



## Golden Threads & Key Vocabulary

The 'sticky knowledge' and supporting *vocabulary* that children will be taught in different contexts in each year group with increasing depth and complexity

	EYFS	YEAR 1	YEAR 2	YEAR 3
<p><b>Computer Science</b></p> <p><b>Algorithms and Programs</b></p>	<p><i>I understand that an <b>algorithm</b> is a set of instructions we give to a programmable device/robot.</i></p> <p><i>I know how to give a programmable robot a set of instructions. I am beginning to understand how to check the instructions I give a programmable robot (<b>debug</b>).</i></p> <p>Instruction, Algorithm, Program, Debug.</p>	<p>I know how to create a series of instructions and plan a journey for a programmable device/robot.</p> <p>I understand that an <b>algorithm</b> is a set of clear/concise instructions.</p> <p>I know that an <b>algorithm</b> written for a computer is called a <b>program</b>.</p> <p>I am beginning to create/fix <b>code</b> to create or <b>debug</b> algorithms/programs. I can give a programmable device/robot or on-screen turtle a sequence of instructions.</p> <p>Instruction, Algorithm, Program, Debug, Action, Code, Command, Event, Execute, Scale, Scene, Object, Run, Input, Properties, Output, direction, arrow, rewind.</p>	<p>I know how to create a <b>program</b>, to test it and <b>fix/debug</b>.</p> <p>I can predict the outcome of a simple <b>program</b> (logical reasoning).</p> <p>I know and can understand that <b>programs</b> require precise instructions and I know how to organise retrieve and manipulate <b>digital content</b>.</p> <p>I can read <b>code</b> and see the overall effect of a <b>program</b>; I can see what it will do (make logical predictions).</p> <p>Instruction, Algorithm, Program, Debug, Action, Code, Command, Event, Execute, Scale, Scene, Object, Run, Input, Properties, Output, Button, Design Mode,</p>	<p>I can design and <b>code</b> a <b>program</b> which follows a simple <b>sequence</b>.</p> <p>I know how <b>variables</b> can be used to store information while a program is <b>executing</b>,</p> <p>I can turn a real-life situation into an <b>algorithm</b> for a <b>program</b>.</p> <p>I can identify an error within my <b>program</b> that prevents it following the desired algorithm and then fix it (<b>debug</b>).</p> <p>I can read a <b>program</b> with several steps and <b>predict</b> the outcome.</p>

## Computing and E-Safety

			Nesting, Sequence, Test, Predict, Collision Detection,.	
<b>Information Technology</b>	<p>I can input and read simple digital content in 2Count. I can create a pictogram.</p> <p>I can capture digital media/content - photos.</p> <p>Pictogram, file, photo, digital media/content, open, close, app.</p>	<p>I can sort, collate, edit and store simple digital content in 2 Code, 2 Quiz, and 2 Count.</p> <p>I can name, save, retrieve my work in 2 Code, 2Quiz and 2 Count and pictogram programs.</p> <p>I know about some digital media - photos, videos, sound.</p> <p>Sort, criteria, pictogram, data, collate, edit instruction, algorithm, computer, program, save, retrieve, animation, file, sound effect, cells, columns, spreadsheet, clipart, quiz, presentation, animation, font, open, close, app.</p>	<p>I can organise data when using 2 investigate and 2 Sequence.</p> <p>I can retrieve data.</p> <p>I can create, name, save and retrieve content.</p> <p>I can use a range of digital media in my work including photos and sound.</p> <p>Sort, criteria, pictogram, data, collate, edit instruction, algorithm, computer, program, save, retrieve, animation, file, sound effect, cells, rows, columns, spreadsheet, clipart, delete, equals, lock, copy/paste, binary tree, data, database, concept mat, quiz, animated, presentation, font, open, close, app.</p>	<p>I can analyse, evaluate and present data and information using branching databases in 2 Question, using graph software (2 Graph).</p> <p>I can consider which software is good for a task.</p> <p>I can carry out simple searches and retrieve digital content when using Purple Mash and Internet Search engines.</p> <p>I can organise data when using 2 investigate and 2 Sequence.</p> <p>I can retrieve data.</p> <p>I can create, name, save and retrieve content.</p>
<b>Digital Literacy</b>	<p>I can tell you about some of the technology in my classroom.</p> <p>I can list some of the technology I have at home.</p>	<p>I know about technology in and out of school (home and out and about). I can tell you about objects which use technology.</p> <p>I know how important it is to keep personal information safe and the reasons why.</p>	<p>I can make links about technology I see and the coding I learn in school.</p> <p>I can retrieve relevant information using a search engine.</p> <p>I know how to stay safe online, keep personal information safe and how to report my worries.</p>	<p>I know how technology is used in the UK.</p> <p>I know what may happen if I share my passwords or personal information (implications).</p> <p>I know how to stay safe when using 2Email. I know 2 ways to report</p>

## Computing and E-Safety

	<p>I keep my password and personal information safe. I know how to stay safe online and how to report my worries.</p> <p>I know that you can look to see if a game is right for my age by looking at the PEGI rating.</p> <p>I know our school has cyber rules.</p> <p>I know about being stranger aware online.</p> <p>Log in, cyber rules, username, password, safe, report, PEGI rating.</p>	<p>I know how to stay safe online and how to report my worries. I know what a PEGI rating is for/means. I am beginning to remember our cyber rules and follow them. I know how to be stranger aware online.</p> <p>Log in, cyber rules, username, password, tools, avatar, log out, technology, notification, safe, safety, report, internet, PEGI rating.</p>	<p>I am beginning to understand how information is shared electronically and that we must be careful/stay safe when carrying out online searches.</p> <p>I can use 2Respond and email safely.</p> <p>I know what the PEGI rating means and where to look for it on a game/app. I know it tells me about the age appropriate content of a game/app.</p> <p>I know our school cyber rules and why we have them. I know how to follow the rules.</p> <p>I know how to be stranger aware online. I know why we need to follow stranger aware rules.</p> <p>Log in, cyber rules, username, password, tools, avatar, log out, technology, notification, safe, safety, report, search, internet, sharing, email, attachment, digital footprint, search engine, PEGI rating.</p>	<p>unacceptable/inappropriate content.</p> <p>I can stay safe when searching online.</p>
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## Computing and E-Safety