

## Teach Computing Curriculum Map

Welcome to the **Teach Computing Curriculum** Map, this document provides an overview of the units and lessons designed for students aged 5-7 (Key Stage 1). Additional mapping documents are available for other ages at <u>teachcomputing.org/curriculum</u>.

Use this document to explore the curriculum, how it is structured and most importantly how it meets the objectives of the English national curriculum. You can also use this document to discover how the curriculum content connects to other frameworks such as **Education for a connected world** and various exam specifications (where relevant).

You are also able to explore progression within the curriculum materials as each objective is mapped to one or more of the 10 strands within our content taxonomy. For example if you want to understand how skills and concepts around **networks** are developed you can do so, by simply filtering your view to hide all non-network related objectives.

On the next sheet you'll find details of every unit, lesson and learning objective arranged in their suggested teaching order. Every column can be

To filter a column, click the filter control button in the column header and select the desired data from the drop down menu



Statement Number	National Curriculum Statement
1.1	understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
1.2	create and debug simple programs
1.3	use logical reasoning to predict the behaviour of simple programs
1.4	use technology purposefully to create, organise, store, manipulate and retrieve digital content
1.5	recognise common uses of information technology beyond school
1.6	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.

Teach Computing Taxonomy									
Abbreviation	Strand	Description							
NW	Networks	Understand how networks can be used to retrieve and share information and come with associated risks							
СМ	Creating Media	Select and create a range of media including text, images, sounds and video.							
DI	Data & Information	How is data stored, organised and used to represent real world artefacts and scenarios							
DD	Design & Deveopment	The activities involved in planning, creating and evaluating computing artefacts							
CS	Computing Systems	What is a computer, how do it's constituent parts function together as a whole							
IT	Impact of Technology	How individuals, systems and society as a whole interact with computer systems							
AL	Algorithms	Being able to comprehend, design, create and evaluate algorithms							
PG	Programming	Creating software to allow computers to solve problems							
ET	Effective Use of tools	Use software tools to support computing work							
SS	Safety & Security	Understanding risks when using technology and how to protect individuals and systems							

1		I				National Curriculum Links		Teach Computing Tax	onomy	
Year Group	Suggested Order	Unit Name	Lesson	Learning Objectives	Success Criteria	1.1 1.2 1.3 1.4 1.5	1.6 AL	CM CS DD DI ET	IT NW PG SS	Cross Curricular Links Education for a Connected World
1	1	Computing systems and networks – Technology around us	1	-To identify technology	-I can explain how these technology examples help us -I can explain technology as something that helps us -I can locate examples of technology in the classroom					- Copyright and ownership - Health, well-being and lifestyle
1	1	Computing systems and networks – Technology around us	2	-To identify a computer and its main parts	-I can name the main parts of a computer -I can switch on and log into a computer -I can use a mouse to click and drag					- Copyright and ownership - Health, well-being and lifestyle
1	1	Computing systems and networks – Technology around us	3	-To use a mouse in different ways	-I can click and drag to make objects on a screen -I can use a mouse to create a picture -I can use a mouse to open a program					- Copyright and ownership - Health, well-being and lifestyle
1	1	Computing systems and networks – Technology around us	4	-To use a keyboard to type on a computer	-I can save my work to a file -I can say what a keyboard is for					- Copyright and ownership - Health, well-being and lifestyle
1	1	Computing systems and networks -	5	-To use the keyboard to edit text	- I can type my name on a computer -I can delete letters -I can open my work from a file					- Copyright and ownership - Health, well-being and lifestyle
		Technology around us Computing systems and networks –			- I can use the arrow keys to move the cursor -I can discuss how we benefit from these rules - I can give examples of some of these rules					
1	1	and networks – Technology around us	6	-To create rules for using technology responsibly	<ul> <li>I can identify rules to keep us safe and healthy when we are using technology in and beyond the home</li> </ul>					- Copyright and ownership - Health, well-being and lifestyle
1	2	Creating media - Digital	1	-To describe what different freehand tools do	-I can draw lines on a screen and explain which tools I used -I can make marks on a screen and explain which tools I					Art and Design
					- I can use the paint tools to draw a picture					
1	2	Creating media – Digital painting	2	-To use the shape tool and the line tools	-I can make marks with the square and line tools -I can use the shape and line tools effectively -I can use the shape and line tools to recreate the work of an artist					Art and Design
1	2	Creating media – Digital painting	3	-To make careful choices when painting a digital picture	an artist - I can choose appropriate shapes - I can create a picture in the style of an artist - I can make appropriate colour choices					Art and Design
	2	painting  Creating media – Digital	4		- I can make appropriate colour choices - I can choose appropriate paint tools and colours to recreate the work of an artist - I can say which tools were helpful and why					Art and Design
	2	painting		-To explain why I chose the tools I used	- I know that different paint tools do different jobs					Art and Design
1	2	Creating media - Digital painting	5	-To use a computer on my own to paint a picture	-I can change the colour and brush sizes - I can make dots of colour on the page - I can use dots of colour to create a picture in the style of					Art and Design
					an artist on my own  I can explain that pictures can be made in lots of different					
1	2	Creating media – Digital painting	6	-To compare painting a picture on a computer and on paper	ways - I can say whether I prefer painting using a computer or using paper - I can spot the differences between painting on a					Art and Design
		Programming A -			- I can spot the direcences between painting on a computer and on paper  - I can match a command to an outcome  - I can predict the outcome of a command on a device					
	3	Programming A – Moving a robot	1	-To explain what a given command will do	I can predict the outcome of a command on a device     I can run a command on a device     I can follow an instruction					English – writing
1	3	Moving a robot	2	-To act out a given word	I can give directions     I can recall words that can be acted out     can compare forwards and backwards movements					English – writing
1	3	Programming A – Moving a robot	3	-To combine forwards and backwards commands to make a sequence	I can predict the outcome of a sequence involving forwards and backwards commands     I can start a sequence from the same place					English – writing
1	3	Programming A – Moving a robot	4	-To combine four direction commands to make sequences	-I can compare left and right turns - I can experiment with turn and move commands to move a robot					English – writing
		Programming A -			I can predict the outcome of a sequence involving up to four commands     I can choose the order of commands in a sequence					
	3	Moving a robot	5	-To plan a simple program	- I can debug my program - I can explain what my program should do					English – writing
1	3	Programming A – Moving a robot	6	-To find more than one solution to a problem	-I can identify several possible solutions - I can plan two programs - I can use two different programs to get to the same place					English – writing
1	4	Data and information – Grouping data	1	-To label objects	-I can describe objects using labels - I can identify the label for a group of objects - I can match objects to groups					- Copyright and ownership
1	4	Data and information – Grouping data	2	-To identify that objects can be counted	-I can count a group of objects - I can count objects					- Copyright and ownership
1	4	Data and information – Grouping data	3	-To describe objects in different ways	- I can describe an object - I can describe an object - I can describe a property of an object - I can find objects with similar properties.					- Copyright and ownership
1	4	Data and information – Grouping data	4	-To count objects with the same properties	- I can find objects with similar properties - I can count how many objects share a property - I can group objects in more than one way - I can group similar objects - I can group similar objects					- Copyright and ownership
	4	Data and information -	5	-To compare groups of objects	- I can group similar objects - I can choose how to group objects - I can describe groups of objects - I can record how many objects are in a group					- Copyright and ownership
1	4	Grouping data  Data and information –	6	-To answer questions about groups of objects	- I can record how many objects are in a group -I can compare groups of objects					- Copyright and ownership
		Grouping data  Creating media – Digital			-I can compare groups of objects -I can decide how to group objects to answer a question -I can record and share what I have found -I can identify and find keys on a keyboard					
	5	writing	1	-To use a computer to write	- I can open a word processor - I can recognise keys on a keyboard - I can enter text into a computer					- Privacy and security
1	5	Creating media – Digital writing	2	-To add and remove text on a computer	- I can use backspace to remove text - I can use letter, number, and space keys					- Privacy and security
1	5	Creating media – Digital writing	3	-To identify that the look of text can be changed on a computer	-I can explain what the keys that I have learnt about already do -I can identify the toolbar and use bold, italic, and underline					- Privacy and security
1	5	Creating media – Digital	4	-To make careful choices when changing text	I can type capital letters     I can change the font     I can select all of the text by clicking and dragging		-			- Privacy and security
		writing  Creating media – Digital			- I can select all of the text by clicking and dragging - I can select a word by double-clicking - I can decide if my changes have improved my writing - I can say what tool I used to change the text					
1	5	writing	5	-To explain why I used the tools that I chose						- Privacy and security
1	5	Creating media – Digital writing  Programming B -	6	-To compare typing on a computer to writing on paper	I can explain the differences between typing and writing I can make changes to text on a computer I can say why I prefer typing or writing					- Privacy and security
1	6	Programming animations	1	-To choose a command for a given purpose	-I can compare different programming tools -I can find which commands to move a sprite -I can use commands to move a sprite					
1	6	Programming B - Programming animations	2	-To show that a series of commands can be joined together	-I can run my program -I can use a Start block in a program -I can use more than one block by joining them together					
1	6	Programming B - Programming animations	3	-To identify the effect of changing a value	-I can change the value -I can find blocks that have numbers -I can say what happens when I change a value					
1	6	Programming B - Programming	4	-To explain that each sprite has its own instructions	-I can add blocks to each of my sprites					
		animations Programming B -			- I can delete a sprite - I can show that a project can include more than one sprite - I can choose appropriate artwork for my project - I can create an algorithm for each sprite - I can create an algorithm for each sprite					
1	6	Programming animations Programming B -	5	-To design the parts of a project						
1	6	Programming animations	6	-To use my algorithm to create a program	-I can add programming blocks based on my algorithm -I can test the programs I have created -I can use sprites that match my design					