

Shadsworth Junior School Progression of Computing Skills Document

	Presenting	Information	Computer science	Online safety – communicating with others	Online safety - Digital Literacy	Online safety - general
Year 3	<ul style="list-style-type: none"> • I am familiar with the keys on a standard keyboard. • I can type using both hands. • I can save and retrieve files. • I can use tools to manipulate and edit text • I can organise a page of information to present it more clearly for my audience. • I can create or adapt images for a purpose. • I can edit and combine text and images to create a finished document. • I use and combine a range of media to present my ideas e.g. text, images • I can create or adapt images for a purpose. • I can create animations. • I can edit and combine text, images to create a finished animation (sparkling Christmas tree). 	<ul style="list-style-type: none"> • I can create a table of data on a spread sheet. • I can use a spread sheet program to automatically create charts and graphs from data • I can describe a cell location in a spread sheet using the notation of a letter for the column followed by a number for the row. • I can use a range of online and computer based sources of information including databases, to help me find information and answer simple questions. • I can use different tools to find what I want, including filtering, searching and sorting information. • I can organise information to help me explain what I have found out, using graphs, charts and tables. • I am careful to spell all words correctly when carrying out a search. • I take care when typing in a URL and can explain why this is important. • I take care when typing keywords into a search and read the description of the suggested sites carefully before clicking on the link. 	<ul style="list-style-type: none"> • I can write algorithms control on screen objects • I can write an algorithm to cause an event to happen in response to simple input • I can explore the effects of changing variables in a program. • I debug coding using commands that I am familiar with. • I can name some objects that use coding to control them. • • I understand that some games and videos are not intended for children. • I understand that these games can upset children. • I understand why it is not appropriate for me to watch games that are intended for older children and adults. • I understand the harm these games and videos may cause me. • I know what to do if I have seen anything that upsets me when using technology. • 	<ul style="list-style-type: none"> • I can give examples of different ways of communicating/collaborating using technology and through traditional methods, and suggest when these might be appropriate. • I have used technology to communicate for different purposes e.g. messaging my school friends, asking for information from an expert, contributing to a wiki or blog. • I understand that our school network is linked to the internet and that this links to the World Wide Web. • • I can add media to my posts or messages where appropriate. • I am polite and kind when using technology to communicate, and talk to adults in school in a respectful and appropriate manner • I know that text can easily be misinterpreted. • I can explain what cyber bullying is and know who to tell if I am worried. • I know to keep any evidence of cyber bullying. • 	<ul style="list-style-type: none"> • I only search using child friendly search engines. • I only use sites and apps that have family friendly search options. • I take care when typing in a URL and can explain why this is important. • When I search, I always check the description of the link before clicking on a website. • I know that some things online are not suitable for children. • I know that clicking on links and downloading files and software can harm the computer. • I do not click on links or download files or software that I am not 100% sure are safe and I ask my teacher if I am not sure. • I take care with spelling when typing keywords and read the description of the site carefully before clicking on the link for the site. • I know that some sites are more reliable than others. 	<ul style="list-style-type: none"> • I know to keep my login details and personal information belonging to others and to me private. • I always log off websites, apps or computers when I leave the computer. • I know that some data is confidential and should be kept safe. • I understand the need to keep personal information and passwords private.

	Presenting	Information	Computer science	Online safety – communicating with others	Online safety - Digital Literacy	Online safety - general
Year 4	<ul style="list-style-type: none"> • I use a wider range of tools to create and adapt images and designs. I can explain why I have chosen those tools. • I can record my ideas in text using the fingers on both hands to aid efficiency when using a keyboard. • I understand and use folder structures to organise my work. I can use a wide range of tools to manipulate organise and format text. • I think carefully about the content, formatting and layout of text and images to ensure it is appropriate for the audience and purpose it is intended for. E.g. use columns for a newspaper report • I use a wider range of tools to create and adapt images and designs. I can explain why I have chosen those tools. • I can explain how different animations are made and make choices about the type of animation I want to make. • I can use a wide range of applications to present my ideas using of selection of media. e.g. sound, music, images, movies, animations and weblinks. • I can use a range of tools to manipulate organise and format text in a range of different applications. • I think carefully about the content, formatting and layout of text and images to ensure it is appropriate for the audience and purpose it is intended for. • I use a range of tools to create and adapt images and designs. I can explain why I have chosen those tools. • When creating movies, animations and presentations, I can design storyboards that show a clear understanding of the technology and anticipate technical issues. • I plan the use of text and transitions into my storyboards taking into account clarity and audience. • I make changes to my work to improve it and can explain why I did this in terms of the audience and purpose. 	<ul style="list-style-type: none"> • I can organise information to help me explain what I have found out, using graphs, charts and tables. • I understand some graphs and charts are more appropriate for a task and easier to read than others. • I can present information I have found for different audiences, selecting appropriate graphs, charts etc. • I can recognise and use different types of data, e.g. numbers, text, dates, money. • I can use simple calculations. • I can use technology to record data • I can use different tools to find what I want, including filtering, searching and sorting information. • I can use a range of online and computer based sources of information including databases, to help me find information and answer simple questions. • I am careful to spell all words correctly when carrying out a search. • I take care when typing in a URL and can explain why this is important. • I take care when typing keywords into a search and read the description of the suggested sites carefully before clicking on the link. 	<ul style="list-style-type: none"> • I can write algorithms and programs to achieve specific goals • I can write an algorithm to cause an event to happen in response to an input • I can explore the effects of changing variables in a program. • I can detect errors in algorithms (sequences of instructions) using the range of features I am familiar with and correct them. • I can accurately predict the outcome of a program or sequence of instructions that uses the range of commands I am familiar with. • I can design, modify and refine sequences of instructions - algorithms • I can explain why I made changes and the stages I went through to do this. • 	<ul style="list-style-type: none"> • I know who I can talk to if I am worried about something that has happened online. • I know where I can get advice or help from if I feel unsafe because of something that happened online. • I know that anything created using technology can be shared with others e.g. embarrassing videos and images. • • Safer internet day theme: 	<ul style="list-style-type: none"> • I only search using child friendly search engines. • I only use sites and apps that have family friendly search options. • I take care when typing in a URL and can explain why this is important. • When I search, I always check the description of the link before clicking on a website. • I know that some things online are not suitable for children. • I know that clicking on links and downloading files and software can harm the computer. • I do not click on links or download files or software that I am not 100% sure are safe and I ask my teacher if I am not sure. • I know that many sites and apps ask permission to access some of the information on the computer e.g. by using cookies. • I take care with spelling when typing keywords and read the description of the site carefully before clicking on the link for the site. • I know that some sites are more reliable than others. 	<ul style="list-style-type: none"> • I know the class rules for staying safe using technology. • I know that using other people’s digital resources without permission may break copyright rules. • I ask permission from others before taking, sharing or publishing images, video or recordings of them. • I acknowledge other people’s work when I have permission to use it. • I share what I am doing online with my parents • •

	Presenting	Information	Computer science	Online safety	Online safety - Digital Literacy	Online safety - general
Year 5	<ul style="list-style-type: none"> •I can identify a number of methods used to influence others. •I can create more than one version of my work and decide which is the most effective. •I can confidently make choices about and use a range of tools to create, manipulate and combine images and objects to develop composite images and designs. •I set success criteria when creating a digital resource that relates to the purpose and audience • I can identify a number of methods used to influence others. •I can create my own folder structure to organise my work. •I can confidently make choices about and use a range of tools to create, manipulate and combine images and objects to develop composite images and designs. •I am confident using tools in a range of applications to create, combine and amend media including text, video, animation, images. •I use hyperlinks to link pages or resources for a purpose e.g. on a wiki, website or multimedia presentation. •I regularly use story boards to plan my work, taking into account the limitations of the technology, the needs of the audience and the purpose. •I can evaluate my work according to the success criteria. 	<ul style="list-style-type: none"> •When collecting information through a survey, database or questionnaire, I use a range of strategies to check for errors e.g. spelling, incorrect numbers or factual inaccuracies. •I can organise information with the audience and purpose in mind, to help me explain what I have found using a range of methods including graphs, charts and tables. •I can talk about the structure of databases in terms of fields and records. •I can suggest whether the number of results of a search will be greater or fewer depending on the criteria used. •I know how search results are selected from key words and understand that the order they are presented can be affected by popularity and for commercial reasons e.g. some sites pay to appear at the top. •I take care when typing in a URL and can explain why this is important. •I can give examples of sites that are likely to contain reliable information. •I can use children’s search engines safely and understand the dangers of searching on adult search engines, especially for images. •I can perform complex searches to find information. •can present information I have found, for different audiences, selecting appropriate formatting. I can formulate questions to create a branching database to identify planets, 	<ul style="list-style-type: none"> •I know that many devices including computers are controlled using a programming language and that they rely on specific commands and rules. •I can use more advanced commands make my instructions or programme more efficient e.g. using the repeat command or loop to repeat the same sequence a number of times.to simplify instructions for drawing a repeating geometric pattern. •I can detect errors in algorithms (sequences of instructions) using the range of features I am familiar with and correct them. •I can accurately predict the outcome of a program or sequence of instructions that uses the range of commands I am familiar with. •I can design, modify and refine sequences of instructions •I can explain why I made changes and the stages I went through to do this. •I know that many devices including computers are controlled using a programming language and that they rely on specific commands and rules. •I can use pre-set algorithms to create a game with different complexities of levels •I can simulate a maze and explain what the algorithms used to create the game may be in terms of a sequence of simple commands •I can test and evaluate the effectiveness of my game. 	<ul style="list-style-type: none"> •I think carefully about the content of information I share online to ensure it is respectful, accurate and does not put others or myself at risk. •I do not open emails or messages or accept friend’s invitations from people I do not know. •I only have people I know well and trust as my friends online. •I never arrange to meet anyone I met online and tell a trusted adult if anyone asks me to meet them. •I do not click on links or download files or software that I am not 100% sure are safe and I ask my teacher or parent if I am not sure. •I know to set privacy settings on social networking sites to friends only. •I only have people I know well and trust as my friends online. •I never arrange to meet anyone I met online and tell a trusted adult if anyone asks me to meet them. 	<ul style="list-style-type: none"> •I understand that information, including that on web-based resources, is presented in different ways, for different purposes and that this may be biased or inaccurate. •I understand that online databases can be sorted and filtered by different criteria. •I understand that information, including that on web-based resources, is presented in different ways, for different purposes and that this may be biased or inaccurate. •I know that clicking on links and downloading files and software can harm the computer and/or compromise security. •I do not click on links or download files, software or apps that I am not 100% sure are safe and I ask my teacher or parent if I am not sure. •I know that many sites and apps ask permission to access some of the information on the computer e.g. using cookies. •When I search, I always check the description of the link before clicking on it. •I take care when typing in a URL or search term and can explain why this is important. •I understand that information, including that on web-based resources, is presented in different ways, for different purposes and that this may be biased or inaccurate. 	<ul style="list-style-type: none"> •I have helped develop the class rules for staying safe using technology. •I recognise acceptable and unacceptable behaviour when using technology. •I think carefully about the content of information I share online to ensure it is respectful, accurate and does not put others or myself at risk. •I share what I am doing online with my parents •I understand the need to keep personal information private. •I keep my login details private and use passwords that are difficult for others to guess. • I know who I can talk to if I am worried about something that has happened online. •I know where I can get advice or help from if I feel unsafe because of something that happened online.

	Presenting	Information	Computer science	Online safety – communicating with others	Online safety - Digital Literacy	Online safety - general
Year 6	<ul style="list-style-type: none"> •I make decisions about which applications to use and can explain how these will help me to achieve the task in relation to audience and purpose. •I can create more than one version of my work and decide which is the most effective. •I am confident using tools in a range of applications to create, combine and amend media including a quiz, text, video, animation, images. •I use hyperlinks to link pages or resources for a purpose •I use story boards to plan my work, taking into account the limitations of the technology, the needs of the audience and the purpose. <ul style="list-style-type: none"> •I make decisions about which applications to use and can explain how these will help me to achieve the task in relation to audience and purpose. •I can confidently make choices about and use a range of tools to create, manipulate and combine images and objects to develop composite images, designs and movies. <ul style="list-style-type: none"> •I set success criteria when creating a digital resource that relates to the purpose and audience. •I can evaluate my work according to the success criteria. 	<ul style="list-style-type: none"> •I can use formulae in a spreadsheet to investigate the relationship between area and perimeter and look at patterns in multiplication. •I can create a quiz for a purpose. •I will use and understand the different question types within Google Forms. •Children will discuss their ideas about what sort of questions are best suited to the different question types. •Children will share their quiz and respond to feedback from their peers and edit and improve their quiz. <ul style="list-style-type: none"> •I can talk about the structure of databases in terms of fields and records. •I can suggest whether the number of results of a search will be greater or fewer depending on the criteria used. •I know how search results are selected from key words and understand that the order they are presented can be affected by popularity and for commercial reasons e.g. some sites pay to appear at the top. •I have evaluated several websites and am able to comment on their suitability for purpose. •I understand that IT enables you to search and sift through large amounts of different types of information quickly. •I can present the information I have found in a visual way. 	<ul style="list-style-type: none"> •I can write algorithms and programs to achieve specific goals •I can find errors in programs by checking each part of the program (debug) •I can use variables in my coding to control speed of a car •I can use sequences of algorithms to simulate a physical system – steering a car •I can explain how my algorithms work •I can write an algorithm to cause an event to happen in response to an input <ul style="list-style-type: none"> •I can use technical vocabulary when describing the basics of how a computer and network work, including the internet. •I can plan an adventure game using a decision tree. •I can write algorithms and programs to achieve specific goals •I can find errors in programs by checking each part of the program (debug) •I can explain how my algorithms work •I can write an algorithm to cause an event to happen in response to an input •I can use logical reasoning to predict the outcome of a program or sequence of instructions that uses more sophisticated programming techniques. 	<ul style="list-style-type: none"> •Safer internet day theme 	<ul style="list-style-type: none"> •I understand that information, including that on web-based resources, is presented in different ways, for different purposes and that this may be biased or inaccurate. •I know what information is appropriate to share about myself with others. •I know that clicking on links and downloading files and software can harm the computer and/or compromise security. •I only use search engines that are suitable for children. •I know that many sites and apps ask permission to access some of the information on the computer e.g. using cookies. •When I search, I always check the description of the link before clicking on it. <ul style="list-style-type: none"> •I acknowledge other people's work when I have permission to use it. •I know that using other people's digital resources without permission may break copyright laws. •I know that sharing, publishing or uploading some files or comments may be a criminal offence. •I think carefully about the content of information I share online to ensure it is respectful, accurate and does not put others or myself at risk. •I understand that I may be held responsible for anything uploaded in my personal areas and pages. •I know that anything created using technology can be shared with others e.g. embarrassing videos and images. 	<ul style="list-style-type: none"> •I know who I can talk to if I am worried about something that has happened online. •I know where I can get advice or help from if I feel unsafe because of something that happened online. •*Because the theme will bring different concerns up from the children, please refer to appropriate resources from Safer Internet Day and Project Evolve for other outcomes