

Throughout each topic teachers should check that content has been learned and remembered, including content from previous years, to prevent it from being forgotten. Retrieval practice is built into each lesson to interrupt the forgetting curve and secure construct in long term memory.

Each topic ends with a task to be completed. Teachers will assess this work against the relevant Mastery Key each term to decide whether the child is working at Age Related Expectations by the end of each academic year.

By the time pupils leave **Key Stage 2**, they will:

- ✓ Be **confident digital learners** with skills applicable to secondary education and future careers.
- ✓ Understand how to **code, debug, and create digital projects**.
- ✓ Be **digitally responsible**, understanding online safety, data privacy, and ethical technology use.
- ✓ Have an awareness of **emerging technologies**, such as AI, cybersecurity, and digital media.

Our goal is to **inspire curiosity, creativity, and confidence in computing**, empowering pupils to become **innovators of the future**.

Mastery Skills

Reception	Y1	Y2	Y3	Y4	Y5	Y6
Knows what to do if they feel uncomfortable using a device.	Can log-in and save work on Purple Mash.	Can debug their own and other's programs using design documentation to test against.	Can integrate multimedia components such as sounds, animation and images into their coding.	Can create a program that includes an IF/ELSE statement.	Can include sequence, selection and repetition into code as well as use functions to make their programming more efficient.	Can plan, design and create a program that includes variables relating to timing and scoring along with buttons which launch other programs.
Log-in to Purple Mash using my username and password.	Can use a computer to sort items into three clearly defined groups using given criteria.	Can explain reasons for keeping their password safe that include protecting their personal information.	Can articulate what can be negative about the Internet.	Can reflect on own screen time and give reasons for limiting it that include the effect on own physical and mental health.	Can identify reliable online content.	Can identify the positive and negative influences of technology on health and the environment.
Can type their name on a computer.	Can represent simple collected data in an appropriate pictogram by using 2Count.	Can use a database to answer questions.	Can collect and enter data within 2Calculate.	Can edit instructions to produce shapes in the most efficient way including using the procedures function.	Can create a functional spreadsheet using text variables to perform calculations.	Can create a blog that carefully considers the end user.
Can draw a face using 2Paint.	Can change an algorithm to create a different outcome when using 2Go.	Can articulate how to search the Internet safely and effectively.	Can read and respond to a series of email communications.	Can create own animation using 2Animate.	Can create own database showing understanding of how to word questions so that they can be effectively answered using a search.	Can create own program using binary and code.
Can program a Beebot.	Can manipulate the properties of their story by changing the images and adding animations and sound.	Can use a range of effects and functions in 2Paint a Picture.	Can create own branching database and make further suggestions for improvement.	Can recognise whether information on a website is credible or not.	Can evaluate own game for content, design and playability to make improvements.	Can create a spreadsheet to support the planning of an event
Can use devices with care.	Can construct a code purposefully to make objects interact and manipulate how their program looks by adding and changing objects.	Can use a variety of software to manipulate and present digital content and information.	Can create a presentation using text, images, animations and transitions between slides.	Can recognise the main component parts of hardware which allow computers to join and form a network.	Can create a word processing document with images and tables, altering the look of the text to enhance its functionality.	