Subject –Skills Progression Key Stage 2

Key Skills	Year 3	Year 4	Year 5	Year 6	End of KS Expectations
e-Safety	• I can talk about what makes a secure password and why they are important. • I can protect my personal information when I do different things online. • I can recognise websites and games appropriate for my age. • I can post positive comments online. • I ask an adult before downloading files and games from the Internet. • I can use the safety features of websites and also report concerns to an adult.	• I can choose a secure password and screen name when I am using a website. • I can talk about the ways I can protect myself and my friends from harm online. • I use the safety features of websites as well as reporting concerns to an adult. • I know that anything I share online can be seen by others. • I choose websites, apps and games that are appropriate for my age. • I can talk about why I need to ask a trusted adult before downloading files and games from the Internet. • I comment positively and respectfully online and through text messages. • I can make good choices about how long I spend online	• I can choose a secure password and screen name. • I protect my password and other personal information. • I know that anything I post online can be seen, used and may affect others. • I can explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult. • I can talk about the dangers of spending too long online or playing a game. • I can explain the importance of communicating kindly and respectfully. • I can discuss the importance of choosing an age-appropriate website, app or game. • I can explain why I need to protect my computer or device from harm.	•I can explain the consequences of sharing too much about myself online. •I support my friends to protect themselves and make good choices online, including reporting concerns to an adult. •I can explain the consequences of spending too much time online or on a game. •I can explain the consequences to myself and others of not communicating kindly and respectfully. •I protect my computer or device from harm on the Internet.	Use technology safely, respectfully and responsibly; recognise acceptable and unacceptable behaviour; identify a range of ways to report concerns about content and contact

Technology in our lives	• I can save and retrieve work on the Internet, the school network or my own device. • I can talk about the parts of a computer. • I can tell you ways to communicate with others online. • I think about whether I can use images that I find online in my own work. • I can describe the World Wide Web as the part of the Internet that contains websites.	• I can tell you whether a resource I am using is on the Internet, the school network or my own device. • I can identify key words to use when searching safely on the World Wide Web. • I think about the reliability of information I read on the World Wide Web. • I can tell you how to check who owns images and text. • I can recognise that websites use different methods to advertise products	• I can describe different parts of the Internet and how it is different from the World Wide Web. • I can describe the different parts of a webpage. • I can use different online communication tools for different purposes. • I can use a search engine to find appropriate information and check its reliability. • I can recognise and evaluate different types of information I find on the World Wide Web. • I can find out who the information on a webpage belongs to • I know which resources on the Internet I can download and use.	• I can tell you the Internet services I need to use for different purposes. • I can describe how information is transported on the Internet. • I can select an appropriate tool to communicate and collaborate online. • I can talk about the way search results are selected and ranked. • I can check the reliability of a website. • I can tell you about copyright and acknowledge the sources of information online. • I know that websites can use my data to make money and target advertising. • I can describe the ways in which websites advertise their products to me	Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration
Programming	• I can break an open-ended problem up into smaller parts. I can put programming commands into a sequence to achieve a specific outcome. • I keep testing my program and can recognise when I need to debug it. • I can describe the algorithm I will need for a simple task. • I can detect a problem in an algorithm which could result in unsuccessful programming.	• I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts. • I can use a variety of tools to create a program. • I can use a sensor to detect a change which can select an action within my program. • I know that I need to keep testing my program while I am putting it together. • .I recognise that an algorithm will help me to sequence more complex programs. • I can recognise an error in a program and debug it. • I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.	• I can deconstruct a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program. • I can refine a procedure using repeat commands to improve a program. • I use logical thinking, imagination and creativity to extend a program. • I can use a variable to increase programming possibilities. • I can change an input to a program to achieve a different output. • I can use ‘if’ and ‘then’ commands to select an action. • I can use a variable and operators to stop a program. • I can use logical reasoning to detect and debug mistakes in a program.	• I can deconstruct a problem into smaller steps, recognising similarities to previous solutions. • I can explain and program each of the steps in my algorithm accurately. • I can evaluate the effectiveness and efficiency of my algorithm while I continue to test my programming. • I can recognise when I need to use a variable to achieve a required output. • I can talk about how a computer model can provide information about a physical system. • I can use different inputs (including sensors) to control a device or onscreen action and make predictions. • I can use logical reasoning to detect and correct errors in a algorithms and programs.	• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • use sequence, selection, and repetition in programs; work with variables and various forms of input and output. • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Handling Data	• I can search a ready-made database to answer questions. • I can collect data help me answer a question. • I can add to a database. • I can understand what a branching database is. • I can use a data logger to monitor changes and talk about the information collected.	• I can organise data in different ways. • I can collect data and identify where it could be inaccurate. • I can plan, create and search a database to answer questions. • I can choose the best way to present data to my friends. • I can use a data logger to record and share my readings with my friends	• I can use a spreadsheet to collect and record data. • I can choose an appropriate tool to help me collect data.. • I can present data in an appropriate way. • I can talk about mistakes in data and suggest how it could be checked.	• I can plan the process needed to investigate the world around me. • I can check the data I collect for accuracy and plausibility. • I can interpret the data I collect. • I can present the data I collect in an appropriate way. • I use the skills I have developed to interrogate a database.	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
Multi-media	• I can create different effects with different technology tools. • I can combine a mixture of text, graphics and sound to share my ideas and learning. • I can evaluate my work and improve its effectiveness. • I can use an appropriate tool to share my work online. • I can use appropriate keyboard commands to amend text on my device, including making use of a spellchecker.	• I can use photos, video and sound to create an atmosphere when presenting to different audiences. • I am confident exploring new media to widen my ability. • I can change the appearance of text to increase its effectiveness. • I can create, modify and present documents for a particular purpose. • I can use a keyboard confidently and make use of a spellchecker to write and review my work. • I can choose an appropriate tool to share my work and collaborate online. • I can create a hyperlink to a resource on the World Wide Web. • I can give constructive feedback to my friends to help them improve their work and refine my own.	• I can use text, photo, sound and video editing tools to refine my work. • I can use the skills I have already developed to create content for a given purpose. • I can select, use and combine the appropriate technology tools to create effects that will have an impact on others. • I can review and improve my own work and support others to improve their work. • I can select an appropriate online or offline tool to create and share ideas.	• I can talk about audience, atmosphere and structure when planning a particular outcome. • I can confidently identify the potential of unfamiliar technology to increase my creativity. • I can combine a range of media, recognising the contribution of each to achieve a particular outcome. • I can tell you why I select a particular online tool for a specific purpose. • I can be digitally discerning when evaluating the effectiveness of my own work and the work of others. • can select the most effective tool to collect, analyse, evaluate and present data and information	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting and presenting data and information.