**Computing - Yearly Overview**

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|  | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
|  | e-safety  Using the internet  Multimedia (word) | Data Handling  Programming\* | Multimedia  (PowerPoint)  Using the internet | e-safety  Data Handling  Programming\* | Using the internet  Multimedia  (Publisher/Serif) | e-safety  Data Handling  Programming\* |
| **Year 7** | All About Me | All About Us | E-Safety | Formatting Text | [Photography](C:\\Users\\blee\\Computing\\Lesson plans and resources\\Year 7\\5. Medieval Britain) | 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:\Curriculum%20Resources\Computing\Assessment\Computing%20Tree%20of%20growth.xlsx)

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| Unit | Entry 1 | Entry 2 | Entry 3 | Level 1 |
| [E-safety](file:///T:\Curriculum%20Resources\Computing\Lesson%20plans%20and%20resources\E-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 |

