

Computing

Computing

Computer Systems and Networks

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
Technology & IT around us	To be able to explore technological hardware through role play e.g. old phones, keyboard not connected to working computer etc	To be able to identify technology and how it can help us at home and in the classroom	To be able to identify the main parts of a computer including a keyboard and mouse	To be able to use a keyboard and start to edit text	To be able to identify the uses of computers and how IT can be used beyond school	To be able to explain how IT equipment needs to be used safely (see E-safety)	To be able to recognise that some technology can be used as information technology	To be able to identify uses of information technology in school and beyond	To be able to explain how information can help us when it is used safely	To be able to recognise that choices are made when looking for information using technology

Creating Media

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
Digital Painting	To be able to recognise that finger gestures or a mouse can control an iPad / computer	To be able to use the freehand tool in a paint programme either on a computer or iPad	To be able to use line and shape tools in a paint programme either on a computer or iPad	To be able to make careful choices over the tool that I use and explain why I have used it	To be able to paint a picture in the style of an artist	To be able to make comparisons between painting a picture on a computer / iPad and on paper				
Digital Writing			To be able to know that a keyboard / mouse operates a computer	To be able to identify and find keys of a keyboard using a word processing programme	To be able to add and remove text on a word processing programme including the use of capitals	To be able change the look of text using bold, italic and underline	To be able to make choices when changing the font and size of font	To be able to explain why I have used the tools that I have when using a word processing package	To be able to make comparisons between writing on a computer / iPad and on paper	
Digital Music	To be able to identify technology that can play music	To be able to listen to digital music on a range of different devices	To be able to say how music can make us feel and identify simple differences in pieces of music	To be able to create a rhythm pattern in digital music software	To be able to experiment with sound including changing pitch	To be able to create music for a purpose by adding a sequence of notes to my rhythm				

Computing Continued

Programming

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
Moving a robot	To be able to explain what a given command will do	To be able to combine forwards and backwards commands to make sequences	To be able to combine four direction commands to make sequences	To be able to plan a simple program	To be able to find more than one solution to a problem	To be able to explain what happens when we change the order of instructions	To be able to use logical reasoning to predict the outcome of a program	To be able to design an algorithm	To be able to create and debug a program / algorithm that I have written	
Programming animations & quizzes			To be able to choose and use commands to move a sprite (ScratchJnr)	To be able to show a series of commands can be joined together by using a start / stop block	To be able to identify the effect of changing values in ScratchJnr e.g. command blocks	To be able to design parts of my project by changing Sprites and backgrounds	To be able to explain that a sequence of commands has an outcome	To be able to create a program using a given design	To be able to create a program using my own design	To be able to decide how my project can be improved

Data and Information

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
Grouping Data	To be able to identify themselves as part of a group eg; class, phonics group, eye colour etc	To be able to see differences in objects	To be able to make comparisons between objects	To be able to label objects and groups of objects	To be able to identify that objects can be grouped to ease counting	To be able to describe objects in different ways	To be able to count groups with the same properties	To be able to answer questions about groups of question		
Pictograms	To be able to say what data is and why it is collected	To be able to identify a chart or a table of information based on basic information	To be able to recognise that we can count and compare objects using tally charts	To be able to recognise that objects can be represented as pictures	To be able to create a pictogram	To be able to select and arrange objects by an attribute	To be able to explain that we can present information using a computer			

Computing Continued

E-Safety

E-safety will be taught discretely throughout each theme and year group and across all curriculum subjects. Year 2 will explicitly teach self-image, online bullying and healthy lifestyles as a taught sequence of lessons.

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
Online relationships and reputation	To be able to know that the internet can be used to communicate	To be able to identify ways that I can put information on the internet	To be able to recognise that information can stay online and can be copied	To be able to communicate with people that I know with the support of an adult	To be able to describe what information should not be put online without asking a trusted adult first	To be able to explain why things one person finds funny or sad online may not always be seen in the same way by others	To be able to describe different ways to give or deny my permission online and identify who can help me if I am unsure	To be able to identify who can help me if something happens online without my consent	To be able to explain why I should always ask a trusted adult before clicking yes, agree or accept online	
Managing online information, privacy and security	To be able to identify devices and know how to use the internet to find information	To be able to identify some examples of my personal information e.g. name, age, birthday etc.	To be able to describe who would be trusted to keep my personal information safe	To be able to understand that we can encounter a range of things online including things we like or dislike	To be able to understand that passwords protect information and can be used to keep us safe	To be able to explain and give examples of what is private and keeping things private	To be able to explain the difference between things that are imaginary, made up, make believe and things that are true or real	To be able to explain some rules for keeping my personal information private		
Self-image, online bullying and healthy lifestyles	To be able to describe ways that people can be unkind online and may make people feel sad, embarrassed or upset	To be able to identify what makes me feel sad, worried uncomfortable and frightened online and give examples of who to talk to and how they can help	To be able to explain what bullying is, how people may bully others and how bullying can make us feel	To be able to explain how other people may look and act differently, online and offline						