Computing Curriculum Objectives – KS1

Year Group	Unit Name	Learning Objectives	Success Criteria
1	Technology around us	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
1	Technology around us	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
1	Technology around us	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
1	Technology around us	To use a keyboard to type	- I can save my work to a file - I can tell you that writing on a computer is called typing - I can type my name on a computer
1	Technology around us	To use the keyboard to edit text	- I can delete letters - I can open my work from a file - I can use the arrow keys to move the cursor
1	Technology around us	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	Digital Painting	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	Digital Painting	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	Digital Painting	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	Digital Painting	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	Digital Painting	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 an artist on my own
1	Digital Painting	To compare painting a picture on a computer and on paper	- 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	Moving a robot	To explain what a given command will do	- 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	Moving a robot	To act out a given word	- I can follow an instruction - I can give directions - I can recall words that can be acted out
1	Moving a robot	To combine forwards and backwards commands to make a sequence	- 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	Moving a robot	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 - I can predict the outcome of a sequence involving up to four commands
1	Moving a robot	To plan a simple program	- I can choose the order of commands in a sequence - I can debug my program - I can explain what my program should do
1	Moving a robot	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
1	Grouping Data	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

1	Grouping Data	To identify that objects can be counted	- I can count a group of objects - I can count objects - I can group objects
1	Grouping Data	To describe objects in different ways	- I can describe a property of an object - I can describe an object - I can find objects with similar properties
1	Grouping Data	To count objects with the same properties	- I can count how many objects share a property - I can group objects in more than one way - I can group similar objects
1	Grouping Data	To compare groups of objects	- I can choose how to group objects - I can describe groups of objects - I can record how many objects are in a group
1	Grouping Data	To answer questions about groups of objects	- 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	Digital Writing	To use a computer to write	- I can identify and find keys on a keyboard - I can open a word processor - I can recognise keys on a keyboard
1	Digital Writing	To add and remove text on a computer	- I can enter text into a computer - I can use backspace to remove text - I can use letter, number, and space keys
1	Digital Writing	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 - I can type capital letters
1	Digital Writing	To make careful choices when changing text	- I can change the font - I can select a word by double-clicking - I can select all of the text by clicking and dragging
1	Digital Writing	To explain why I used the tools that I chose	- 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	Digital Writing	To compare writing on a computer with writing on paper	- I can compare using a computer with using a pencil and paper - I can say which method I like best - I can write a message on a computer and on paper
1	Programming Animations	To choose a command for a given purpose	- I can compare different programming tools - I can find which commands move a sprite - I can use commands to move a sprite
1	Programming Animations	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 Animations	To identify the effect of changing a value	- I can change the value - I can find blocks which have numbers - I can say what happens when I change a value
1	Programming Animations	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 Animations	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 Animations	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 which match my design
2	Information Technology around us	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 information technology
2	Information Technology around us	To identify information technology in the home	- I can explain the purpose of information technology in the home - I can move and resize images - I can open a file
2	Information Technology around us	To identify information technology beyond school	- I can compare types of information technology - I can find examples of information technology - I can talk about uses of information technology
2	Information Technology around us	To explain how information technology benefits us	- I can demonstrate how information technology is used in a shop - I can explain how information technology helps people - I can recognise that information technology can be connected
2	Information Technology around us	To show how to use information technology safely	- I can list different uses of information technology - I can recognise how to use information technology responsibly - I can say how those rules/guides can help me
2	Information Technology around us	To recognise that choices are made when using information technology	- I can enjoy a variety of activities - I can explain simple guidance for using information technology in different environments and settings - I can identify the choices that I make when using information technology
2	Digital Photography	To know what devices can be used to take photographs	- I can capture digital photos and talk about my experience - I can sort devices into old and new - I can talk about how to take a photograph
2	Digital Photography	To use a digital device to take 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	Digital Photography	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	Digital Photography	To decide how photographs can be improved	- I can experiment with different light sources - I can explore the effect that light has on a photo - I can focus on an object
2	Digital Photography	To use tools to change an image	- I can explain my choices - I can recognise that images can be changed - I can use a tool to achieve a desired effect
2	Digital Photography	To recognise that images can be changed	- I can apply a range of photography skills to capture a photo - I can identify which images are real and which have been changed - I can recognise which images have been changed
2	Robot Algorithms	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 and unambiguous instructions
2	Robot Algorithms	To explain what happens when we change the order of instructions	- 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
2	Robot Algorithms	To use logical reasoning to predict the outcome of a program (series of commands)	- I can compare my prediction to the program outcome - I can follow a sequence - I can predict the outcome of a sequence
2	Robot Algorithms	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	Robot Algorithms	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	Robot Algorithms	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	Pictograms	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	Pictograms	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	Pictograms	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	Pictograms	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	Pictograms	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	Pictograms	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
2	Making Music	To say how music can make us feel	- 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)
2	Making Music	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	Making Music	To describe how music can be used in different ways	- 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 and duration
2	Making Music	To show how music is made from a series of notes	- 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
2	Making Music	To create music for a purpose	- I can describe an animal using sounds - I can explain my choices - I can save my work
2	Making Music	To review and refine our computer work	- 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
2	An Introduction to Quizzes	To explain that a sequence of commands has a start	- 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
2	An Introduction to Quizzes	To explain that a sequence of commands has an outcome	- 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
2	An Introduction to Quizzes	To create a program using a given design	- I can build the sequences of blocks I need - I can decide which blocks to use to meet the design - I can tell the actions of a sprite in an algorithm
2	An Introduction to Quizzes	To change a given design	- I can choose backgrounds for the design - I can choose characters for the design - I can create a program based on the new design

2	An Introduction to Quizzes	To create a program using my own 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
2	An Introduction to Quizzes	To decide how my project can be improved	- I can compare my project to my design - I can debug - I can improve my project by adding features