemed inappropriate for a child or group of children, alternatives will be planned which best suit their needs.

Inclusion

Lessons and activities are planned to include all children by using a range of approaches. This includes questioning, use of equipment, and mixed ability grouping to enable children to offer peer support. Lessons are planned to facilitate the identification of children at either end of the ability range within each class.

Security and filtering

The Computing technician and Telford and Wrekin will be responsible for regularly updating anti-virus software and filtering.
Staff use SENSO to monitor children during lessons and the DSL monitor the SENSO software alerts. Please see our filtering and monitoring policy for more information.
Use of computing will be in line with the school’s ‘Acceptable Use Policy’ (AUP). All staff, volunteers and children must sign a copy of the schools AUP.
Parents will be made aware of the ‘acceptable use policy’.
All children and parents will be aware of the school expectations for responsible use of computing and the Internet and will understand the consequence of any misuse.
The agreed rules for safe and responsible use of computing and the Internet will be displayed in all computing areas.

Shared drive

Long Term Planning, Medium Term Planning and PowerPoints for lessons are saved on the shared drive and are available for teachers to access and use to support their teaching.

Central Computing resources

Photocopier room

- Beebots
- Beebots mats
- Photocopier

GP Room in or near the laptop trolley.

- 30 laptops
- 15 digital cameras
- 30 computer mice
- 15 headphones

Health and Safety

The school is aware of the health and safety issues involved in children's use of computing. All electrical appliances in school are tested accordingly. It is advised that staff should not bring their own electrical equipment in to school but if this is necessary, then the equipment must be PAT tested before being used in school. This also applies to any equipment brought into school by, for example, people running workshops, activities, etc. and it is the responsibility of the member of staff organising the workshop, etc. to advise those people. All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to the IT technician, bursar or head teacher who will arrange for repair or disposal.

Involving parents and carers

The school believes that it is important to have the support of parents, carers and the wider community for the Computing programme. Parents and carers are given the opportunity to find out about the computing curriculum through:

- Parent/carer curriculum meetings and workshops
- Online safety updates
- Parent/carer teacher consultations
- School reports
- Parents can view the Computing policy on the school website.
- Information leaflets/displays/newsletter.

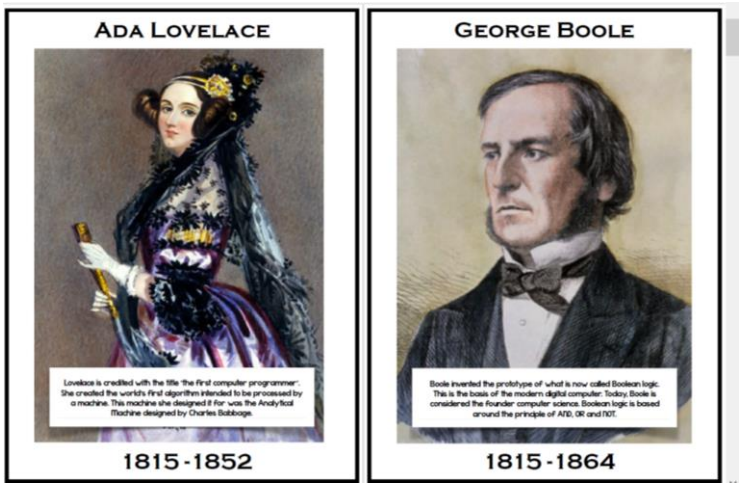
Links with other policies

This online safety policy is linked to our:

- Online Safety Policy
- Home School Agreement
- Child Protection and Safeguarding policy
- Behaviour policy
- Staff Disciplinary Policy
- Data protection policy and Privacy Notices
- Complaints procedure
- Filtering and Monitoring

Appendix 1

Computer Science legends (Examples below)



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