Computing

Curriculum Progression Map (2026 - 2027)

Level expected at the end of EYFS – Although there is no statutory ELG for technology, we are using Birth to 5 Matters non-statutory guidance for the EYFS.

Understanding the world (Technology)	**Personal, Social and Emotional Development (Self-Regulation)**
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, in order to integrate technology effectively within early years' practice.	Shows an understanding of their own feelings and those of others and begin to regulate their behaviour accordingly.

Key Stage 1 National Curriculum Expectations	**Key Stage 2 National Curriculum Expectations**
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.	Pupils should be taught to: •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.

Intent

At our school we want pupils to be masters of technology. Technology is everywhere and will have a pivotal role in our children's lives. Therefore, we want to model and educate our pupils on how to use technology positively, effectively, responsibly and safely. We want to provide our children with a broad and engaging curriculum that encompasses computer science, information technology and digital literacy. Our vision for Computing is to provide a curriculum that inspires pupils to become confident, responsible, and skilled digital citizens.

We aim to achieve a balance between providing a knowledge rich curriculum along with plenty of opportunity for pupils to apply their knowledge creatively so that we help children begin their journey to becoming skilful computer scientists. We want to foster creativity, problem-solving, and critical thinking through engaging Computing lessons and equip pupils with the skills required to thrive in a technology driven world. We encourage staff to try to embed computing skills across the whole curriculum to make learning creative and accessible.

Implementation

Our school follows the Purple Mash Computing scheme. Curriculum planning is overseen by the subject leader and is tailored to pupil's needs by the class teachers. Each class has one Computing lesson every week (lasting approximately 45 minutes). We also embed computing skills across the curriculum where possible and appropriate.

We have a comprehensive progressions document and cover every element of the Computing curriculum for key stage one children. The knowledge/skills statements build year on year to deepen and challenge our learners. We have broken our computing curriculum into the three strands of Information Technology, Computer Science and Digital Literacy.

Progress is tracked using digital portfolios, digital quizzes and teacher observations. Feedback is given verbally during lessons and through comments on completed digital work. Assessment statements that link to the national Computing framework objectives are used to assess attainment at the end of each unit of work.

Impact

We want our children to enjoy the curriculum we deliver and be able to use technology effectively, confidently and safely. We want our pupils to consider the WHY behind their learning and not just the HOW. We want learners to recognise, discuss and appreciate the impact computing can have on their learning, development and life. Finding the right balance with technology is key to an effective education and a healthy life-style and we hope to provide children with the first early steps that they can then continue to build on in their next stage of education and beyond. We want children to be able to demonstrate their knowledge and skills by showcasing, sharing and celebrating their work.

Knowledge / Skills to be covered

Year 1

	Computer Science			Information Technology	Digital Literacy	
National Curriculum Statements	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, keep personal information private; identify where to go for help and support with concerns about content or contact on the internet or other online technologies.
Year 1 Pupil Outcomes	Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. When they code, they understand that they are using an algorithm and turning it into something that the computer can interpret.	Children can create simple instructions for someone to follow, building up to creating a simple program that a computer can follow by arranging code blocks. They will recognise simple errors in a program such as the way an object is moving and attempt to debug in a purposeful way.	When looking at simple programs, children use logical reasoning based upon their understanding of the desired algorithm and their knowledge of code blocks to predict outcomes. They focus on objects and their actions and the events that initiate these actions.	Children can name, save and retrieve their work and follow simple instructions to access online resources. They create and combine digital content such as images, sound and text with a purpose. **Unit Coverage:** • Introduction to Purple Mash	Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can comment on the specific purpose of technology examples they encounter. **Unit Coverage:** • Technology Around Us	See 2BeSafe (below) **Unit Coverage:** • Technology Around Us

	Unit Coverage: • Creating & Following Instructions • Coding	**Unit Coverage:** • Creating & Following Instructions • Coding	**Unit Coverage:** • Coding	• Creative Computing • Data Explorers • Animated Stories • Making Beats		

Year 1 - 2BeSafe

National Curriculum Statement relating to Computing:

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.

2BeSafe Themes

Copyright and Ownership	Health, Wellbeing and Lifestyle	Managing Online Information	Online Bullying	Online Relationships	Online Reputation	Privacy and Security	Self-Image and Identity
Children begin to explain why their creations belong to them, for example "I designed it" or "I filmed it." They learn how to save their work with a clear name so it is recognised as theirs. They also understand that work created by other people does	Children begin to explain the rules that help them stay safe when using technology, both at home and in other places.	Children are introduced to simple ways of finding information using digital tools like search engines or voice assistants. They learn that the internet contains all kinds of content — things they like, things they don't like, and things	Children learn how to behave online in positive ways that do not upset others. They practise giving examples of kind and respectful behaviour.	Children learn that they should ask permission before doing things online and understand why this is important. They practise communicating with people they know, with adult support, and begin to explore why it matters to be kind,	Children start to understand that information shared online can stay there and be copied by others. They learn that some information should not be shared without checking with a trusted adult first.	Children are introduced to the idea of passwords and how they help protect information, accounts, and devices. They learn to recognise more detailed personal information, such as where they live or go to school, and are taught	Children start to recognise that, just like in real life, there may be people online who could upset or embarrass them. They learn when and how to tell a trusted adult if something worries them and understand that adults can help

not belong to them, even if they save a copy.		that may be real or make-believe. They also practise asking a trusted adult for help if they see something that upsets or worries them.		considerate, and respectful to others online - even if people don't always find the same things funny or upsetting.		that they should always ask a trusted adult before sharing any of this online.	keep them safe.

Year 2

	Computer Science			Information Technology	Digital Literacy	
National Curriculum Statements	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, keep personal information private; identify where to go for help and support with concerns about content or contact on the internet or other online technologies.
Year 2 Pupil Outcomes	Children can create a computer program from an algorithm they have made, turning each step into code. They	Children can create programs that include more than one object type. They can alter attributes of objects	Children can identify the parts of a program that respond to specific events and initiate specific actions.	Children know how to access digital content they have created or have been assigned . They use a range of software to	Children identify a range of devices that connect to the internet and explain that the internet is used to access	See 2BeSafe (below) **Unit Coverage:** • The Internet

	recognise that outputs from an on-screen program or physical device are directly attributed to the instructions they have coded. **Unit Coverage:** • Route Explorers • Coding	purposefully and predict and observe the effect. They vary the flow of sequences through the use of timer commands. They can program buttons to initiate events in programs. They know that unexpected errors in their programs are due to the code they have created. They attempt to debug using logical reasoning, interpreting each line of code in sequence. **Unit Coverage:** • Route Explorers • Coding	Using a design plan or simple written algorithm, they can compare this against how a program is executing when in play mode. **Unit Coverage:** • Route Explorers • Coding	create digital content and manipulate it with purpose. For example, creating spreadsheets to organise data, merging digital artifacts from different sources into a file. They know how to save and edit work. **Unit Coverage:** • Creating Pictures • Spreadsheets • Questioning • Presenting Ideas • Making Music	websites and find information. They can carry out simple keyword searches to find specific information. **Unit Coverage:** • The Internet	• 2Be Safe

Year 2 - 2BeSafe

National Curriculum Statement relating to Computing:

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.

2BeSafe Themes

Copyright and Ownership	Health, Wellbeing and Lifestyle	Managing Online Information	Online Bullying	Online Relationships	Online Reputation	Privacy and Security	Self-Image and Identity
Children learn that content found online often belongs to other people. They begin to explain why it is important to respect that ownership.	Children learn that technology is used in many different environments, such as at home or in public places. They discuss simple guidance to keep themselves and others safe when using devices in these settings.	Children begin using simple keywords in search engines and practise navigating web pages using links, tabs, and buttons. They learn that voice assistants (like Alexa or Siri) are not real people. They also discuss the difference between "real" and "made up" information and learn that not everything they find online is true.	Children are introduced to the concept of bullying. They learn what bullying is, how it can happen online, and how it can affect people's feelings. Importantly, they are taught that anyone being bullied is not to blame and that help is always available.	Children start to understand that people may use technology to communicate with strangers, and why this can be risky. They learn about asking permission before sharing information, how to say "no" or "I'm not sure," and why it's important to respect other people's choices. They are encouraged to always ask a trusted adult before agreeing to anything online and to seek help if something happens without their consent.	Children find out that once information is online, it can last a long time and be seen by others. They are encouraged to ask for help if something is shared without consent or if the information is wrong.	Children develop their understanding of passwords and learn rules for keeping personal information private. They talk about what it means for something to be "private," practise creating and protecting passwords, and learn that many devices in the home are connected to the internet, such as toys, TVs, or even fridges.	Children begin to notice that people may look or behave differently online than they do in person. They talk about situations online that might feel worrying or upsetting and learn clear steps they can take to ask for help.

Year R 'I can' Statements

Mouse and Trackpad Skills	I can hold a computer mouse with my finger on the correct buttons. I can use a mouse to make the cursor move around the computer screen where I want it to go. I can click the correct mouse button to play games on the computer. I can use a mouse accurately to click and drag objects on the screen. I can use the mouse roller to scroll up and down a page. I can use a laptop touchpad.
Keyboard Skills	I can find letters of the alphabet on a keyboard. I am beginning to put spaces between words in my typed work. I can use the delete keys. I can type capital letters and lower case and know how to change between these. I can type numbers using a keyboard. I know how to move to the next line down when typing. I can use the arrow keys to move around the screen.
Drawing Skills	I can select colours when painting on the computer. I can draw pictures on the computer. I can use a computer to draw with different widths of pens. I can try the different tools that I can draw with on the computer. I can use the undo button correctly. I can use the erase button. I can use a touchscreen device purposefully. I can draw on a computer using a mouse.

Robots	I can talk about where I am moving a toy vehicle whilst I am moving it. I can describe the route taken by a toy vehicle. I can follow directions to make a route for a toy vehicle. I can plan a route for a toy vehicle. I can follow my own plan for where the toy vehicle should move. I can make a floor robot move. I can control the forwards, backwards and rotation of a floor robot one step at a time. I can program a 3-step route for a floor turtle. I can predict where a floor robot will end up when given the instructions for a 2 or 3 step route. I can plan a route for a floor robot and then carry out these instructions one step at a time. I can plan a route for a floor robot and then carry out these instructions more than one step at a time.
Sounds	I can make music using a computer. I can add sound effects to my work. I can use a device to record myself speaking and play back the sounds.
Photography	I can talk about what photos show. I can take photos using a digital device. I can use the webcam in Mini Mash. I can open photos in Purple Mash. I can open photos that I have taken, in Purple Mash.
Technology Around Us	I can talk about what technology is used at home. I can talk about what technology is used outdoors. I can talk about what technology is used in the world around me.
Hardware	I can understand why having clean hands is important when using shared devices. I can understand why it is not sensible to eat and drink whilst using a technological device.

	I can understand why I need to take care with electronic devices and their plugs and wires. I can take appropriate actions when I need to carry a device to a different location. I can use devices with care. I can identify the technology used around me. I can identify the parts of a computer and what they are for.
Safety and Privacy	I can explain how my work on the computer belongs to me and other people's work belongs to them. I can explain what it means for something to be private. I can talk about how my body feels when I am not comfortable with something. I know who can help me when I am feeling worried. I can show that I understand how to be kind to others. I can choose activities in my free time that help me to be healthy.
Quizzes	I can understand what a quiz is. I can complete a multiple-choice quiz. I can complete a sequencing quiz. I can complete a matching quiz. I can complete a sorting and sequencing quiz. I can complete quizzes on the computer. I can play games that ask me questions.
Using Purple Mash with an Individual Login	I can get to the Purple Mash page on my device. I can login to Purple Mash / Mini Mash in school using the shortcut icon. I can login to Purple Mash and Mini Mash using my username and password. I can save work in my own tray / folder when I am using Mini / Purple Mash. I can open work that I have done earlier. I can find and complete 2Dos that my teacher has set for me.

Year R - 2BeSafe Objectives

Copyright and Ownership	Health, Wellbeing and Lifestyle	Managing Online Information	Online Bullying	Online Relationships	Online Reputation	Privacy and Security	Self-Image and Identity
I know that work I create belongs to me. I can name my work so that others know it belongs to me.	I can identify rules that help keep us safe and healthy in and beyond the home when using technology. I can give some simple examples of these rules.	I can talk about how to use the internet as a way of finding information online.	I can describe ways that some people can be unkind online. I can offer examples of how this can make others feel.	I can recognise some ways in which the internet can be used to communicate. I can give examples of how I (might) use technology to communicate with people I know.	I can identify ways that I can put information on the internet.	I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location). I can describe who would be trustworthy to share this information with; I can explain why they are trusted.	I can recognise (online or offline) that anyone can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who makes them feel sad, uncomfortable, embarrassed or upset.

Curriculum Overview

Predominant Computing strand*

	Computer Science
	Information Technology
	Digital Literacy

Most units will include aspects of all strands

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
1	Pirates	It's a Wonderful World	Space	Castles	Once Upon a Time	Farms
	Introduction to Purple Mash (3 lessons) **Creative Computing** (4 lessons)	**Data Explorers** (6 lessons)	**Creating & Following Instructions** (3 lessons) **Making Beats** (4 lessons)	**Animated Story Books** (6 lessons)	**Coding** (6 lessons)	**Technology Around Us** (4 lessons)

Online Safety delivered throughout the year using 2BeSafe – Being Safe in a Digital World

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
2	Let's Go Wild!	Poles Apart	The Great Fire	Twisted Tales	Come Outside	Summer Fun
	Creating Pictures (5 lessons)	**Making Music** (3 lessons) **Route Explorers** (4 lessons)	**Spreadsheets** (6 lessons)	**Questioning** (4 lessons) **Presenting Ideas** (4 lessons)	**Coding** (6 lessons)	**The Internet** (4 lessons)

Online Safety delivered throughout the year using 2BeSafe – Being Safe in a Digital World

<table>
<tr><th>Year R</th><th>Autumn 1</th><th>Autumn 2</th><th>Spring 1</th><th>Spring 2</th><th>Summer 1</th><th>Summer 2</th></tr>
<tr><td></td><td>Getting to know you</td><td>Looking at the Past</td><td>People Who Help Us</td><td>Traditional Tales</td><td>The Lost World</td><td>Mighty Minibeasts</td></tr>
<tr><td></td><td colspan="6">Rather than a scheme with set lessons, the Purple Mash early years resources are designed to integrate into the day-to-day routine and set-up of an early years setting with opportunities for using Mini Mash or Purple Mash as part of the Early Years curriculum to support children in working towards early learning goals. In addition, there are units of suggested ideas that focus on computing skills specifically, that can also be provided as opportunities for learning as part of the topics in other areas to give children a sound basis to explore topics using technology and to be ready for progressing through the Computing curriculum. These are as follows and are designed to be integrated and linked to wider early years curriculum areas. These have been loosely classified into the three strnds but there is overlap between all three strands.
<table>
<tr><td>Mouse and Trackpad Skills</td><td>Keyboard Skills</td><td>Drawing skills</td><td>Robots</td><td>Sounds</td><td>Photography</td></tr>
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Online Safety delivered throughout the year using 2BeSafe – Being Safe in a Digital World