

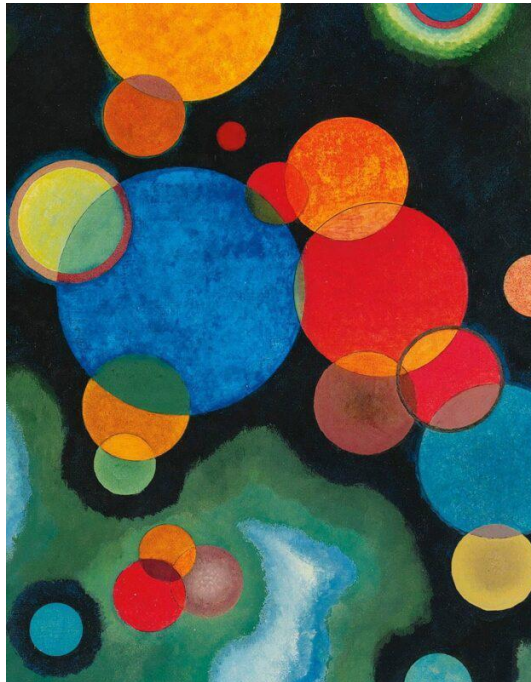
Year 1 Computing Medium Term Planning

Year 1	Information Technology	Digital Literacy/e-Safety	Computer Science
Autumn 1 Link to further resources: Computing systems and networks: <i>Technology around us</i>	• 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. • 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. • Recognise common uses of information technology beyond school.	
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
	• I can explain technology as something that helps us. • I can locate examples of technology in the classroom. • 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, to open a program and to click, to create digital art and to drag objects on a screen.	• I can identify rules to keep us safe and healthy when we are using technology in and beyond the home. • I can give examples of some of these rules. • I can discuss how we benefit from these rules.	

	• I can say what a keyboard is for. • I can recognise and use letter keys, number keys, the space bar, backspace and the enter key. • I can type my name on a computer. • I can save my work to a file. • I can open my work from a file. • I can use the arrow keys to move the cursor. <u>Opportunities for the arts:</u> Technology helps us create art. Artist - Eric Carle Use Paintz app to create a digital animal. Technology as a Tool • Explore tablets, cameras and interactive whiteboards. • Create simple digital pictures. • Question: <i>How does technology help artists make pictures?</i>		
Autumn 2 Link to further resources: <u>Creating media:</u> <i>Digital painting</i>	• Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about	• Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about	

Applications/programs to use: Paintz.app 2Simple Microsoft Paint	content or contact on the internet or other online technologies. Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	content or contact on the internet or other online technologies. Recognise common uses of information technology beyond school.	
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
	- I can use freehand tools to create marks on the screen. - I can use shape and line tools to create marks on the screen. - I can choose appropriate colours and tools to create a desired effect. - I can change the colour and brush sizes. - I can use digital tools to create a picture. - I can recreate the work of an artist using digital tools. - I can explain that pictures can be made in lots of different ways. - I can spot the differences between painting on a computer and on paper. - I can say whether I prefer painting using a computer or using paper. <u>Opportunities for the arts:</u>	- I can keep my personal information safe. - I can use my personal login details to login to a computer. - I can ask for help if I see something I am unsure of.	

- Look at digital artwork on Google Arts and Culture
- Mimic the work of famous artists using Paintz app
 - Cubism - Picasso
 - Pointilism - Alma Thomas
 - Pop art - Andy Warhol
 - Colour line and shape - Wassily Kandinsky





Children experiment with:

- brush tools
- fill tools
- colour selection
- shape creation

Art question: *How can colours and shapes show feelings?*

Spring 1

Link to further resources:

[Creating media:](#)
Digital writing

Programs to use:

- 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.

- 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.

Microsoft Word Google Docs Google Slides	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	• Recognise common uses of information technology beyond school.	
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
	• I can open a word processor. • I can recognise, identify, find and use letter keys, number keys, the space bar, the enter key, the shift key and the backspace key on a keyboard. • I can type capital letters by using the shift key. • I can identify the toolbar and use bold, italic, and underline. • I can select a word by double-clicking. • I can select all of the text by clicking and dragging. • I can change the font. • I can decide if my changes have improved my writing. • I can use 'undo' to remove changes. • I can write a message on a computer and on paper. • I can compare using a computer with using a pencil and paper	• I can keep my personal information safe. • I can use my personal login details to login to a computer. • I can ask for help if I see something I am unsure of.	

	and I can say which method I prefer. <u>Opportunities for the arts:</u> Complete word processing tasks linked with a familiar book or familiar song, rather than 'Ted' that is in the NCCE Scheme. OR Create a 'word cloud' about a poem or text you have studied in English lessons.		
Spring 2 Link to further resources: Data and information <i>Grouping data</i> Program to use: J2E	• 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. • Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	• 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. • Recognise common uses of information technology beyond school.	
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
	• I can describe objects using labels.	• I can keep my personal information safe.	

- I can match objects to groups.
- I can identify the label for a group of objects.
- I can count and group objects.
- I can count a group of objects
- I can describe an object.
- I can describe a property of an object.
- I can find objects with similar properties.
- I can group similar objects.
- I can group objects in more than one way.
- I can count how many objects share a property.
- 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 decide how to group objects to answer a question.
- I can compare groups of objects.
- I can record and share what I have found.

Opportunities for the arts:

Use a data set linked with favourite songs, paintings, musicals.

OR

Grouping data by visual features

- I can use my personal login details to login to a computer.
- I can ask for help if I see something I am unsure of.

	Artist: Henri Matisse Task: Sort artwork by colour, shape or subject before creating your own collage inspired by Matisse's artwork.		
Summer 1 Link to further resources: Programming A <i>Moving a robot</i> Floor Robots: Beebots Blue Bots LEGO WEDO		• 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. • Recognise common uses of information technology beyond school.	• 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.
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge
		• I can use resources safely and respectfully. • I can turn floor robots on and off.	• I can predict the outcome of a command on a device. • I can match a command to an outcome. • I can run a command on a device. • I can give directions. • I can compare forwards and backwards movements.

			• I can start a sequence from the same place. • I can predict the outcome of a sequence involving forwards and backwards commands. • 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 explain what my program should do. • I can choose the order of commands in a sequence. • I can debug my program. • I can identify several possible solutions. • I can plan two programs. • I can use two different programs to get to the same place. <u>Opportunities for the arts:</u> Make your BlueBot/VEX123 Robot move/stop to the beat of a familiar song. OR
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			Use the VEX123 to tell a story by adding pictures to the board, or by characterizing the robot. OR Drawing through movement Artist: Paul Klee Task: Create floor-robot journeys that draw lines and shapes. (Blue bots, VEX 123).
Summer 2 Link to further resources: Programming B <i>Introduction to animation</i> Program/Resources Scratch Jr iPads		• 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. • Recognise common uses of information technology beyond school.	• 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 safely
	Key Skills/Knowledge	Key Skills/Knowledge	Key Skills/Knowledge

		• I can use resources safely and respectfully. • I can plug iPads in to charge.	• I can find the commands to move a sprite. • I can use commands to move a sprite. • I can compare different programming tools. • I can use more than one block by joining them together. • I can use a Start block in a program. • I can run my program. • I can find blocks that have numbers. • I can change the value. • I can say what happens when I change a value. • I can show that a project can include more than one sprite. • I can delete a sprite. • I can add blocks to each of my sprites. • I can choose appropriate artwork for my project. • I can decide how each sprite will move. • I can create an algorithm for each sprite. • I can use sprites that match my design. • I can add programming blocks based on my algorithm.
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			I can test the programs I have created. <u>Opportunities for the arts:</u> Upload music or other sound bytes to Scratch Jr. projects. OR Bring drawings to life Artist: Walt Disney Task: Create a simple frame-by-frame animated character.
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GDS Opportunities	Children record voice/video footage to add to their digital writing projects. Children use a teacher prepared photo story to create a slideshow of photographs to add to digital writing projects.
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