Otterham Primary School

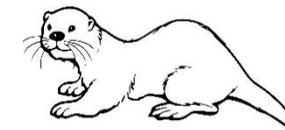| Computing Progression of skills Year 1				
e-Safety	**Programming**	**Handling Data**	**Multimedia**	**Technology in our Lives**
✓ I can keep my password private. ✓ I can tell you what personal information is. ✓ I can tell an adult when I see something unexpected or worrying online. ✓ I can talk about why it's important to be kind and polite. ✓ I can recognise an age appropriate website. ✓ I can agree and follow sensible e-Safety rules.	✓ I can give instructions to my friend and follow their instructions to move around. ✓ I can describe what happens when I press buttons on a robot. ✓ I can press the buttons in the correct order to make my robot do what I want. ✓ I can describe what actions I will need to do to make something happen and begin to use the word algorithm. ✓ I can begin to predict what will happen for a short sequence of instructions. ✓ I can begin to use software/apps to create movement and patterns on a screen. ✓ I can use the word debug when I correct mistakes when I program.	✓ I can talk about the different ways in which information can be shown. ✓ I can use technology to collect information, including photos, video and sound. ✓ I can sort different kinds of information and present it to others. ✓ I can add information to a pictograph and talk to you about what I have found out.	✓ I can be creative with different technology tools. ✓ I can use technology to create and present my ideas. ✓ I can use the keyboard or a word bank on my device to enter text. ✓ I can save information in a special place and retrieve it again.	✓ I can recognise the ways we use technology in our classroom. ✓ I can recognise ways that technology is used in my home and community. ✓ I can use links to websites to find information. ✓ I can begin to identify some of the benefits of using technology.

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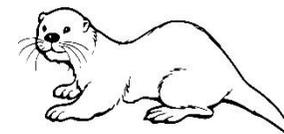
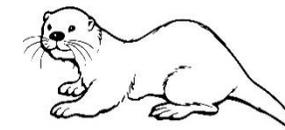| Computing Progression of skills Year 2				
e-Safety	**Programming**	**Handling Data**	**Multimedia**	**Technology in our Lives**
✓ I can explain why I need to keep my password and personal information private. ✓ I can describe the things that happen online that I must tell an adult about. ✓ I can talk about why I should go online for a short amount of time. ✓ I can talk about why it is important to be kind and polite online and in real life. ✓ I know that not everyone is who they say they are on the Internet.	✓ I can give instructions to my friend (using forward, backward and turn) and physically follow their instructions. ✓ I can tell you the order I need to do things to make something happen and talk about this as an algorithm. ✓ I can program a robot or software to do a particular task. ✓ I can look at my friend's program and tell you what will happen. ✓ I can use programming software to make objects move. ✓ I can watch a program execute and spot where it goes wrong so that I can debug it.	✓ I talk about the different ways I use technology to collect information, including a camera, microscope or sound recorder. ✓ I can make and save a chart or graph using the data I collect. ✓ I can talk about the data that is shown in my chart or graph. ✓ I am starting to understand a branching database. ✓ I can tell you what kind of information I could use to help me investigate a question.	✓ I can use technology to organise and present my ideas in different ways. ✓ I can use the keyboard on my device to add, delete and space text for others to read. ✓ I can tell you about an online tool that will help me to share my ideas with other people. ✓ I can save and open files on the device I use.	✓ I can tell you why I use technology in the classroom. ✓ I can tell you why I use technology in my home and community. ✓ I am starting to understand that other people have created the information I use. ✓ I can identify benefits of using technology including finding information, creating and communicating. ✓ I can talk about the differences between the Internet and things in the physical world.

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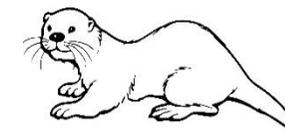| Computing Progression of skills Year 3				
e-Safety	**Programming**	**Handling Data**	**Multimedia**	**Technology in our Lives**
✓ I can talk about what makes a secure password and why they are important. ✓ I can protect my personal information when I do different things online. ✓ I can use the safety features of websites as well as reporting concerns to an adult. ✓ I can recognise websites and games appropriate for my age. ✓ I can make good choices about how long I spend online. ✓ I ask an adult before downloading files and games from the Internet. ✓ I can post positive comments online.	✓ 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 use repeat commands. ✓ 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 talk about the different ways data can be organised. ✓ 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 make a branching database. ✓ I can use a data logger to monitor changes and can talk about the information collected.	✓ 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 use appropriate keyboard commands to amend text on my device, including making use of a spellchecker. ✓ I can evaluate my work and improve its effectiveness. ✓ I can use an appropriate tool to share my work online.	✓ 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 can describe the World Wide Web as the part of the Internet that contains websites. ✓ I can use search tools to find and use an appropriate website. ✓ I think about whether I can use images that I find online in my own work.

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Computing Progression of skills Year 4

e-Safety	Programming	Handling Data	Multimedia	Technology in our Lives
✓ I choose a secure password 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 post online can be seen by others. ✓ I choose websites and games that are appropriate for my age. ✓ I can help my friends make good choices about the time they spend online. ✓ 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.	✓ I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts. ✓ I can use an efficient procedure to simplify 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 can use a variety of tools to create a program. ✓ I can recognise an error in a program and debug it. ✓ I recognise that an algorithm will help me to sequence more complex programs. ✓ I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.	✓ 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 photos, video and sound to create an atmosphere when presenting to different audiences. ✓ I am confident to explore new media to extend what I can achieve. ✓ 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 use an appropriate tool to share my work and collaborate online. ✓ I can give constructive feedback to my friends to help them improve their work and refine my own work.	✓ 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 photos, text and clipart. ✓ I can create a hyperlink to a resource on the World Wide Web.

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Computing Progression of skills Year 5

e-Safety	Programming	Handling Data	Multimedia	Technology in our Lives
✓ I protect my password and other personal information. ✓ 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 know that anything I post online can be seen, used and may affect others. ✓ 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 or game. ✓ I can explain why I need to protect my computer or device from harm. ✓ I know which resources on the Internet I can download and use.	✓ I can decompose 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 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 talk about how a computer model can provide information about a physical system. ✓ I can use logical reasoning to detect and debug mistakes in a program. ✓ I use logical thinking, imagination and creativity to extend a program.	✓ I can use a spreadsheet and database 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 search a database using different operators to refine my search. ✓ I can talk about mistakes in data and suggest how it could be checked.	✓ 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 using unfamiliar technology. ✓ I can select, use and combine the appropriate technology tools to create effects that will have an impact on others. ✓ I can select an appropriate online or offline tool to create and share ideas. ✓ I can review and improve my own work and support others to improve their work.	✓ I can describe different parts of the Internet. ✓ 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 describe the different parts of a webpage. ✓ I can find out who the information on a webpage belongs to.

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Computing Progression of skills Year 6

e-Safety	Programming	Handling Data	Multimedia	Technology in our Lives
✓ I protect my password and other personal information. ✓ 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.	✓ I can deconstruct a problem into smaller steps, recognising similarities to solutions used before. ✓ I can explain and program each of the steps in my algorithm. ✓ I can evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm. ✓ I can recognise when I need to use a variable to achieve a required output. ✓ I can use a variable and operators to stop a program. ✓ I can use different inputs (including sensors) to control a device or onscreen action and predict what will happen. ✓ I can use logical reasoning to detect and correct errors in a algorithms and programs.	✓ I can plan the process needed to investigate the world around me. ✓ I can select the most effective tool to collect data for my investigation. ✓ 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.	✓ 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.	✓ 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 that I find online.