

Computing Knowledge Progression Grid - EYFS/KS1 - Cycle 1 and Cycle 2

Key stage 1 - National Curriculum

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.

	EYFS	Year 1	Year 2
Autumn 1	I can name 2 devices used at school in computing. (ipad/IWB) I can use a touch screen effectively. I can select an icon to load a variety of programmes/games. I can what I should do if I see anything upsetting whilst watching an ipad or computer. I can answer basic questions about information displayed in images	Digital Literacy - Online safety/Effective searching on Purple Mash and Ipads. (PM 1.1) Digital Networks and Systems (PM 1.9) • I can log in safely with my password and I understand why this is important. • I can create an avatar and I know how it is used. • I can create a picture and add my own name to it. • I understand the idea of 'ownership' of creative work. • I can save my work to the My Work area and find my saved work. • I can add pictures and text to my work. • I can log out of purple mash. • I can search Purple Mash using icons to find resources, tools and games. • I understand what is meant by technology. • I can explain technology as something that helps us. • I can give examples of technology outside school and in the community. Digital Literacy - Online safety (PM 1.1) / Digital Networks and Systems (NCC Yr 1/2) • I know where to go for help if something I have seen online worries or upsets me. • I can identify the main parts of a computer. • I can recognise the uses and features of IT. • I can identify how IT is used in school. • I can identify how IT is used outside of school. • I can give examples of rules to keep us safe and healthy when we are using technology in and beyond the home.	
Autumn 2		Computer Science – Programming (PM1.4) /Multimedia • I can follow instructions to create a model or picture. (eg lego model) • I can make simple instructions to create a program. • I can order instructions to solve a problem. • I can find a solution to a problem.	

Computing Knowledge Progression Grid - EYFS/KS1 - Cycle 1 and Cycle 2

		Information Technology – Multimedia (PM 2.7) (PM 2.8) • I can use different sounds within 2Sequence to create a tune. • I can explain how music makes me feel. • I can create a short piece of music to represent my feelings. • I can edit and combine sounds to improve my tune. • I can make a quiz about a story or class topic using 2Quiz. • I can make a fact file about a story or class topic using 2Connect. • I can create a mind map (concept map) about a story or class topic. • I can explain and present my information to the class.
Spring 1	I can say what I should do if I see anything that upsets me whilst watching an ipad. I can independently use White Rose One Minute Maths. I can use a variety of artistic effects on 2 paint to create a topic related picture.	Information Technology – Multimedia (PM 2.6) • I can make marks, lines and patterns using the 2paint programme. • I can use a variety of paint tools (eg brushes, pens, colour, shape and fill) to paint a picture. • I can say which tools are most useful and why • I can create Pointillism art using the Pointillism template. • I can create art like William Morris using a pattern template. Digital Literacy - Online safety/ Information Technology – Multimedia (PM 1.6) • I can explain some ways to use technology safely and respectfully. • I can use the drawing tools on 2Create a Story. • I can add text to my ebook. • I can add animation to my drawings on my ebook. • I can add sound, voice recording and music to my ebook.
Spring 2	I can create simple digital content, e.g. create a picture and a caption	Information Technology - Data (PM1.8/1.2) • I can group and label objects offline. • I can describe an objects properties and match with similar objects using purple mash activities. • I can group objects in more than one way. • I can choose how to record groups (eg a list or table) • I can explain that we can present information on computers/tablets (e.g on a spreadsheet, pictogram, table) • I can recognise that objects can be represented as pictures. • I can recognise a spreadsheet. • I can use the tablet to enter data and create a spreadsheet.

Computing Knowledge Progression Grid - EYFS/KS1 - Cycle 1 and Cycle 2

		Information Technology - Data (PM1.3/2.4) • I understand what data is and that it can be represented in different ways. • I can use a pictogram to answer simple questions. • I can create my own pictogram. • I can use yes/no questions to separate information. • I can create a binary tree to sort objects into two categories. • I can use a search tool to find information on a database.
Summer 1	I can follow simple instructions. I can follow simple instructions to control an event. I understand the term "login". I can login to Purple Mash using a pin passcode. I can save my work in a folder.	Computer Science – Programming (PM1.7) • I can explain that an algorithm is a set of instructions • I can choose a command or instruction for a given purpose. • I can create an event by joining commands together. • I can explain that coding is the way that instructions are put into computers to create programs. • I can use object and action code blocks (eg forwards, left,) • I can plan a simple program. • I can predict what will happen if I change a command. Computer Science – Programming (PM1.5) • I can explain that an algorithm is a set of instructions • I can describe a series of instructions as a sequence. • I can combine direction commands to make a sequence. • I can choose a command for a given purpose. • I can show that commands can be joined together to form an algorithm.
Summer 2		Computer Science – Programming (PM2.1) • I can explain that an algorithm is a set of instructions • I can read blocks of code and can predict what will happen when it runs. • I can create a program using collision detection. • I can edit a scene by adding, changing or deleting objects. • I can explain what debugging means. • I can debug a simple program. Computer Science – Programming (NCC Yr 2) • I can describe a series of instructions as a sequence. • I can predict the outcome of a sequence. • I can create, design and test a mat and algorithm for a floor robot/Beebot.



Computing Knowledge Progression Grid - EYFS/KS1 - Cycle 1 and Cycle 2