

Computing Knowledge Progression Grid - EYFS/KS1 - Cycle 1

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	<p>I can name 2 devices used at school in computing. (ipad/IWB)</p> <p>I can use a touch screen effectively.</p> <p>I can select an icon to load a variety of programmes/games.</p>	<p>Digital Literacy - Online safety/Effective searching on Purple Mash and I pads. (PM 1.1)</p> <ul style="list-style-type: none"> • 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. 	
Autumn 2		<p>Computer Science – Programming (PM1.4)</p> <p>Digital Literacy (PM1.9)</p> <ul style="list-style-type: none"> • 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. • I can give examples of where technology is used to help us in the community. 	
Spring 1	<p>I can say what I should do if I see anything that upsets me whilst watching an ipad.</p> <p>I can independently use White Rose One Minute Maths.</p>	<p>Information Technology - Data (PM1.2)</p> <p>Information Technology – Multimedia (PM 2.6)</p> <ul style="list-style-type: none"> • 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 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. 	

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Spring 2	<p>I can use a variety of artistic effects on 2 paint to create a topic related picture.</p>	<p>Information Technology – Multimedia (PM 2.6) Information Technology - Data (PM1.8)</p> <ul style="list-style-type: none"> • I can create Pointillism art using the Pointillism template. • I can create art like William Morris using a pattern template. • 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.
Summer 1	<p>I understand the term “login”.</p> <p>I can login to Purple Mash using a pin passcode.</p> <p>I can save my work in a folder.</p>	<p>Computer Science – Programming (PM1.7)</p> <ul style="list-style-type: none"> • 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.
Summer 2		<p>Computer Science – Programming (PM2.1)</p> <ul style="list-style-type: none"> • 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.