**Computing - Yearly Overview**

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|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
|  | e-safety Using the internetMultimedia (word) | Data HandlingProgramming\* | Multimedia(PowerPoint)Using the internet | e-safety Data HandlingProgramming\* | Using the internetMultimedia(Publisher/Serif)  | e-safety Data HandlingProgramming\* |
| **Year 7** | All About Me | All About Us | E-Safety | Formatting Text | Photography | Editing |
| **Year 8** | E-Safety | Multimedia Tasks | Using Internet (E1) | Programming | Formatting Text (E1) | Publisher |
| **Year 9** | E safety | Use of Email | Excel  | Using Internet (E2) | Photography | Editing |
| **Year 10** | E-Safety | Excel (E2) | Using Internet (E3) | Formatting Text  | Publisher | E-mails |
| **Year 11** | E Safety | Applications | Exam Practise | Final Exams | Leavers Videos |

[Objectives](file:///T%3A%5CCurriculum%20Resources%5CComputing%5CAssessment%5CComputing%20Tree%20of%20growth.xlsx)

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| Unit | Entry 1 | Entry 2 | Entry 3 | Level 1 |
| [E-safety](file:///T%3A%5CCurriculum%20Resources%5CComputing%5CLesson%20plans%20and%20resources%5CE-Safety) | **-[]know who to tell if I see something unexpected or worrying online**-[] talk about why it’s important to be kind and polite-[] tell you what personal information is | **-[] describe the things that happen online that I must tell an adult about****-[] report any concerns to a trusted adult****-[]know that not everyone is who they say they are on the Internet**-[] keep my password and personal information private-[] remember and use a password-[] recognise websites and games appropriate for my age-[] ask an adult before downloading files and games from the Internet | **-[] recognise inappropriate content, contact and conduct and know how to report concerns****-[] understand the need to stay safe and to respect others when online**-[] make good choices about how long I spend online-[] know that anything I share online can be seen by others-[] set the privacy setting on a social network site-[] choose a secure password and appropriate screen name when I am using a website-[] choose websites, apps and games that are appropriate for my age-[] talk about what makes a secure password and why it is important | **-[] explain the consequences of sharing too much about myself online**-[] explain the importance of communicating kindly and respectfully-[]know that anything I post online can be seen, used and may affect others-[] protect my password and other personal information-[] demonstrate how to create, use and maintain secure passwords-[] explain about the dangers of spending too long online or playing a game-[] explain why I need to protect my computer or device from harm and how to minimise the risk of computer viruses |
| Hardware & Software | -[] find on-screen information-[] recognise and use interface features (keyboard/mouse)-[] type over 5 words per minute-[] add text (e g label an image) | -[] turn on the computer and screen and plug in the mouseand keyboard-[] select and use a number of programs (2Simple/internet/word etc)-[] minimise physical stress of seating, lighting and hazards-[] type at over 10 wpm-[] open and save files | -[] recognise and use some interface features of a program (menus, icons etc)-[] select a program to solve given problems (e g use Publisher to create a leaflet)-[] type at over 20 wpm-[] print my work-[] create a folder and organize my files-[] use correct procedures to start and shut down an ICT system-[] use input and output devices (microphone/headphones etc)-[] know how to insert and remove media (memory sticks/CDroms)-[] change simple software settings (lower volume etc) | -[] recognise and use all interface features of a program (menus, icons etc)-[] work with files, folders and other media to access, organise, store, label and retrieve information-[] type at over 30 wpm-[] add a device to a computer and download or install the relevant software-[] adjust system settings as appropriate to individual needs |
| Multimedia | -[] identify and correct simple errors-[] use technology to collect information, including photos, video and sound-[]I can label an image-[] insert an image onto a document from the web or a file | -[] evaluate my work using the tree of growth-[] use simple editing and formatting techniques (cut and paste, change the font size etc)-[] combine a mixture of text and graphics in a presentation | -[] review and improve my own work and support others to improve their work-[] enter, edit and format text and graphics (crop, add borders, change backgrounds etc)-[] bring together two given types of information for printing and viewing on screen (e g web and file)-[] upload digital media to a computer (e g from a camera or microphone) | -[] create a shared page or site (e g a website or vlog)-[] combine text, images, audio and video to my presentation-[] talk about audience, atmosphere and structure when creating a presentation-[] create content using unfamiliar technology-[] tell you why I select a particular online or offline tool for a specific purpose-[] use editing tools to refine my work (e g Audacity, Photshop)-[] add hyperlinks to my presentation |
| Using the Internet | -[] receive and open an e-mail-[] search for an image | -[] use information I have found online-[] send and receive and read e-mails-[] use key words to search for information online | -[] search websites to find information using menus-[] read, send and receive electronic messages with attachments-[] think about the reliability of information I read online-[] use contacts when sending and receiving e-mails-[] identify key words to use when searching safely online-[] select relevant information that matches requirements of a given task-[] open a hyperlink | -[] use a search engine to find appropriate information and check its reliability-[] find an address online and a map with directions-[] describe the ways in which websites advertise their products to me-[] know which resources on the internet download and use-[] create a group and send an email to that group-[] paste a link into an email |
| Data Handling | -[] sort different kinds of information and present it to others-[] add information to a table and talk about what I have found out | -[] collect data help me answer a question-[] search a ready-made database to answer questions-[] talk about the data that is shown in my chart or graph-[] talk about the different ways data can be organised (e g by size)-[] add to a database-[] create a table in Word and on a spreadsheet-[] create a bar chart using the data I have collected-[] say what kind of information I could use to help me investigate a question-[] start to understand a branching database | -[] apply editing, formatting and layout techniques to text, tables and charts-[] use a spreadsheet and database to collect and record data-[] search a database to answer questions-[] choose an appropriate tool to help me collect data (e g stopwatch, tape measure)-[] identify where data could be inaccurate and suggest how it could be checked-[] choose the best way to present data to others (e g pie chart or bar chart)-[] make a branching database-[] organise data in different ways (alphabetically/numerically)-[] total numbers to answer a question (Autosum)-[] process numbers to answer a question using formulas (mult, diff, ave, sum, min, max) | -[] protect my data with a password-[] enter, search, sort and edit records-[] select the most effective tool to collect data for my investigation (e g digital scales)-[] hide rows or columns in a spreadsheet-[] display numerical data in a line graph-[] use headings and data types to organise information-[] use a data logger to record and share my readings with other |
| Programming | -[] give instructions to my friend and follow their instructions to move around-[] describe what actions I will need to do to make something happen-[] describe what happens when I press buttons on a robot-[] begin to predict what will happen for a short sequence of instructions-[] press the buttons in the correct order to make my robot do what I want | -[] program a robot to do a particular task-[] look at my friend’s program and tell you what will happen-[] begin to use software/apps to create movement and patterns on a screen-[]I keep testing my program and can recognise when I need to debug it-[] put programming commands into a sequence to achieve a specific outcome-[] use repeat commands | -[] know to keep testing a program while putting it together-[] recognise an error in a program and debug it-[] use an algorithm to sequence more complex programs-[] use ‘if’ and ‘then’ commands to select an action-[] design a program for sorting and searching | -[] use two or more programming languages, at least one of which is textual-[] use a variable and operators in my program (to stop a program or achieve a required output)-[] understand and use lists, tables and arrays in my programs-[] understand and use AND, OR and NOT in my programs-[] use logical reasoning to detect and correct errors in algorithms and programs-[] evaluate the effectiveness and efficiency of my algorithm while continually testing-[] use different inputs (including sensors) to control a device or an action within my program-[] use an efficient procedure to simplify a program |

