Princefield First School

Computing

	Early Years	Key Stage 1		Key Stage 2	
	Reception	Year 1	Year 2	Year 3	Year 4
Strand					
E-safety	. Ask an adult whe I want to use the internet. . Tell an adult when something worrying or unexpected happens when I am using the internet. . Be kind to my friends. . Discuss the amount of time I spend using a tablet/ computer/ game device. . Show care when using technology devices.	. Able to keep passwords private. . Understand what personal information is. . Discuss why it's important to be kind and polite. . Inform an adult if experiences something unexpected or worrying online. . Recognise an age appropriate website. .Agree and follow sensible e-Safety rules. (School code of conduct).	. Explain why passwords and personal information must be kept private. . Know what to do if something inappropriate happens online. . Understand why a time limit is needed for online activity. . Understand why it is important to be kind and polite online and in real life. . Know that not everyone is who they say they are on the Internet.	. Understand what makes a secure password and why they are important. . Protect personal information when using online resources and sites. . Use the safety features of websites as well as reporting concerns to an adult. . Recognise websites and games appropriate for my age. . Make good choices about the length of time spent online. . Ask and check with an adult before downloading files and games from the Internet. . Post positive comments online.	. Choose secure password and appropriate screen names when using websites. . Discuss the ways of protecting myself and others online. . Use the safety features of websites as well as understanding how to report concerns to an adult. . Understand that anything shared online can be seen by others. . Choose websites, apps and games that are appropriate for a specific age group. (KS2) . Help other to make good choices about the time spent online. . Discuss why I need to ask a trusted adult before downloading files and games from the Internet. . Comment positively and respectfully online and through text messages.

Programming	. Able to make the beebot move. . Use simple software to make something happen. . Make choices about the buttons and icons I press, touch or click on.	. Give instructions to others and follow instructions to move around. . Describe what happens when pressing buttons on a robot/beebot. . Press the buttons in the correct order to make a robot/beebot move. . Describe actions which are needed to make something happen and begin to use the word algorithm. . Begin to predict what will happen for a short sequence of instructions. . Start to use software and apps to create movement and patterns on a screen. . Use the word debug when correcting mistakes during programming.	Give instructions for others to follow (using forward, backward and turn) and physically follow their instructions. . Tell the order needed in order to do things or to make something happen. Talk about this as an algorithm. . Program a robot/beebot or software to complete a particular task. . Analyse other's programs and tell you what will happen. . Use programming software to make objects move. . Watch a program execute and spot where it goes wrong in order to debug it.	. Break an open-ended problem up into smaller parts. . Enter/ write programming commands into a sequence to achieve a specific outcome. . Test my program and if an error is used, attempt to debug it. . Use repeat commands. . Describe the algorithm needed for a simple task. . Detect a problem in an algorithm which could result in unsuccessful programming.	. Use logical thinking to solve an open-ended problem by breaking it up into smaller parts. . Use an efficient procedure to simplify a program. . Use a sensor to detect a change which can select an action within a program. . Understand the importance of testing programs when programming. . Use a variety of tools to create a program. . Recognise an error in a program and debug it. . Recognise that an algorithm will help to sequence more complex programs. . Understand that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.
Handling Data	. Discuss different kinds of information such as picture, video, text and sound.	. Discuss the different ways in which information can be shown. . Use technology to collect information, including photos, video and sound. . Sort different kinds of information and present it to others. . Add information to a pictograph and discuss findings.	. Discuss the different ways technology is used to collect information, including a camera, microscope or ipad. . Make and save a chart or graph using the data collected. . Discuss the data that is shown in a chart or graph. . Start to understand a branching database. . Discuss the kind of information used to help me investigate a question.	. Discuss the different ways data can be organised. . Search a ready-made database to answer questions. . Collect data help me answer a question. . Add to a database. . Make a branching database. . Use a data logger to monitor changes and discuss the information collected.	. Organise data in different ways. . Collect data and identify where it could be inaccurate. . Plan, create and search a database to answer questions. . Choose the best way to present data. . Use a data logger to record and share my readings with others.

Multimedia	. Able to move objects on a screen. . Create shapes and text on a screen. . Use technology to show my learning.	. Explore and develop creative ideas using different technology tools. . Use technology to create and present ideas. . Use the keyboard or a word bank on a device to enter text. . Save information in a special place and retrieve it again.	. Use technology to organise and present ideas in different ways. . Use the keyboard on a device to add, delete and space text for others to read. . Discuss an online tool that will help to share ideas with other people. . Save and open files on a device.	. Create different effects with different technology tools. . Combine a mixture of text, graphics and sound to share ideas and learning. . Use appropriate keyboard commands to amend text on a device, including making use of a spellchecker. . Evaluate work and improve its effectiveness. . Use an appropriate tool to share work online.	. Use photos, video and sound to create an atmosphere when presenting to different audiences. . Have confidence to explore new media and to extend what can be achieved. . Change the appearance of text to increase its effectiveness. . Create, modify and present documents for a particular purpose. . Use a keyboard confidently and make use of a spellchecker to write and review work. . Use an appropriate tool to share work and collaborate online. . Give constructive feedback to others to help them improve their work and refine my own work.
Technology	. Discuss different kinds of technlogy used at home and in school. . Operate simple equipment. . Use a safe part of the internet to learn, explore and investigate.	. Recognise the ways we use technology in our classroom. . Recognise ways that technology is used in my home and community. . Use links to websites to find information. . Begin to identify some of the benefits of using technology.	. Discuss why technology is used in the classroom. . Discuss why technology is used in my home and community. . Understand that other people have created the information I use. . Identify the benefits of using technology including finding information, creating and communicating. . Talk about the differences between the Internet and things in the physical world.	. Save and retrieve work on the Internet, the school network or my own device. . Talk about the parts of a computer. . Discuss ways to communicate with others online. Describe the World Wide Web as the part of the Internet that contains websites. . Use search tools to find and use an appropriate website. . Think about whether I can use images that I find online in my own work.	. Discuss whether a resource I am using is on the Internet, the school network or my own device. . Identify key words to use when searching safely on the World Wide Web. . Think about the reliability of information I read on the World Wide Web. . DIscuss how to check who owns photos, text and clipart. . Create a hyperlink to a resource on the World Wide Web. . Recognise that websites use different methods to advertise products.