

ST AGATHA'S PRIMARY SCHOOL KEY STAGE 1 COMPUTING CURRICULUM MAP

Year Group	UNIT	Unit Name	Lesson	Learning Objectives	Success Criteria
1	AUTUMN 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 - I can name the main parts of a computer
1		Computing systems and networks – Technology around us	2	-To identify a computer and its main parts	- I can switch on and log into a computer - I can use a mouse to click and drag - I can click and drag to make objects on a screen
1		Computing systems and networks – Technology around us	3	-To use a mouse in different ways	- I can use a mouse to create a picture - I can use a mouse to open a program - I can save my work to a file
1		Computing systems and networks – Technology around us	4	-To use a keyboard to type on a computer	- I can say what a keyboard is for - I can type my name on a computer - I can delete letters
1		Computing systems and networks – Technology around us	5	-To use the keyboard to edit text	- I can open my work from a file - I can use the arrow keys to move the cursor
1		Computing systems and networks – Technology around us	6	-To create rules for using technology responsibly	- 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
1	AUTUMN 2	Creating media – Digital painting	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 used - I can use the paint tools to draw a picture
1		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
1		Creating media – Digital painting	3	-To make careful choices when painting a digital picture	- I can choose appropriate shapes - I can create a picture in the style of an artist - I can make appropriate colour choices
1		Creating media – Digital painting	4	-To explain why I chose the tools I used	- 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

1		Creating media – Digital painting	5	-To use a computer on my own to paint a picture	<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
1		Creating media – Digital painting	6	-To compare painting a picture on a computer and on paper	<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
1	SPRING 1	Creating media – Digital writing	1	-To use a computer to write	<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
1		Creating media – Digital writing	2	-To add and remove text on a computer	<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
1		Creating media – Digital writing	3	-To identify that the look of text can be changed on a computer	<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
1		Creating media – Digital writing	4	-To make careful choices when changing text	<ul style="list-style-type: none"> -I can change the font - I can select all of the text by clicking and dragging - I can select a word by double-clicking
1		Creating media – Digital writing	5	-To explain why I used the tools that I chose	<ul style="list-style-type: none"> -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
1		Creating media – Digital writing	6	-To compare typing on a computer to writing on paper	<ul style="list-style-type: none"> -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
1		Data and information – Grouping data	1	-To label objects	<ul style="list-style-type: none"> -I can describe objects using labels - I can identify the label for a group of objects - I can match objects to groups
1		Data and information – Grouping data	2	-To identify that objects can be counted	<ul style="list-style-type: none"> -I can count a group of objects - I can count objects - I can group objects

1	SPRING 2	Data and information – Grouping data	3	-To describe objects in different ways	<ul style="list-style-type: none"> -I can describe an object - I can describe a property of an object - I can find objects with similar properties
1		Data and information – Grouping data	4	-To count objects with the same properties	<ul style="list-style-type: none"> - I can count how many objects share a property - I can group objects in more than one way - I can group similar objects
1		Data and information – Grouping data	5	-To compare groups of objects	<ul style="list-style-type: none"> - I can choose how to group objects - I can describe groups of objects - I can record how many objects are in a group
1		Data and information – Grouping data	6	-To answer questions about groups of objects	<ul style="list-style-type: none"> - 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
1	SUMMER 1	Programming A – Moving a robot	1	-To explain what a given command will do	<ul style="list-style-type: none"> - 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
1		Programming A – Moving a robot	2	-To act out a given word	<ul style="list-style-type: none"> - I can follow an instruction - I can give directions - I can recall words that can be acted out
1		Programming A – Moving a robot	3	-To combine forwards and backwards commands to make a sequence	<ul style="list-style-type: none"> - 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
1		Programming A – Moving a robot	4	-To combine four direction commands to make sequences	<ul style="list-style-type: none"> - 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
1		Programming A – Moving a robot	5	-To plan a simple program	<ul style="list-style-type: none"> - I can choose the order of commands in a sequence - I can debug my program - I can explain what my program should do
1		Programming A – Moving a robot	6	-To find more than one solution to a problem	<ul style="list-style-type: none"> - I can identify several possible solutions - I can plan two programs - I can use two different programs to get to the same place

1	SUMMER 2	Programming B - 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		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		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		Programming B - Programming animations	4	-To explain that each sprite has its own instructions	- 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
1		Programming B - Programming animations	5	-To design the parts of a project	- I can choose appropriate artwork for my project - I can create an algorithm for each sprite - I can decide how each sprite will move
1		Programming B - 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
2	AUTUMN 1	Computing systems and networks – IT around us	1	-To recognise the uses and features of information technology	- I can describe some uses of computers - I can identify examples of computers - I can identify that a computer is a part of IT
2		Computing systems and networks – IT around us	2	-To identify the uses of information technology in the school	- 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
2		Computing systems and networks – IT around us	3	-To identify information technology beyond school	- I can find examples of information technology - I can sort IT by where it is found - I can talk about uses of information technology
2		Computing systems and networks – IT around us	4	-To explain how information technology helps us	- I can demonstrate how IT devices work together - I can recognise common types of technology - I can say why we use IT
2		Computing systems and networks – IT around us	5	-To explain how to use information technology safely	- 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
2		Computing systems and networks – IT around us	6	-To recognise that choices are made when using information technology	- 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

2	AUTUMN 2	Creating media – Digital photography	1	-To use a digital device to take a photograph	- 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
2		Creating media – Digital photography	2	-To make choices when taking a photograph	- 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
2		Creating media – Digital photography	3	-To describe what makes a good photograph	- 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
2		Creating media – Digital photography	4	-To decide how photographs can be improved	- 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 - I can explain my choices
2		Creating media – Digital photography	5	-To use tools to change an image	- I can recognise that images can be changed - I can use a tool to achieve a desired effect
2		Creating media – Digital photography	6	-To recognise that photos can be changed	- 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
2	SPRING 1	Creating media - Digital music	1	-To say how music can make us feel	- I can describe music using adjectives - I can identify simple differences in pieces of music - I can say what I do and don't like about a piece of music
2		Creating media - Digital music	2	-To identify that there are patterns in music	- 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
2		Creating media - Digital music	3	-To experiment with sound using a computer	- I can connect images with sounds - I can relate an idea to a piece of music - I can use a computer to experiment with pitch
2		Creating media - Digital music	4	-To use a computer to create a musical pattern	- I can explain how my music can be played in different ways - I can identify that music is a sequence of notes - I can refine my musical pattern on a computer
2		Creating media - Digital music	5	-To create music for a purpose	- I can add a sequence of notes to my rhythm - I can create a rhythm which represents an animal I've chosen - I can create my animal's rhythm on a computer
2		Creating media - Digital music	6	-To review and refine our computer work	- I can explain how I changed my work - I can listen to music and describe how it makes me feel - I can review my work
2		Programming A – Robot algorithms	1	-To describe a series of instructions as a sequence	- 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 instructions

2	SPRING 2	Programming A – Robot algorithms	2	-To explain what happens when we change the order of instructions	-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 -I can use the same instructions to create different algorithms
2		Programming A – Robot algorithms	3	-To use logical reasoning to predict the outcome of a program	-I can compare my prediction to the program outcome -I can follow a sequence -I can predict the outcome of a sequence
2		Programming A – Robot algorithms	4	-To explain that programming projects can have code and artwork	-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
2		Programming A – Robot algorithms	5	-To design an algorithm	-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
2		Programming A – Robot algorithms	6	-To create and debug a program that I have written	-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
2	SUMMER 1	Programming B - Programming quizzes	1	-To say how music can make us feel	-I can describe music using adjectives -I can identify simple differences in pieces of music -I can say what I do and don't like about a piece of music
2		Programming B - Programming quizzes	2	-To identify that there are patterns in music	-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
2		Programming B - Programming quizzes	3	-To experiment with sound using a computer	-I can connect images with sounds -I can relate an idea to a piece of music -I can use a computer to experiment with pitch
2		Programming B - Programming quizzes	4	-To use a computer to create a musical pattern	-I can explain how my music can be played in different ways -I can identify that music is a sequence of notes -I can refine my musical pattern on a computer
2		Programming B - Programming quizzes	5	-To create music for a purpose	-I can add a sequence of notes to my rhythm -I can create a rhythm which represents an animal I've chosen -I can create my animal's rhythm on a computer
2		Programming B - Programming quizzes	6	-To review and refine our computer work	-I can explain how I changed my work -I can listen to music and describe how it makes me feel -I can review my work
2	Data and information – Pictograms	Data and information – Pictograms	1	-To recognise that we can count and compare objects using tally charts	-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
2		Data and information – Pictograms	2	-To recognise that objects can be represented as pictures	-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
2		Data and information – Pictograms	3	-To create a pictogram	-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

2	SUMMER 2	Data and information – Pictograms	4	-To select objects by attribute and make comparisons	-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
2		Data and information – Pictograms	5	-To recognise that people can be described by attributes	-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
2		Data and information – Pictograms	6	-To explain that we can present information using a computer	-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