

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 teachcomputing.org/curriculum.

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 filtered to

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

National Curriculum Links



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
CM	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

Year Group	Suggested Order	Unit Name	Lesson
1	1	Computing systems and networks – Technology around us	1
1	1	Computing systems and networks – Technology around us	2
1	1	Computing systems and networks – Technology around us	3
1	1	Computing systems and networks – Technology around us	4
1	1	Computing systems and networks – Technology around us	5
1	1	Computing systems and networks – Technology around us	6
1	2	Creating media – Digital painting	1
1	2	Creating media – Digital painting	2
1	2	Creating media – Digital painting	3
1	2	Creating media – Digital painting	4
1	2	Creating media – Digital painting	5
1	2	Creating media – Digital painting	6
1	5	Creating media – Digital writing	1
1	5	Creating media – Digital writing	2
1	5	Creating media – Digital writing	3

1	5	Creating media – Digital writing	4
1	5	Creating media – Digital writing	5
1	5	Creating media – Digital writing	6
1	4	Data and information – Grouping data	1
1	4	Data and information – Grouping data	2
1	4	Data and information – Grouping data	3
1	4	Data and information – Grouping data	4
1	4	Data and information – Grouping data	5
1	4	Data and information – Grouping data	6
1	3	Programming A – Moving a robot	1
1	3	Programming A – Moving a robot	2
1	3	Programming A – Moving a robot	3
1	3	Programming A – Moving a robot	4
1	3	Programming A – Moving a robot	5
1	3	Programming A – Moving a robot	6
1	6	Programming B – Introduction to animation	1
1	6	Programming B – Introduction to animation	2
1	6	Programming B – Introduction to animation	3

1	6	Programming B – Introduction to animation	4
1	6	Programming B – Introduction to animation	5
1	6	Programming B – Introduction to animation	6
2	1	Computing systems and networks – IT around us	1
2	1	Computing systems and networks – IT around us	2
2	1	Computing systems and networks – IT around us	3
2	1	Computing systems and networks – IT around us	4
2	1	Computing systems and networks – IT around us	5
2	1	Computing systems and networks – IT around us	6
2	2	Creating media – Digital photography	1
2	2	Creating media – Digital photography	2
2	2	Creating media – Digital photography	3
2	2	Creating media – Digital photography	4
2	2	Creating media – Digital photography	5
2	2	Creating media – Digital photography	6
2	5	Creating media – Making music	1

2	5	Creating media – Making music	2
2	5	Creating media – Making music	3
2	5	Creating media – Making music	4
2	5	Creating media – Making music	5
2	5	Creating media – Making music	6
2	4	Data and information – Pictograms	1
2	4	Data and information – Pictograms	2
2	4	Data and information – Pictograms	3
2	4	Data and information – Pictograms	4
2	4	Data and information – Pictograms	5
2	4	Data and information – Pictograms	6
2	3	Programming A – Robot algorithms	1
2	3	Programming A – Robot algorithms	2
2	3	Programming A – Robot algorithms	3
2	3	Programming A – Robot algorithms	4

2	3	Programming A – Robot algorithms	5
2	3	Programming A – Robot algorithms	6
2	6	Programming B – An introduction to quizzes	1
2	6	Programming B – An introduction to quizzes	2
2	6	Programming B – An introduction to quizzes	3
2	6	Programming B – An introduction to quizzes	4
2	6	Programming B – An introduction to quizzes	5
2	6	Programming B – An introduction to quizzes	6

Learning Objectives

To identify technology

To identify a computer and its main parts

To use a mouse in different ways

To use a keyboard to type on a computer

To use the keyboard to edit text

To create rules for using technology responsibly

To describe what different freehand tools do

To use the shape tool and the line tools

To make careful choices when painting a digital picture

To explain why I chose the tools I used

To use a computer on my own to paint a picture

To compare painting a picture on a computer and on paper

To use a computer to write

To add and remove text on a computer

To identify that the look of text can be changed on a computer

To make careful choices when changing text
To explain why I used the tools that I chose
To compare typing on a computer to writing on paper
To label objects
To identify that objects can be counted
To describe objects in different ways
To count objects with the same properties
To compare groups of objects
To answer questions about groups of objects
To explain what a given command will do
To act out a given word
To combine forwards and backwards commands to make a sequence
To combine four direction commands to make sequences
To plan a simple program
To find more than one solution to a problem
To choose a command for a given purpose
To show that a series of commands can be joined together
To identify the effect of changing a value

To explain that each sprite has its own instructions
To design the parts of a project
To use my algorithm to create a program
To recognise the uses and features of information technology
To identify the uses of information technology in the school
To identify information technology beyond school
To explain how information technology helps us
To explain how to use information technology safely
To recognise that choices are made when using information technology
To use a digital device to take a photograph
To make choices when taking a photograph
To describe what makes a good photograph
To decide how photographs can be improved
To use tools to change an image
To recognise that photos can be changed
To say how music can make us feel

To identify that there are patterns in music
To show how music is made from a series of notes
To show how music is made from a series of notes
To create music for a purpose
To review and refine our computer work
To recognise that we can count and compare objects using tally charts
To recognise that objects can be represented as pictures
To create a pictogram
To select objects by attribute and make comparisons
To recognise that people can be described by attributes
To explain that we can present information using a computer
To describe a series of instructions as a sequence
To explain what happens when we change the order of instructions
To use logical reasoning to predict the outcome of a program (series of commands)
To explain that programming projects can have code and artwork

To design an algorithm

To create and debug a program that I have written

To explain that a sequence of commands has a start

To explain that a sequence of commands has an outcome

To create a program using a given design

To change a given design

To create a program using my own design

To decide how my project can be improved

Success Criteria	National Curriculum Links				
	1.1	1.2	1.3	1.4	1.5
<ul style="list-style-type: none"> - 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 					
<ul style="list-style-type: none"> - 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 					
<ul style="list-style-type: none"> - 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 					
<ul style="list-style-type: none"> - I can save my work to a file - I can say what a keyboard is for - I can type my name on a computer 					
<ul style="list-style-type: none"> - I can delete letters - I can open my work from a file - I can use the arrow keys to move the cursor 					
<ul style="list-style-type: none"> - I can discuss how we benefit from these rules - I can give examples of some of these rules - I can identify rules to keep us safe and healthy when we are using technology in and beyond the home 					
<ul style="list-style-type: none"> - 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 used - I can use the paint tools to draw a picture 					
<ul style="list-style-type: none"> - 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 					
<ul style="list-style-type: none"> - I can choose appropriate shapes - I can create a picture in the style of an artist - I can make appropriate colour choices 					
<ul style="list-style-type: none"> - I can choose appropriate paint tools and colours to recreate the work of an artist - I can say which tools were helpful and why - I know that different paint tools do different jobs 					
<ul style="list-style-type: none"> - 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 an artist on my own 					
<ul style="list-style-type: none"> - I can explain that pictures can be made in lots of different ways - I can say whether I prefer painting using a computer or using paper - I can spot the differences between painting on a computer and on paper 					
<ul style="list-style-type: none"> - I can identify and find keys on a keyboard - I can open a word processor - I can recognise keys on a keyboard 					
<ul style="list-style-type: none"> - I can enter text into a computer - I can use backspace to remove text - I can use letter, number, and space keys 					
<ul style="list-style-type: none"> - I can explain what the keys that I have learnt about already do - I can identify the toolbar and use bold, italic, and underline - I can type capital letters 					

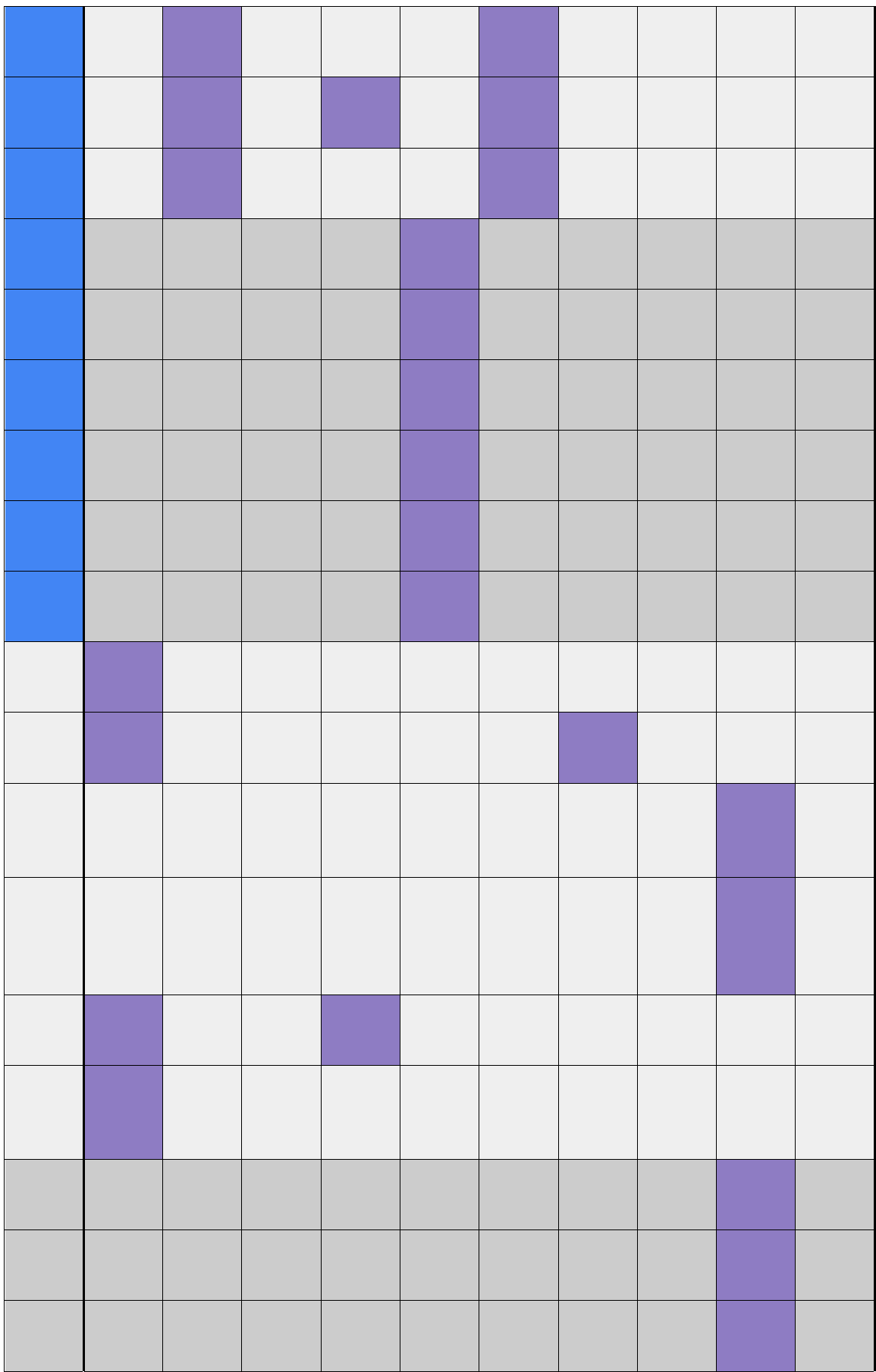
- I can change the font - I can select all of the text by clicking and dragging - I can select a word by double-clicking					
- I can decide if my changes have improved my writing - I can say what tool I used to change the text - I can use 'undo' to remove changes					
- I can explain the differences between typing and writing - I can make changes to text on a computer - I can say why I prefer typing or writing					
- I can describe objects using labels - I can identify the label for a group of objects - I can match objects to groups					
- I can count a group of objects - I can count objects - I can group objects					
- I can describe an object - I can describe a property of an object - 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 choose how to group objects - I can describe groups of objects - I can record how many objects are in a group					
- 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 match a command to an outcome - I can predict the outcome of a command on a device - I can run a command on a device					
- I can follow an instruction - I can give directions - I can recall words that can be acted out					
- I can compare forwards and backwards movements - I can predict the outcome of a sequence involving forwards and backwards commands - I can start a sequence from the same place					
- I can compare left and right turns - I can experiment with turn and move commands to move a robot - I can predict the outcome of a sequence involving up to four commands					
- I can choose the order of commands in a sequence - I can debug my program - I can explain what my program should do					
- I can identify several possible solutions - I can plan two programs - I can use two different programs to get to the same place					
- I can compare different programming tools - I can find which commands to move a sprite - I can use commands to move a sprite					
- 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					
- I can change the value - I can find blocks that have numbers - I can say what happens when I change a value					

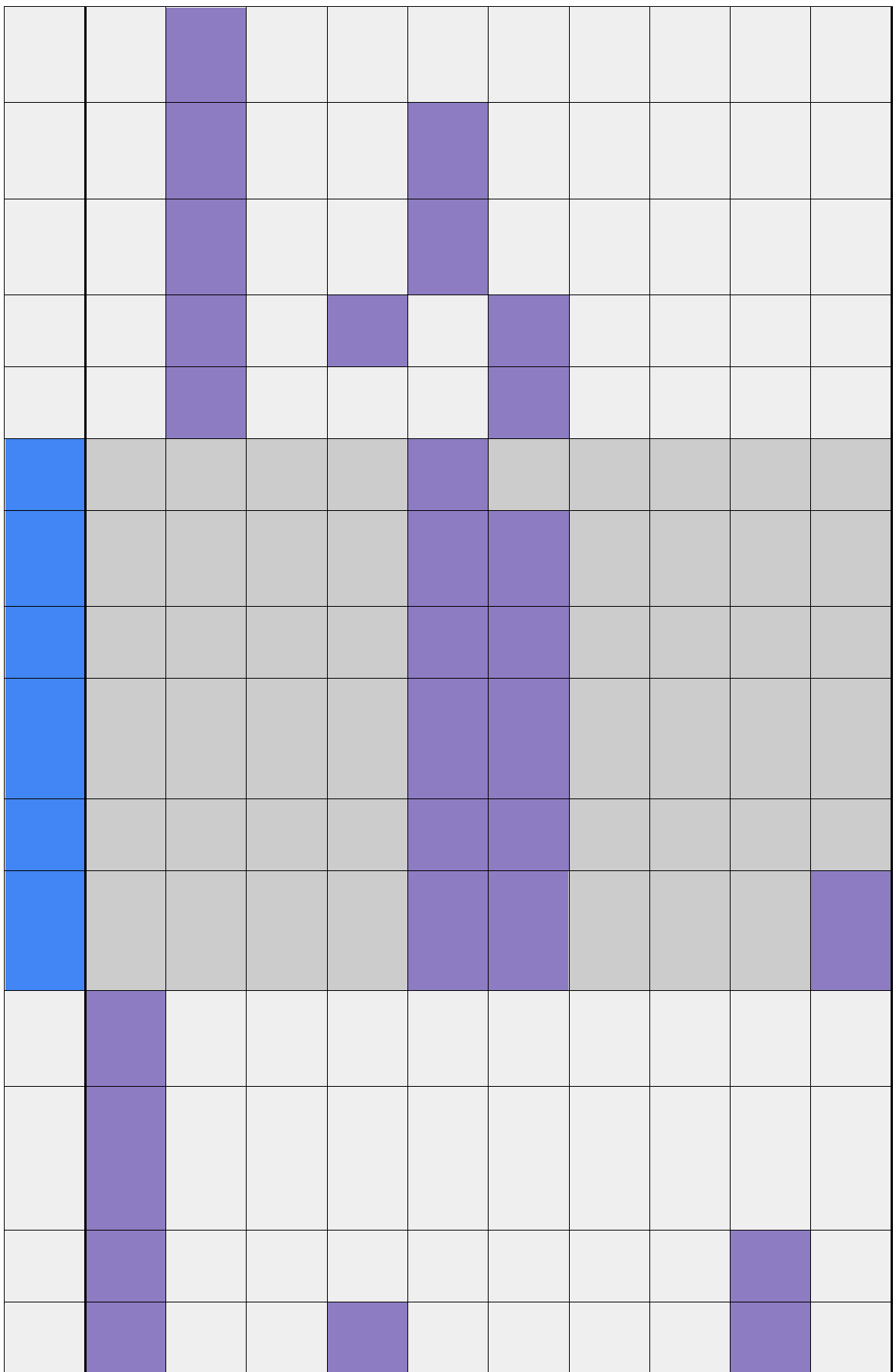
<ul style="list-style-type: none"> - I can add blocks to each of my sprites - I can delete a sprite - I can show that a project can include more than one sprite 					
<ul style="list-style-type: none"> - I can choose appropriate artwork for my project - I can create an algorithm for each sprite - I can decide how each sprite will move 					
<ul style="list-style-type: none"> - 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 					
<ul style="list-style-type: none"> - I can describe some uses of computers - I can identify examples of computers - I can identify that a computer is a part of IT 					
<ul style="list-style-type: none"> - I can identify examples of IT - I can identify that some IT can be used in more than one way - I can sort school IT by what it's used for 					
<ul style="list-style-type: none"> - I can find examples of information technology - I can sort IT by where it is found - I can talk about uses of information technology 					
<ul style="list-style-type: none"> - I can demonstrate how IT devices work together - I can recognise common types of technology - I can say why we use IT 					
<ul style="list-style-type: none"> - I can list different uses of information technology - I can say how rules can help keep me safe - I can talk about different rules for using IT 					
<ul style="list-style-type: none"> - I can explain the need to use IT in different ways - I can identify the choices that I make when using IT - I can use IT for different types of activities 					
<ul style="list-style-type: none"> - I can explain what I did to capture a digital photo - I can recognise what devices can be used to take photographs - I can talk about how to take a photograph 					
<ul style="list-style-type: none"> - I can explain the process of taking a good photograph - I can explain why a photo looks better in portrait or landscape format - I can take photos in both landscape and portrait format 					
<ul style="list-style-type: none"> - I can discuss how to take a good photograph - I can identify what is wrong with a photograph - I can improve a photograph by retaking it 					
<ul style="list-style-type: none"> - I can experiment with different light sources - I can explain why a picture may be unclear - I can explore the effect that light has on a photo 					
<ul style="list-style-type: none"> - I can explain my choices - I can recognise that images can be changed - I can use a tool to achieve a desired effect 					
<ul style="list-style-type: none"> - I can apply a range of photography skills to capture a photo - I can identify which photos are real and which have been changed - I can recognise which photos have been changed 					
<ul style="list-style-type: none"> - I can describe how music makes me feel, e.g. happy or sad - I can identify simple differences in pieces of music - I can listen with concentration to a range of music (links to the Music curriculum) 					

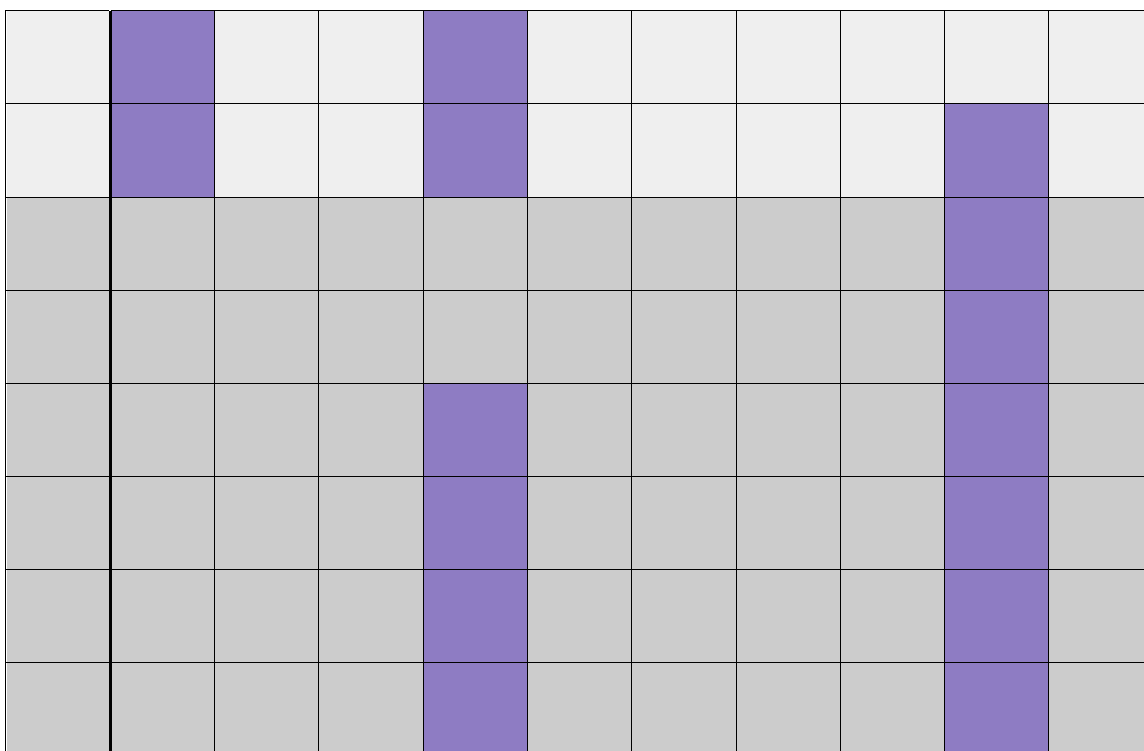
<ul style="list-style-type: none"> - I can create a rhythm pattern - I can explain that music is created and played by humans - I can play an instrument following a rhythm pattern 					
<ul style="list-style-type: none"> - I can identify that music is a sequence of notes - I can refine my musical pattern on a computer - I can use a computer to create a musical pattern using three notes 					
<ul style="list-style-type: none"> - I can identify that music is a sequence of notes - I can refine my musical pattern on a computer - I can use a computer to create a musical pattern using three notes 					
<ul style="list-style-type: none"> - I can describe an animal using sounds - I can explain my choices - I can save my work 					
<ul style="list-style-type: none"> - I can explain how I made my work better - I can listen to music and describe how it makes me feel - I can reopen my work 					
<ul style="list-style-type: none"> - I can compare totals in a tally chart - I can record data in a tally chart - I can represent a tally count as a total 					
<ul style="list-style-type: none"> - I can enter data onto a computer - I can use a computer to view data in a different format - I can use pictograms to answer simple questions about objects 					
<ul style="list-style-type: none"> - I can explain what the pictogram shows - I can organise data in a tally chart - I can use a tally chart to create a pictogram 					
<ul style="list-style-type: none"> - I can answer 'more than'/'less than' and 'most/least' questions about an attribute - I can create a pictogram to arrange objects by an attribute - I can tally objects using a common attribute 					
<ul style="list-style-type: none"> - I can choose a suitable attribute to compare people - I can collect the data I need - I can create a pictogram and draw conclusions from it 					
<ul style="list-style-type: none"> - I can give simple examples of why information should not be shared - I can share what I have found out using a computer - I can use a computer program to present information in different ways 					
<ul style="list-style-type: none"> - I can choose a series of words that can be enacted as a sequence - I can follow instructions given by someone else - I can give clear and unambiguous instructions 					
<ul style="list-style-type: none"> - I can create different algorithms for a range of sequences (using the same commands) - I can show the difference in outcomes between two sequences that consist of the same commands - I can use an algorithm to program a sequence on a floor robot 					
<ul style="list-style-type: none"> - I can compare my prediction to the program outcome - I can follow a sequence - I can predict the outcome of a sequence 					
<ul style="list-style-type: none"> - I can explain the choices I made for my mat design - I can identify different routes around my mat - I can test my mat to make sure that it is usable 					

- I can create an algorithm to meet my goal - I can explain what my algorithm should achieve - I can use my algorithm to create a program					
- I can plan algorithms for different parts of a task - I can put together the different parts of my program - I can test and debug each part of the program					
- I can identify that a program needs to be started - I can identify the start of a sequence - I can show how to run my program					
- I can change the outcome of a sequence of commands - I can match two sequences with the same outcome - I can predict the outcome of a sequence of commands					
- I can build the sequences of blocks I need - I can decide which blocks to use to meet the design - I can work out the actions of a sprite in an algorithm					
- I can choose backgrounds for the design - I can choose characters for the design - I can create a program based on the new design					
- I can build sequences of blocks to match my design - I can choose the images for my own design - I can create an algorithm					
- I can compare my project to my design - I can debug my program - I can improve my project by adding features					

1.6	AL	CM	CS	Teach Computing Taxonomy				DD	DI	ET	IT	NW	PG	SS
Blue			Purple							Purple				
Blue			Purple											
Blue			Purple						Purple					
Blue			Purple						Purple					
Blue			Purple						Purple					
Blue			Purple						Purple				Purple	
Grey		Purple							Purple					
Grey		Purple							Purple					
Grey		Purple							Purple					
Grey		Purple							Purple					
Grey		Purple				Purple			Purple					
Grey		Purple							Purple					
Grey		Purple				Purple			Purple					
Blue		Purple							Purple					
Blue		Purple							Purple					
Blue		Purple							Purple					







Cross Curricular Links	Education for a Connected World
	<ul style="list-style-type: none"> - Copyright and ownership - Health, well-being and lifestyle
	<ul style="list-style-type: none"> - Copyright and ownership - Health, well-being and lifestyle
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	<ul style="list-style-type: none"> - Copyright and ownership - Health, well-being and lifestyle
Art and Design	
Art and Design	
Art and Design	
Art and Design	
Art and Design	
Art and Design	
English – writing	
English – writing	
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English – writing	
English – writing	
	- Copyright and ownership
	- Copyright and ownership
	- Copyright and ownership
	- Copyright and ownership
	- Copyright and ownership
	- Copyright and ownership
	- Privacy and security
	- Privacy and security
	- Privacy and security
	- Privacy and security
	- Privacy and security
	- Privacy and security

Music	
Music	
Music	
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Music	
Maths	- Privacy and security
Maths	- Privacy and security
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