Progression of Skills

Area of Learning	Reception Class	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Systems & Networks	I can find and name Computing technology around us in school. I can describe how I communicate with others online. I am starting to communicate online, safely and respectfully	I can recognise common uses of Computing technology. I am finding the keyboard keys more quickly on a desktop computer and on a tablet. I am beginning to create digital content using a computer. I can use search engines to find information and images.	I am becoming more familiar with the keys on a keyboard and I can type more quickly. I can recognise uses of Computing technology and explain how to use these safely.	I can label parts of a network within school and a larger network across a country or even the world. I am beginning to understand the opportunities offered by connectivity through networks.	I can explain how a network and its parts are connected together.	I can send a sensible, accurate email to my class teacher and classmates. I can use search technologies effectively and explain how results are selected and ranked, and evaluate the results.	I can explain how the world wide web provides opportunities for communication, collaboration and searching. I can explain how information is transferred across the internet. I can communicate my knowledge and ideas effectively and safely online.
Creating Digital Content	I can log in to the school computers. I am starting to type on computers and tablets. I am starting to learn important iPad gestures. I can paint, create music, animate and write.	I am beginning to create digital content using a computer. I can use search engines to find information and images. With support, I can add images and information to a PowerPoint.	I can take a photo using a tablet device or a digital camera. I can edit a photo using the photo device itself. I can make an effective PowerPoint about our History learning.	I can record video footage to create new content. I can use programs to edit the content of my video. I can create, edit and publish digital content.	I can create, edit, publish and evaluate digital audio and photo content. I can use a program to make content for a webpage about online safety.	I can use my knowledge of the buttons and functions of PowerPoint to perform tasks quickly and effectively. I can create a PowerPoint to present my ideas, including inserted audio/video, hyperlinks and personalised designs. I can design, write and debug a program to design content and then control a physical system to create my own badge.	I can use software to create, edit and publish video content I can analyse and evaluate my video and my classmates' videos with positive feedback and ideas for improvement. I can deploy my knowledge and skills to use a program to make content for an effective webpage, including hyperlinks.
Programming	I can input a simple set of instructions into a computer device	I can use simple algorithms to animate a character.	I can input a more complex set of instructions with a BeeBot device	I am starting to design and write programs to design an exciting game.	I can create an algorithm to program a drawing app	I can independently design, write and debug a program that	I can independently design, write and debug a computer game using algorithms.

	(BeeBot) to fulfill an objective.		to allow it to explore. I can edit the algorithm on a game, to make it easier to play. I can edit a 'bug' in a game so that it works properly.	I am typing more quickly, using computers and tablets. I can use sequence, selection and repetition in my coding for an animation. I can use logical reasoning to explain the algorithms in my code and look for, and fix bugs in my coding.	to create patterns and pictures. I am beginning to use coding skills to program and control a physical system.	accomplish specific goals.	I can use variables in my game to make it more exciting. I can use coding skills to program and control a physical system to achieve a specific goal.
Data & Information		I can use technology to organise, store and retrieve digital content.	I can send an email to my class teacher and classmates. I can create a pictogram to present data. I can create, interpret and compare data in different pictograms.	I can create a systematic database to present data. I can appreciate how results are selected and ranked.	I can use coding skills to program and control a physical system and to record data.	I can create a systematic database to present data. I can search for information in my own databases and other people's databases. I can evaluate databases created by others.	I can collect, edit and analyse data using a spreadsheet in order to support event planning. I can input simple formulae into a spreadsheet to make calculations more streamlined.
Online Safety	I know who I should speak to at school or at home, if I encounter content that upsets me online. I know how to play online games more safely.	I know who I should speak to at school or at home, if I encounter content that upsets me online. I can keep my passwords secret and secure. I know where to search for information online. I can log out of apps, games and websites.	I know who I should speak to at school or at home, if I encounter content that upsets me online. I know why I must keep my passwords secret and secure. I know that I should show empathy towards my friends online. I am starting to understand who	I know who I should speak to at school or at home, if I encounter content that upsets me online. I can decide which information I should and should not share online. I am starting to analyse information I read online and decide if it is true. I know how and why i must keep my passwords secure.	I know who I should speak to at school or at home, if I encounter content that upsets me online. I can decide which information I should and should not share online. I am starting to analyse information I	I can explain to others, who they should speak to at school or at home, if they encounter content that upsets them online. I can decide which information I should and should not share online. I am starting to analyse information I read online and decide if it is true. I know how and why i must keep my passwords secure.	I can explain to others, who they should speak to at school or at home, if they encounter content that upsets them online. I can explain to other children in the school, how they must stay safe online. I can decide which information I should and should not share online. I am starting to analyse information I read online and decide if it is true.

			my 'trusted adults' are. I know how to send sensible and safe emails to my teachers and friends.	I know how to act respectfully towards others online.	read online and decide if it is true. I know how and why i must keep my passwords secure. I know how to act respectfully towards others online.	I know how to act respectfully towards others online.	I know how and why i must keep my passwords secure. I know how to act respectfully towards others online.

Progression of Knowledge

Area of Learning	Reception Class	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Systems & Networks	I am beginning to know where to go for help when I have concerns about content Know the names of key Computing technologies I understand how to communicate safely and respectfully using school computing technology and at home.	I know the names of important information technologies at school and at home. I know who to speak to if I am upset or worried by online content.	I know some of the benefits of computer technology.	I am beginning to understand computer networks, including the internet.	I can explain how a network and its parts are connected together. I understand how computer networks, including the internet, allow us to connect together. I know that content on websites, including what I publish on there is owned by the website owners.	I know that emails must be professional and polite. I understand how the world wide web provides opportunities for communication, collaboration and searching.	I know that information is sent across the internet in packets.

Creating Digital Content	I know that I should log out of Purple Mash when I have finished. I know how to play online games more safely.	I know how computers can be used to create Art work. I know that search engines help us to find information online.	I know what makes an effective photo. I know that images, fonts and colours can enhance the effectiveness of my PowerPoint.	I know which programs are best for creating a published document. I understand why a desktop computer is best for creating and editing this content.	I know that websites are 'written' and edited by web designers.	I understand the key functions of the 'ribbon tabs' in PowerPoint. I know that computers can be programmed to control a physical system.	I know that computer programs can allow us to record, edit and publish video content.
Programming	I am beginning to learn what an algorithm is.	I know that BeeBots can be programmed to move. I know that algorithms can be used to create computer animations.	I know that an algorithm is a set of instructions for a computer device to follow. I know that these instructions must be clear to be followed accurately.	I understand how simple algorithms work. I know that computer programs, such as Scratch, can be used to program an animation.	I know that computers can be programmed to create patterns and Art.	I know that algorithms allow us to program a computer to achieve a specific goal.	I know that programming also allows us to control physical systems. I know that programming can be used to create and debug a computer game.
Data & Information		I know that we can capture and compare data on a computer.	I know that Computers can make charts and tables to show our data.	I know that computers can be used to create databases and present data.	I know that computers can be used to program a data logger. I know that I can record data directly to a computer for analysis.	I know that I can compare data and search for data, using a database program.	I know that I can input data into a spreadsheet before converting it into other types of chart/table that make analysis easier.
Online Safety	I know where to go for help if I have concerns about online content. I know what bad content means. I know how to play online games more safely. I know who I should speak to at	I know who I should speak to at school or at home, if I encounter content that upsets me online. I know what information I should keep private online. I know that I must keep my passwords secure. I know that I must log out of websites and	I know who I should speak to at school or at home, if I encounter content that upsets me online. I know that I must include letters and numbers in my password to	I know who I should speak to at school or at home, if I encounter content that upsets me online. I can decide which information I should and should not share online. I am starting to understand respectful and responsible	I know who I should speak to at school or at home, if I encounter content that upsets me online. I can decide which information I should and	I can explain to different people that some information on the internet may be false or biased. I know different methods to test whether online information is true or false.	I can explain to others, who they should speak to at school or at home, if they encounter content that upsets them online. I can explain to other children in the school, how they must stay safe online. I can decide which information I should and should not share online.

	school or at home, if I encounter content that upsets me online.	apps that I use in school and at home.	make it more difficult to copy. I know who to speak to if I am upset or worried by online content. I know that we must show empathy towards each other online. I know that emails must be sensible and polite.	behaviour online. I am starting to learn what information I should and should not share online.	should not share online. I know that some images, videos and audio that I encounter online may be fake. I know that some information on the internet may be false or biased. I know different methods to test whether online information is true or false.	can explain all of my key online safety learning from this year. I know different methods to test whether online information is true or false.	I am starting to analyse information I read online and decide if it is true. I know how and why I must keep my passwords secure. I know how to act respectfully towards others online.