# Purple Mash Computing Scheme

## 8 Computing Scheme Overview

## Introduction to the Scheme

### Introduction to the Scheme

The Purple Mash Computing Scheme is a complete scheme covering the National Curriculum for Computing, with planning, resources and progression built in. It is designed to support the teaching of Computer Science, Information Technology and Digital Literacy within one coherent platform.

Everything needed to deliver a fully comprehensive computing curriculum across the school is included within the Purple Mash Scheme of Work. This means teachers have access to all software, teaching slides, supporting videos, individual activities and assessment materials they need, all in one place.

The aim is to make planning and delivery as straightforward as possible, **without** requiring schools to look elsewhere for any additional resources.

The **F.A.Q** document below has been designed to answer the most common questions about the Purple Mash Computing Scheme of Work. We hope that you find this useful. If you require any further assistance, or require any support, please get in touch by emailing support@2simple.com.

- Frequently Asked Questions

## 2026 - 2027 Long Term Planner

### Long Term Planner

These example tracks for each year group provide a suggested route of units to follow with a total of **36 teaching hours**.

Each track includes a range of units offering full coverage of curriculum objectives as well as the three computing strands: Information Technology, Digital Literacy and Computer Science.

In most year groups there are also some **additional units** which can be taught in addition or as a replacement to those units in the suggested track, depending on the needs of your setting.

**Following feedback this year, some year group tracks have been reordered to better reflect progression. While lesson and unit content remains unchanged, the sequence may differ from previous versions. Teachers are, of course, free to adapt the order to suit their classes.**

(A downloadable version of these tracks is available at the bottom of this page.)

## Year 1

Information Technology | Computer Science | Digital Literacy

| Unit Title | Introduction to PM | Creative Computing | Data Explorers | Creating & Following Instructions | Animated Stories | Coding | Technology Around Us | Making Beats |
|---|---|---|---|---|---|---|---|---|
| Lessons | 3 | 4 | 6 | 3 | 6 | 6 | 4 | 4 |
| | Online Safety – Delivered throughout the year using 2BeSafe – Being Safe in a Digital World | | | | | | | |

| Additional Units | Robotics with Mai-Z MouseBot |
|---|---|
| Lessons | 4 (Y1/2 unit) |

## Year 2

Information Technology | Computer Science | Digital Literacy

| Unit Title | Creating Pictures | Making Music | Spreadsheets | Route Explorers | Questioning | Coding | Presenting Ideas | The Internet |
|---|---|---|---|---|---|---|---|---|
| Lessons | 5 | 3 | 6 | 4 | 4 | 6 | 4 | 4 |
| | Online Safety – Delivered throughout the year using 2BeSafe – Being Safe in a Digital World | | | | | | | |

| Additional Units | Introduction to Purple Mash | Robotics with Mai-Z MouseBot |
|---|---|---|
| Lessons | 2 | 4 (Y1/2 unit) |

## Year 3

Information Technology | Computer Science | Digital Literacy

| Unit Title | Touch Typing | Email | Route Planners | Spreadsheets | Coding | Presentations (Microsoft, Apple & Google) | Branching Databases |
|---|---|---|---|---|---|---|---|
| Lessons | 4 | 6 | 5 | 6 | 6 | 5 | 4 |
| | Online Safety – Delivered throughout the year using 2BeSafe – Being Safe in a Digital World | | | | | | |

| Additional Units | Introduction to Purple Mash | micro:bit | Robotics with Mai-Z MouseBot |
|---|---|---|---|
| Lessons | 2 | 4 | 5 (Y3/4 unit) |

## Year 4

Information Technology | Computer Science | Digital Literacy

| Unit Title | Animation | Unpacking Hardware & Software | Sound Stories | Logo | Effective Searching | Coding | Composing Beats | Introduction to AI |
|---|---|---|---|---|---|---|---|---|
| Lessons | 6 | 4 | 4 | 4 | 4 | 6 | 4 | 4 |
| Online Safety - Delivered throughout the year using 2BeSafe - Being Safe in a Digital World | | | | | | | | |

| Additional Units | Introduction to Purple Mash | micro:bit | Robotics with Mai-Z MouseBot |
|---|---|---|---|
| Lessons | 2 | 4 | 5 (Y3/4 unit) |

## Year 5

Information Technology | Computer Science | Digital Literacy

| Unit Title | Quizzing | Databases | Game Creator | Spreadsheets | Coding | Word Processing (Microsoft, Apple & Google) | Concept Maps |
|---|---|---|---|---|---|---|---|
| Lessons | 5 | 4 | 5 | 6 | 6 | 6 | 4 |
| Online Safety - Delivered throughout the year using 2BeSafe - Being Safe in a Digital World | | | | | | | |

| Additional Units | Introduction to Purple Mash | Coding: External Devices | micro:bit | Robotics with Mai-Z MouseBot |
|---|---|---|---|---|
| Lessons | 2 | 6 | 4 | 5 (Y5/6 unit) |

## Year 6

Information Technology | Computer Science | Digital Literacy

| Unit Title | Blogging | Networks | Graphing | Data Detectives | Coding | 3D Modelling | Spreadsheets (Microsoft, Apple & Google) | Introduction to Python |
|---|---|---|---|---|---|---|---|---|
| Lessons | 4 | 4 | 4 | 4 | 6 | 4 | 6 | 4 |
| Online Safety - Delivered throughout the year using 2BeSafe - Being Safe in a Digital World | | | | | | | | |

| Additional Units | Introduction to Purple Mash | Binary | micro:bit | Robotics with Mai-Z MouseBot |
|---|---|---|---|---|
| Lessons | 2 | 4 | 4 | 5 (Y5/6 unit) |

- Long Term Planner Yr 1-6

# 2026 - 2027 Unit Content Overview

## Unit Content Overview

These **content overviews** offers additional information on all of the units in the scheme.

**Like the Long Term Planning tracks, these have been updated to reflect the revised teaching sequence and include more detailed explanations of content.**

(A downloadable version of these documents is available at the bottom of this page.)

## Year 1

Information Technology | Computer Science | Digital Literacy

| | | | |
|---|---|---|---|
| **Introduction to Purple Mash** — 3 lessons<br>This unit introduces Purple Mash, and the essential knowledge and skills required for the Year 1 units. Children will learn about 2Dos, saving work and navigating to key areas.<br>• Logging in and out of Purple Mash<br>• Opening and using 2Dos<br>• Saving work in the Work area | **Creative Computing** — 4 lessons<br>Children develop their mouse, keyboard and basic computing skills using creative tools. Children will use the 2DIY tools to paint, create jigsaws and make simple drag and drop games.<br>• Making digital art<br>• Making and sharing jigsaws<br>• Making a drag and drop game | **Data Explorers** — 6 lessons<br>Children use software tools to group and sort recognisable objects. By the end of the unit, children can collect simple data and present it in a pictogram.<br>• Sorting and grouping items<br>• Understanding what data is<br>• Representing data accurately | **Creating & Following Instructions** — 3 lessons<br>The basis for understanding simple algorithms and algorithmic thinking. This is a foundational unit, introducing the basis of logical thinking in preparation for coding.<br>• Following instructions<br>• Creating Instructions<br>• Understanding simple algorithms |
| **Animated Stories** — 6 lessons<br>Children create digital books using the 2Create a Story tool. They learn how to work with images, text and sound. Children also learn how to animate simple objects.<br>• Creating digital art and text<br>• Adding animation to images<br>• Adding sound | **Coding** — 6 lessons<br>Children learn coding using the block coding tool, 2Code. Children will explore simple instructions and relate this to code blocks. By the end of this unit, children will be able to make a simple program.<br>• Using blocks to code<br>• Understanding objects, actions and events<br>• Planning and designing a program | **Technology Around Us** — 4 lessons<br>Defining and understanding what technology is. Children will relate this to school, home, outside and to its use in the wider world.<br>• Understanding what technology is<br>• Recognising technology in the local environment and wider world | **Making Beats** — 4 lessons<br>Introducing digital music making. Children will use the tools 2Explore and 2Beat to make their own digital music.<br>• Creating sounds using 2Explore<br>• Combining instruments using 2Beat<br>• Composing digital music |
| **Robotics with Mai-Z MouseBot** — 4 lessons<br>A Year 1 or Year 2 unit that introduces children to robotics.<br>• Controlling the Mai-Z MouseBot through code<br>• Coding movement, lights and sounds | | | |
| **Online Safety: To be delivered throughout the year using 2BeSafe** | | | |

## Year 2

Information Technology | Computer Science | Digital Literacy

| | | | |
|---|---|---|---|
| **Introduction to Purple Mash** 2 lessons<br>An optional introduction to Purple Mash and the essential skills for beginning the year 2 scheme units. Use with classes who haven't used Purple Mash before or who need a refresher in the basics. | **Creating Pictures** 5 lessons<br>Digital art creation using 2Paint A Picture. Children learn about famous art styles and how a digital art tool can be used to reproduce art in that style.<br>• Painting in different styles<br>• Learning about famous art styles<br>• Creating a portfolio of digital art | **Making Music** 3 lessons<br>Explore digital music creation through the use of the music tool, 2Sequence.<br>• Understanding a digital music tool<br>• Relating functions to musical terms<br>• Composing music digitally | **Spreadsheets** 6 lessons<br>Creating and using spreadsheets with 2Calculate, focusing on how to enter, organise, and manage data in rows and columns.<br>• Understanding rows and columns<br>• Inserting images with values<br>• Using totalling tools<br>• Creating graphs |
| **Route Explorers** 4 lessons<br>Children code using the tool, 2Go. Children learn to build simple algorithms to move a screen turtle along routes.<br>• Considering direction and distance<br>• Creating commands<br>• Building an algorithm | **Questioning** 4 lessons<br>Children will explore how to ask questions to collect useful information. They will learn to organise data using tally charts, pictograms, and simple branching databases to help sort and identify objects.<br>• Asking questions to collect data<br>• Using 2Count to present data<br>• Using a branching database | **Coding** 6 lessons<br>Builds on the coding skills and knowledge from Year 1. Children will explore, modify and create programs that include the use of timers and button objects.<br>• Understanding algorithms<br>• Introducing sequencing<br>• Coding interaction between objects<br>• Using timers and debugging | **Presenting Ideas** 4 lessons<br>Children will learn how to present ideas using the concept mapping tool, 2Connect. They will organise information using the features of a concept map and think about how to present their thoughts clearly to an audience.<br>• Using and making mind maps<br>• Using a mind map as a presentation tool |
| **The Internet** 4 lessons<br>The fundamentals of the internet, including its purpose, how we access it, and how to use it safely and effectively.<br>• Defining the World Wide Web and the internet<br>• Recognising different hardware<br>• Understanding websites, webpages and browsers | **Robotics with Mai-Z MouseBot** 4 lessons<br>A Year 1 or Year 2 unit that introduces children to robotics.<br>• Controlling the Mai-Z MouseBot through code<br>• Coding movement, lights and sounds | | |
| **Online Safety: To be delivered throughout the year using 2BeSafe** | | | |

## Year 3

Information Technology | Computer Science | Digital Literacy

| | | | |
|---|---|---|---|
| **Introduction to Purple Mash** 2 lessons<br>An optional introduction to Purple Mash and the essential skills for beginning the year 3 scheme units. Use with classes who haven't used Purple Mash before or who need a refresher in the basics. | **Touch Typing** 4 lessons<br>Introduce children to touch typing. Children learn correct posture, finger positioning and typing techniques to develop speed and accuracy, while understanding how these skills support safe and effective computer use.<br>• Recognising keyboard locations<br>• Understanding correct finger positioning<br>• Improving accuracy and speed | **Email** 6 lessons<br>Children explore electronic communication using 2Email. Children learn how to respond to, compose and add attachments to emails as well as consider the safety aspects of email communication.<br>• Composing and replying to emails<br>• Opening and sending attachments<br>• Using email safely | **Route Planners** 5 lessons<br>Children will plan algorithms and write code that includes angles of turn to create routes for screen turtles, testing them using 2Go.<br>• Writing commands using rotation<br>• Creating algorithms and writing code<br>• Planning routes<br>• Repetition in 2Go |
| **Spreadsheets** 6 lessons<br>Using 2Calculate in Advanced Mode, helping children move beyond basic data entry to explore how spreadsheets can calculate and solve problems.<br>• Advanced mode of 2Calculate<br>• Understanding cell addresses<br>• Using the formula wizard | **Coding** 6 lessons<br>Children will explore timers, the repeat command and the importance of nesting code. They will build up to using design documentation to code a program.<br>• Using flowcharts in 2Chart<br>• Using timers<br>• Introducing repetition<br>• Testing and debugging | **Presentations** 5 lessons<br>Use of industry standard software to create presentations. Children will explore features of the presentation software then create and present their own slideshow presentations.<br>• Adding media<br>• Customizing with animations and timings<br>• Designing an effective presentation | **Branching Databases** 4 lessons<br>Explore and create branching databases in 2Question. They learn how binary questioning is used to sort data records and about the importance of testing and debugging databases that they create.<br>• Asking binary questions<br>• Completing branching databases<br>• Creating and testing branching databases |
| **micro:bit** 4 lessons<br>Introducing the micro:bit for coding external devices. Children will explore how to make basic outputs occur from the micro:bit when inputs are detected. The software includes an emulator for use in schools without micro:bits.<br>• Using the LED display<br>• Sequencing and timing<br>• Understanding inputs and outputs<br>• Adding sounds and gestures | **Robotics with Mai-Z MouseBot** 4 lessons<br>A Year 3 or Year 4 unit that introduces children to robotics.<br>• Controlling the Mai-Z MouseBot through code<br>• Coding movement, lights and sounds | | |
| **Online Safety: To be delivered throughout the year using 2BeSafe** | | | |

## Year 4

Information Technology | Computer Science | Digital Literacy

| | | | |
|---|---|---|---|
| **Introduction to Purple Mash** (2 lessons)<br>An optional introduction to Purple Mash and the essential skills for beginning the year 4 scheme units. Use with classes who haven't used Purple Mash before or who need a refresher in the basics. | **Animation** (6 lessons)<br>Digital animation and the common techniques used by animators. Children will use traditional animation methods and compare these methods with using animation software (2Animate).<br>• Knowing the types of animation<br>• Understanding onion skinning<br>• Exploring animation features<br>• Using storyboarding | **Unpacking Hardware and Software** (4 lessons)<br>Further understanding of technology and computer systems in relation to their hardware and software.<br>• Defining types of technology<br>• Knowing how systems work together<br>• Identifying hardware<br>• Understanding software | **Sound Stories** (4 lessons)<br>This unit introduces children to 2Cast, an audio recording tool in Purple Mash. Children will explore the features of effective audio books and work as a team to script, record and edit their own.<br>• Recording audio content<br>• Creating sound effects<br>• Post-production editing |
| **Logo** (4 lessons)<br>This unit introduces children to Logo programming, focusing on developing their understanding of basic commands and programming concepts. Children will learn to create shapes and letters using instructions.<br>• Using Logo commands<br>• Writing commands in a sequence<br>• Refining code using repetition and procedures | **Effective Searching** (4 lessons)<br>This unit teaches children to use search technologies effectively by selecting clear keywords, refining searches for accuracy, and evaluating online content to judge whether it is reliable and trustworthy.<br>• Using a search engine<br>• Search rankings<br>• Reliable searching<br>• Search algorithms | **Coding** (6 lessons)<br>This unit builds on learning from previous coding units. Children will learn to use selection, co-ordinates, looping and variables. They will use these coding skills to create their own game.<br>• Introducing selection<br>• Exploring design properties<br>• Introducing loops<br>• Coding number variables | **Composing Beats** (4 lessons)<br>This unit teaches children to explore the different elements of music, experiment with beats, and compose engaging music using the Purple Mash tool, Busy Beats.<br>• Exploring pulse, rhythm and tempo<br>• Understanding pitch and texture<br>• Composing a melody |
| **Introduction to AI** (4 lessons)<br>This unit introduces pupils to Artificial Intelligence, exploring what it is, what it can do, and how it is used in today's digital world.<br>• Exploring how AI works<br>• Investigating the positive and negative impacts of AI<br>• Considering AI in the future | **micro:bit** (4 lessons)<br>This unit introduces children to coding a micro:bit to make simulations of real-world tools such as dice and step counters. Includes an emulator for schools without micro:bits.<br>• Exploring sensor inputs and the accelerometer<br>• Using variables, inputs and outputs<br>• Coding with selection and loops | **Robotics with Mai-Z MouseBot** (4 lessons)<br>A Year 3 or Year 4 unit that introduces children to robotics.<br>• Controlling the Mai-Z MouseBot through code<br>• Coding movement, lights and sounds | |
| **Online Safety: To be delivered throughout the year using 2BeSafe** | | | |

## Year 5

Information Technology | Computer Science | Digital Literacy

| | | | |
|---|---|---|---|
| **Introduction to Purple Mash** (2 lessons)<br>An optional introduction to Purple Mash and the essential skills for beginning the year 5 scheme units. Use with classes who haven't used Purple Mash before or who need a refresher in the basics. | **Quizzing** (5 lessons)<br>The process of designing and creating interactive quizzes using Purple Mash's 2Quiz tool.<br>• Evaluating the features of a good quiz<br>• Choosing appropriate question types<br>• Making use of feedback and titles<br>• Testing and editing quizzes | **Databases** (4 lessons)<br>Using table-based databases. Children will create their own databases as well as query existing databases to find information that they are being asked for.<br>• Understanding records and fields<br>• Creating a collaborative database<br>• Searching databases<br>• Analysing data | **Game Creator** (5 lessons)<br>Children will design and make their own 3D maze adventure games using the 2DIY3D tool, assessing the effectiveness of their own and others' creations.<br>• Exploring the features of a good game<br>• Designing and making sprites and the game world<br>• Evaluating the playability of games |
| **Spreadsheets** (6 lessons)<br>Through measurement conversions, graphing, weather analysis, budgeting, and planning a holiday, children learn how spreadsheets support real-world decision-making.<br>• Using formulae<br>• Exploring measurement conversions<br>• Predicting results and identifying patterns | **Coding** (6 lessons)<br>Children will learn about the importance of simplifying code, as well as how tags, functions and different variable types can be used within a program.<br>• Coding efficiently by refining code<br>• Simulating a physical system<br>• Exploring decomposition and abstraction<br>• Using functions and variables | **Word Processing** (6 lessons)<br>This unit introduces children to word processing by using industry standard software. Children will explore how to edit, format and create their own documents.<br>• Creating documents<br>• Using images<br>• Entering and editing text<br>• Using tables and templates | **Concept Maps** (4 lessons)<br>In this unit, children explore how concept maps can be used to organise, develop and present ideas using 2Connect. They will learn to create their own structured concept maps based on non-fiction topics and present their work clearly to an audience.<br>• Creating concept maps<br>• Presenting from a concept map<br>• Making collaborative concept maps |
| **Coding External Devices** (4 lessons)<br>Coding programs which enable the Purple Chip external device to be used as a game controller as well as exploring ways that the interaction of a host device and an external device can be used in real world scenarios.<br>• Using device movement<br>• Exploring text functions<br>• Coding interaction with the environment | **micro:bit** (4 lessons)<br>Explores the use of the temperature sensor and pins on the micro:bit as well as sensors and inputs covered previously. Includes an emulator for schools without micro:bits.<br>• Exploring sensor inputs and the accelerometer<br>• Using selection, variables, inputs and outputs<br>• Coding for the micro:bit pins | **Robotics with Mai-Z MouseBot** (4 lessons)<br>A Year 5 or Year 6 unit that introduces children to robotics.<br>• Controlling the Mai-Z MouseBot through code<br>• Coding movement, lights and sounds<br>• Radio control | |
| **Online Safety: To be delivered throughout the year using 2BeSafe** | | | |

## Year 6

Information Technology | Computer Science | Digital Literacy

| | | | |
|---|---|---|---|
| **Introduction to Purple Mash** 2 lessons<br>An optional introduction to Purple Mash and the essential skills for beginning the year 5 scheme units. Use with classes who haven't used Purple Mash before or who need a refresher in the basics. | **Blogging** 4 lessons<br>Children explore blogs and their features, including how they can be used to engage an audience effectively.<br>• Planning the theme, content and structure<br>• Writing, editing and publishing a blog post<br>• Understanding blog moderation<br>• Reviewing and commenting on blog posts | **Networks** 4 lessons<br>This unit allows children to learn more about what networks are, what they do and how they connect devices. Children also consider the safety aspects of networks.<br>• Identifying examples of networks<br>• Recognising types of networks<br>• Understanding internet services<br>• Discussing positive and negative use of networks | **Graphing** 4 lessons<br>This unit explores the benefits of creating common graph types, digitally. Children will create a range of familiar graph types using the 2Graph and 2Calculate tools.<br>• Creating a range of graph types<br>• Incorporating multiple datasets<br>• Using graphs to solve a problem<br>• Exporting and importing files |
| **Data Detectives** 4 lessons<br>Exploration of 'big data' using Data Detectives; an interactive set of databases challenges. Children will interpret information being requested and query databases to find the information.<br>• Filtering and sorting data<br>• Grouping data<br>• Linking tables | **Coding** 6 lessons<br>Coding cloning and hotspots within programs. Children will use more complex flowcharts to help them test and debug existing simulations and programs.Using functions<br>• Understanding flowcharts and control simulations<br>• Coding for user input | **3D Modelling** 4 lessons<br>3D Modelling design using the CAD software, 2Design and Make. It guides children to create, refine and evaluate models with creativity and purpose.<br>• Working with viewpoints of 3D objects<br>• Adding and editing points on a model<br>• Designing for a purpose | **Spreadsheets** 6 lessons<br>Industry standard spreadsheets software. Children will explore how to create spreadsheets and use their functionality to support real-world decision-making and problem-solving.<br>• Performing calculations<br>• Entering and using formulae<br>• Presenting data<br>• Solving real life problems |
| **Introduction to Python** 4 lessons<br>Introducing text-based Python coding using the Python in Pieces platform. Python in Pieces translates between block-code and Python.<br>• Comparing block and text code views<br>• Coding for text output<br>• Working with different data types<br>• Coding repetition in Python | **Binary** 4 lessons<br>The concept of binary, helping them understand that all digital systems store and process information using patterns of 1s and 0s.<br>• Examining how binary represents data in digital systems.<br>• Converting from decimal to binary<br>• Exploring binary in relation to game states | **micro:bit** 4 lessons<br>Use of micro:bits to collect data on environmental conditions. Children will create programs that use the micro:bit's pin input to create outputs.<br>• Using the micro:bit as a data logger<br>• Measuring, recording and analysing environmental data<br>• Collecting data and exporting to graphical software | **Robotics with Mai-Z MouseBot** 4 lessons<br>A Year 5 or Year 6 unit that introduces children to robotics.<br>• Controlling the Mai-Z MouseBot through code<br>• Coding movement, lights and sounds<br>• Radio control |
| **Online Safety: To be delivered throughout the year using 2BeSafe** | | | |

- Unit Content Overview

# Excel Overview Document

## Excel Overview Document

This **overview spreadsheet** contains all the key information for each unit. It includes:

- Lesson title, aims and success criteria
- Key Vocabulary by lesson
- Overview of tools used
- National Curriculum links

- Overview Spreadsheet

# 2026 - 2027 Mixed Aged Planning

## Mixed Aged Planning

This document has been designed to support schools with mixed age classes consisting of:

- Years 1 and 2
- Years 3 and 4
- Years 5 and 6

It is a suggested plan for schools to follow based on 36 hours of teaching a year, offering a wide range of units with the full breadth of National Curriculum objectives.

- Mixed Age Overview

**We understand that no two schools are the same.**

The scheme is designed with flexibility in mind and can be used effectively in any mixed-age setting, regardless of mix.

We regularly work with schools to support them in mapping out mixed-age planning, and we are very happy to help with this.

If you would like help in amending this plan to meet the needs of your school, please contact the education team at 2Simple by emailing support@2simple.com.

## Online Safety

### Online Safety

It is recommended that Online Safety is delivered over the course of the year using **2BeSafe - Being Safe in a Digital World**. This is an **Online Safety Scheme** created by 2Simple. These sessions can be delivered outside of Computing lessons as part of PSHE and\or RSE lessons, or wherever timetable flexibility may allow.

- **2BeSafe** covers many of the requirements of the Digital Literacy strand of the Computing curriculum.
- **2BeSafe** meets the guidance set out within the Department for Education's - **Teaching Online Safety in Schools Guidance** and Education for a Connected World.
- **The Education for a Connected World framework** outlines eight key areas which seek to equip children and young people for digital life and the digital world.
- **2BeSafe** offers a comprehensive coverage of these requirements for primary schools starting from Reception up to Year 6.
- For each objective within the framework, we have produced a **15-to-20-minute session** containing activities to promote discussion, greater thinking and deeper reflection in order to raise the profile of the importance of staying safe online.
- All sessions contain a teaching **PowerPoint and easily accessible resources** in order to save teachers' time.
- Sessions **do not** require children to take out **devices**; activities requiring devices are optional.

Find out more and view the **2BeSafe Online Safety Scheme** by clicking the button below.

- 2BeSafe- Online Safety Scheme

## Adaptation and SEND

### Adaptation and SEND

Where appropriate, guidance has been given on how to simplify tasks within lessons or challenge those who are ready for more stretching tasks. We identify SEND as a broad term which can include physical, sensory, cognitive, behaviour and learning access needs, of which some children with SEND needs may be functioning at above expected national levels.

Within the scheme, most lessons are designed to be differentiated by using support and/or scaffolding to adapt tasks and activities so that outcomes can be tailored to each child's individual needs.

Specific SEND guidance is not provided, except where difficulties in other subjects may affect access to computing content. For example, some activities involving spreadsheets draw on mathematical understanding, which may present additional challenges for certain pupils.

We aim to make resources accessible to as many children as possible, such as including voice recordings alongside text in quiz activities, and carefully considering colour palettes and illustrations.

Extension tasks are included in many lessons to provide additional challenge for more able learners.

## Links Across the Curriculum

### Links Across the Curriculum

Within the scheme, there are many opportunities to incorporate the computational skills into other subjects. Resources could be adapted or created to match your topics. Below are some suggestions.

**Units that link to the Maths curriculum:**

- Year 1 - Data Explorers
- Year 2 - Questioning
- Year 3 - Branching Databases
- Year 5 - Databases
- Year 6 - Graphing
- Year 2, 3 and 5 - Spreadsheets
- Year 6 - Spreadsheets

**Units that could be part of English lessons:**

- Year 2 - Presenting Ideas
- Year 4 - Sound Stories
- Year 5 - Word Processing

**Units that could easily be topic linked; resources will need to be adapted to have a topic theme:**

- Any of the data handling units suggested in the Maths section.
- Year 1 - Animated Stories
- Year 2 - Creating Pictures
- Year 2 - Presenting Ideas
- Year 3 - Presentations
- Year 4 - Animation
- Year 4 - Sound Stories
- Year 5 - Quizzing
- Year 5 - Game Creator
- Year 5 - Word Processing
- Year 5 - Concept Maps
- Year 6 - Blogging

**Music topics could be incorporated into music lessons with a modelling of musical skills on both instruments and using the computer:**

- Year 1 - Making Beats
- Year 2 - Making Music
- Year 4 - Composing Beats

**Typing** could be covered during a regular 10-minute morning session over a term rather than during dedicated computing lessons (Year 3 Touch Typing). This is facilitated by using the Typing Across the Year resources (found in the Computing area).

## Cultural Capital

### Cultural Capital

*"As part of making the judgement about the quality of education, inspectors will consider the extent to which schools are equipping pupils with the knowledge and cultural capital they need to succeed in life. Our understanding of 'knowledge and cultural capital' is derived from the following wording in the national curriculum: 'It is the essential knowledge that pupils need to be educated citizens, introducing them to the best that has been thought and said and helping to engender an appreciation of human creativity and achievement.'"*

(Ofsted's definition of cultural capital – Extract: Ofsted School Inspection Handbook 2019)

When we consider cultural capital in relation to a child starting their journey of learning in a school setting, it's the idea that they all have started school with their own experiences and knowledge. These experiences and knowledge will link to their culture and wider family. Pierre Bourdieu, a French sociologist, developed the concept of cultural capital in the 1960s, arguing heavily that children's attainment in schools was not defined by solely economic factors. Various research indicates a strong correlation between the value placed on children's cultures and the progress they make in formal education settings.

It's important to note that cultural capital shouldn't be defined as just academic achievement, cultural capital should be thought of enabling a child to grow into educated citizens who have

had broad experiences and knowledge with a strong appreciation of human achievement and creativity.

Cultural capital is one of the key things that a child will utilise throughout their life in order to become successful in society.

## How Schools Play A Part

Schools have a duty to ensure that their children are given a rich educational diet that supports the notion of Cultural Capital.

Schools should consider several key things:

- **Culturally relevant pedagogy:** Embracing all their children's cultural identities, personal experiences, knowledge, and heritage in order to make learning more relevant to them and in thus doing so, giving rise to greater engagement and subsequently greater achievement.
- **Culturally responsive teaching:** Using a range of teaching strategies that supports children's personal experiences and cultural identities.
- **Provision:** Providing broad and rich experiences that their learners may not have experienced before, including the immersion of different cultures, traditions and approaches to everyday activities.
- **Knowledge:** Giving children a diet of knowledge that supports them in becoming educated citizens.

## Purple Mash Computing Scheme of Work and Cultural Capital

We understand the importance of supporting opportunities for all children. Our future workforce should reflect a broad cross section of society, including but not limited to: age, gender, race, religious beliefs, cognitive and physical differences. If we consider computing and the potential career opportunities and pathways this may lead to, it's vital that a broad workforce is in place, particularly when decisions on design and implementation of systems is required to limit bias. Computing should be integrated within different cultures and experiences of people, for example, farmers using technology to maximise yield of crops.

The Purple Mash Computing Scheme of Work is a comprehensive set of resources aligned to the National Curricula for Computing, Technology and Digital Competence. The Scheme of Work is intended to facilitate teachers in achieving the very best outcomes for all children. It exposes children to a wide variety of digital tools, technological skills and innovations to enable them to become informed members of the digital community.

It contains everything that is needed to deliver inspiring and engaging lessons whilst allowing for the flexibility to meet individual school needs. The scheme provides the scaffolding for teaching key skills alongside the flexibility to change the context to meet needs of individuals. For example, relating graphing to the local environment; tailoring blogging to individual cultures, experiences and interests. Lessons are delivered from lesson plans with accompanying slide shows. We have included additional units that go beyond the expectations of National Curricula, whilst also providing 'Catch-Up' units to close gaps in learning. The activity ideas for Early Years (Reception)

show opportunities for using Mini Mash or Purple Mash as part of the Early Years classroom to support children in working towards early learning goals.

The scheme's flexibility is not just limited to adaptation of teaching approaches or contexts used within lessons. Functionality within the delivery platform allows for a range of devices to be used to access and deliver content. Additionally, features such as collaboratively enabled tools, means that children don't always require individual devices.

Supplementary resources such as Code Club and Digital Leaders give rise to opportunities for broadening horizons for all children regardless of their starting point. They support experience of leadership, developing skills and give exposure to new experiences and responsibilities such as leadership.