COMPUTING					
	E-safety	Programming	Handling Data	Multimedia	Technology In Our Lives Vocabulary
EYFS					
Year 1	• Use sensible rules to keep me safe when using technology • Explain why it's important to be kind and polite • Use links to websites to find information • Tell a trusted adult what I want to use a device for • Show a trusted adult when something worrying or unexpected happens when using a device • Know what personal information is and keep it private • Know that something put online can be seen by others • Use different technologies, with a trusted adult, to communicate responsibly with others • Be careful about the icons tapped when using technology devices • Be able to tell similarities and differences between people we know • Say how we feel when someone says something nice to us • Select from a list of apps, games and websites that a trusted adult gives • Use devices for the time allowed and say what else we like doing	• Give instructions to a friend and follow instructions to move around. • Describe what happens when buttons are pressed on a robot. • Press the buttons in the correct order to make a robot do what we want. • Describe what actions we need to do to make something happen and begin to use the word algorithm. • Begin to predict what will happen for a short sequence of instructions. • Begin to use software/apps to create movement and patterns on a screen. • Use the word debug when correcting programs.	• Talk about 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 talk about what we have found out	• Be creative with different technology tools. • Use technology to create and present my ideas. • Use the keyboard or a word bank on a device to enter text. • Save information in a special place and retrieve it again.	• 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.
Year 2	• Agree and use sensible rules to keep safe when using technology	• Give instructions to a friend (using forward, backward and	• Talk about the different ways we use technology to collect information, including a	• Use technology to organise and present my ideas in different ways.	• Say why we use technology in the classroom.

	• Talk about why it is important to be kind and polite online and in real life • Know that not all information online is true • Talk to a trusted adult about how I will keep myself safe before using a device • Tell a trusted adult when something worrying or unexpected happens when using a device • Explain why we need to keep passwords and personal information private • Know that not everyone is who they say they are online • Identify some possible risks to devices • Identify similarities and differences between people we know and people we see in the media/online • Tell someone how I feel when someone says something nice or not nice to me • Describe the things we enjoy about age appropriate apps, games and websites • Take a break when I have been using a device for too long • Do a range of other activities when I am not using devices	turn) and physically follow their instructions. • Tell you the order needed to do things to make something happen and talk about this as an algorithm. • Program a robot or software to do a particular task. • Look at my friend's program and say what will happen. • Use programming software to make objects move. • Watch a program and execute and spot where it goes wrong so that it can be debugged.	camera, microscope or sound recorder. • Make and save a chart or graph using the data collected. • Talk about the data that is shown in a chart or graph. • Start to understand a branching database. • Say what kind of information could be used to help investigate a question.	• Use the keyboard on a device to add, delete and space text for others to read. • Talk about an online tool that will help me to share my ideas with other people. • Save and open files on the device I use.	• Say why we use technology at home and the community. • Start to understand that other people have created the information we use. • Identify benefits of using technology including finding information, creating and communicating. • Talk about the differences between the Internet and things in the physical world.
Year 3	• Contribute to shared rules and use them to make good choices when using technology • Describe the ways that people get bullied when they use different technologies and consider what should be posted	• Break an open-ended problem up into smaller parts. • Put programming commands into a sequence to achieve a specific outcome. • Keep testing my program and recognise when it needs to be debugged. • Use repeat commands.	• Talk about the different ways data can be organised. • Search a ready-made database to answer questions. • Collect data to help answer a question. • Add to a database. • Make a branching database.	• Create different effects with different technology tools. • Combine a mixture of text, graphics and sound to share my ideas and learning. • Use appropriate keyboard commands to amend text on my device, including making use of a spellchecker.	• Save and retrieve work on the Internet, the school network or my own device. • Talk about the parts of a computer. • Tell you ways to communicate with others online.

	• Think about whether we can use images that we find online in our own work • Use search tools to find appropriate information and decide whether we can trust it • Use the safety features of websites as well as reporting concerns to a trusted adult • Use a secure password and explain why they are important • Protect personal information when we do different things online • Participate safely and responsibly in a secure online community • Ask a trusted adult before downloading files and games from the Internet • Identify images which have been digitally altered • Explain how we feel when someone responds to something we have shared online • Use age appropriate apps, games and websites from a list I have agreed with others • Make good choices about when and why devices are used • Identify adverts online, including those within Google searches	• Describe the algorithm needed for simple tasks. • Detect problems in an algorithm which could result in unsuccessful programming.	• Use a data logger to monitor changes and can talk about the information collected.	• Evaluate my work and improve its effectiveness. • Use an appropriate tool to share my work 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.
Year 4	• Contribute to shared rules and use them to make good choices when I use technology • Comment positively and respectfully when I use different technologies • Explain how to check who owns photos, text and clipart	• Use logical thinking to solve an open-ended problem by breaking it up into smaller parts. • Use an efficient procedure to simplify a program.	• 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 to my friends.	• Use photos, video and sound to create an atmosphere when presenting to different audiences. • Be confident to explore new media to extend what I can achieve.	• Tell you 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.

	• Identify key words to use when searching safely online and think about the reliability of information I find • Use a range of strategies to protect myself and my friends from harm online, including reporting concerns to a trusted adult • Know that anything I share online will stay there to be seen and used by others • Make safe choices when using technology to communicate responsibly with others • Explain why I need to ask a trusted adult before downloading files and games from the internet • Explain how digitally altered images in the media make me feel • Use appropriate strategies to deal with comments online • Choose apps, games and websites that are appropriate for my age and explain my reasons to friends • Tell my friends about the sensible choices I make about when and why I use device • Ignore or close adverts that appear on my device and explain my reasons	• Use a sensor to detect a change which can select an action within my program. • Know that I need to keep testing my program while I am putting it together. • Use a variety of tools to create a program. • Recognise an error in a program and debug it. • Recognise that an algorithm will help me to sequence more complex programs. • Recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.	• Use a data logger to record and share my readings with my friends.	• 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 my work. • Use an appropriate tool to share my work and collaborate online. • Give constructive feedback to my friends to help them improve their work and refine my own work.	• Think about the reliability of information I read on the World Wide Web. • Tell you 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
Year 5	• Contribute to shared rules and use them to support myself and others when we use technology • Always communicate kindly and respectfully and can describe the impact where this does not happen	• Decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program. • Refine a procedure using repeat commands to improve a program.	• Use a spreadsheet and database to collect and record data. • Choose an appropriate tool to help me collect data. • Present data in an appropriate way.	• Use text, photo, sound and video editing tools to refine my work. • Use the skills I have already developed to create content using unfamiliar technology. • Select, use and combine the appropriate technology tools to	• Describe different parts of the Internet. • Use different online communication tools for different purposes. • Use a search engine to find appropriate information and check its reliability.

				create effects that will have an impact on others.	
	• Know which online resources I can download and use • Use a search engine to find and evaluate different types of information • Explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to a trusted adult • Use a secure password and safe screen name when I am using an online tool • Explain the risks of sharing too much about myself online • Compare my online and face-to-face relationships • Explain why I need to protect my computer or device from harm • Know the reasons why images are altered • Recognise that online friendships affect my feelings • Select age-appropriate apps, games and websites and encourage my friends to do the same • Evaluate my own and others' choices when using games and devices • Identify the intended audience for an advert	• Use a variable to increase programming possibilities. • Change an input to a program to achieve a different output. • Use 'if' and 'then' commands to select an action. • Talk about how a computer model can provide information about a physical system. • Use logical reasoning to detect and debug mistakes in a program. • Use logical thinking, imagination and creativity to extend a program.	• Search a database using different operators to refine my search. • Talk about mistakes in data and suggest how it could be checked.	create effects that will have an impact on others. • Select an appropriate online or offline tool to create and share ideas. • Review and improve my own work and support others to improve their work.	• Recognise and evaluate different types of information I find on the World Wide Web. • Describe the different parts of a webpage. • Find out who the information on a webpage belongs to • Know which resources on the Internet I can download and use. • Describe the ways in which websites advertise their products.
Year 6	• Contribute to shared rules and use them to support myself and others • Always communicate kindly and respectfully, working with others to help all enjoy use of technology • Acknowledge the sources of information that I find online	• Deconstruct a problem into smaller steps, recognising similarities to solutions used before. • Explain and program each of the steps in my algorithm. • Evaluate the effectiveness and efficiency of an algorithm while	• Plan the process needed to investigate the world around me. • Select the most effective tool to collect data for my investigation. • Check the data I collect for accuracy and plausibility. • Interpret the data I collect.	• Talk about audience, atmosphere and structure when planning a particular outcome. • Confidently identify the potential of unfamiliar technology to increase my creativity. • Combine a range of media, recognising the contribution of	• I can tell you the Internet services I need to use for different purposes. • Describe how information is transported on the Internet. • Select an appropriate tool to communicate and collaborate online.

• Talk about the way search results are selected and ranked and check the reliability of websites I visit • Support my friends to protect themselves and make good choices online, including reporting concerns to a trusted adult • Consider terms and conditions and adjust privacy settings to maintain control of my personal information • Check the information about me online and know that some of it can be uploaded by others • Explain how to communicate safely and responsibly with people I only know online • Protect my computer or device from harm on the internet • Explain how images in the media affect how we feel about ourselves • Explain how online friendships affect our feelings • Select age-appropriate apps, games and websites and explain the potential risks of making different choices • Support my friends in evaluating their use of games and devices and make good choices for myself • Explain how my data is used to target adverts towards me	I continually test the programming of that algorithm. • Recognise when I need to use a variable to achieve a required output. • Use a variable and operators to stop a program. • Use different inputs (including sensors) to control a device or onscreen action and predict what will happen. • Use logical reasoning to detect and correct errors in a algorithms and programs.	• Present the data I collect in an appropriate way. • Use the skills I have developed to interrogate a database.	each to achieve a particular outcome. • I can tell you why I select a particular online tool for a specific purpose. • Be digitally discerning when evaluating the effectiveness of my own work and the work of others.	• Talk about the way search results are selected and ranked. • Check the reliability of a website. • Tell you about copyright and acknowledge the sources of information that I find online. • Know that websites can use my data to make money and target their advertising