St. Aidan's Catholic Academy
Y7 ICT Curriculum Map

Topic	Emerging	Developing	Secure	Mastering
Autumn 1 Game Control - Scratch	• Identify and label different flowchart symbols and know how to put them together". • I can set up and test sequences of instructions. Using features such as motion and looks. • Independently create a virtual pet in Scratch using one variable. • I can give good and not so good points about my game. • I can compare my use of ICT games with other methods and with its use outside school.	• Combine the symbols to make a flow chart • I can create sequences of instructions in scratch including using a selection and a loop. • COMBINE various blocks to make the basics of a game and control game play for a virtual pet. • I can discuss good and points of my game and list ways to make improvements based on my evaluation. • I can discuss the good and bad point of using ICT Games.	• Create a flowchart of my own using the correct Sequence of events • I can sequence some instructions in Scratch to control what happens. As well as create variables. I can explain how Selection and Iteration have been used. • Sequence instructions in a virtual pet game to create a hunger variable of my own using various block of code to ensure the hunger score increases by one. • I can evaluate my work with advantages and disadvantages using examples • I can discuss the impact of ICT games on society. Good and bad points	• Independently create a flow chart using various symbols more than once and in the correct sequence • I can apply my knowledge of the used so far in scratch including VARIABLES to produce a program. I can create new variables to develop and improve my program and fully explain my use of the blocks. • Independently apply my knowledge of VARIABLES to create a variable that makes the hunger score go down if the pet is not fed enough. And have created at least two of my own working variables. I can create new costumes for the pet to animate if it dies. • I can evaluate my work in detail using examples and describe various improvements I could make to the game using the correct terminology. • I can evaluate the impact of ICT games on society using real life examples.
Autumn 2 Spread sheets basic skills	• I can discuss why a spreadsheet is used • I can enter simple formulae in a spreadsheet to calculate results. +.-, *, / • I can test formulae using a calculator • I can make predictions about what will happen when I change variables. • I can create a chart.	• Describe the advantages of using spreadsheets as computer models. • I can I can apply for than one calculation in a formulae to gain results. • I can test formulae using different inputs. • I can make predictions about the consequences of changing	• Describe the advantages and disadvantages of using spreadsheets as computer models • I can apply various functions in a spreadsheet, count, min, max etc. -I can explain rules on a model and discuss improvements. • I can test formulae with various inputs.	• Discuss which occupations may use spreadsheet models and what they will use them for – giving examples • I can apply complex formulae on my own and improve the outcome in a spreadsheet. • I can test formulae and amend errors to ensure the spreadsheet is correct. • I am fully confident at using complex formulae

	• I can create a report to show findings.	variables by using goal seek. • I can create a relevant chart to present information from a spreadsheet. Applying the correct titles. • I can discuss findings in a report. Evaluation.	• I can apply goal seek to make my own predictions. • I can create various charts to present information from a spreadsheet applying titles, and data labels correctly. • I can discuss findings in a report and make recommendations.	and making my own predictions. • Fully confident at creating graphs to interpret and present information and can apply formatting to the graphs. • I can create a report to discuss findings and make predictions using goal seek with evidence included from my spreadsheet.
Spring Term Theory / DTP	• I can list various input and output devices • I can list various parts of the computer system • I can list various health and safety risks. • I can use page plus and add pages with text and images • I can give good and not so good points about my leaflet. • I understand that binary is made up of 1s and 0s • I can list some components needed to set up a computer to the internet • I can evaluate my work and give improvements • I can list various types of computer networks. • I can discuss the Computer Misuse Act • I can discuss the GDPR	• I can describe various input and output devices and describe what they do. • I can describe various parts of the computer system and reference them to my body parts • I can describe various health and safety risks and explain what we need to do to prevent these risks. Maybe in a leaflet • I can use different software tools to include and improve information in my leaflet. • I can list ways to make improvements based on success criteria. • I can do an algorithm to convert binary to decimal. • I can describe all components needed to set up a computer to the internet and describe their purpose. • I can list, find an image and describe various	• I can discuss various input and output devices and fully explain each one giving examples of why they are used • I can explain various parts of the computer -what they are and how they work. • I can create a health and safety leaflet to identify risks within an ICT classroom and discuss prevention methods • I use various tools to create a leaflet with borders text and edited images suitable for the purpose. • I can improve the quality of my work, by fully critiquing my publication using criteria given. • I can sequence and decode binary numbers to create a message • I can explain how a wireless network can be set up using all the necessary components. • I can explain the various network topologies by	• I can explain and compare various input output devices for the same purpose. • I can independently create the inside of a computer myself using various parts and explain how they work together. • I can create a suitable health and safety guide for an employer to give to employees to ensure the health and safety procedures are followed. I can also apply these rules in the ICT classroom to ensure I am not at risk. • I use advanced tools in Page Plus to improve the layout e.g. drop caps, column, text flow,etc include and improve information from a range of sources. • I can fully critique my work and refine the publication so it meets its purpose fully and looks professional. • Create my own message using binary and convert to ASCII – for another student to decode. • I can evaluate 3 different ISP's on the internet and discuss the advantages and disadvantages of each with costs. Then decide which one would be

		computer networks • I can evaluate my work discussing good and bad points of the publication • I can discuss the Computer Misuse Act and the three rules. • I can describe the GDPR and the various rules	giving descriptions of each. • I can evaluate my work discussing refinements and further improvements if I was to do a similar task in the future. • I can explain the advantages and disadvantages of the Computer Misuse Act. • I can explain the advantages and disadvantages of the GDPR.	best for you with reasons why. • I can evaluate different topologies giving advantages and disadvantages of each. You may be able to give an example of where each topology is used. • I can evaluate my work fully (good, bad points, refinements justifying choices made. • I can explain the Computer Misuse Act using examples to reflect on the act. • I can explain the GDPR using examples to reflect on the act.
Summer Term HTML Incorporating Internet Safety	• I understand what sexting is. • can list various dangers when being online • I can describe various areas of cyberbullying • I can use notepad to save a basic web page following instructions HTML, TITLE,BODY • I can describe and use simple hierarchy such as H1, H2 to apply headings and subheadings. • I can add a hyperlink to my web page following simple instructions combining tags and attributes. • I can embed an image into my webpage by following instructions to use the <IMG> tag. • I can describe why we need a style sheet and create my own design for a style sheet.	• I can list various dangers of sexting and how to prevent them. • can apply my knowledge and identify how threats can be avoided when online • can analyse the various websites available to help raise awareness of cyberbullying • I can create a web page with various HTML elements and consider layout. • I can independently add to my own web page and Apply tags such as adding my own headings and paragraphs. • I can explain the tags, attributes and content to implement hyperlinks into the web page. • I can independently implement images into my	• I can reflect and explain the dangers of sexting and fully explain how to prevent these dangers using examples. • I can explain various threats, how to prevent and what might happen if I don't follow safety rules. • I can reflect on the dangers of cyberbullying and I'm aware of who to turn to for help and advice • I can change the layout of the page by using the tag to change the widths. • I can amend margins and padding properties to change the look of my page in the CSS file. • I can experiment with columns and understand the difference	• I can reflect and explain sexting using real life examples and explain how these could have been prevented. • I can fully explain using real life examples what might happen if I don't follow rules to stay safe online. • I can use real life examples from news reports and fully explain and reflect on cyberbullying and how to prevent this from happening • I can create a web page independently using various layout techniques and elements. • I can independently amend margins and apply wrappers to various parts of my code and explain how they work. • I can create a web page with a professional layout including using tables and columns. I can apply various advanced features to my web page. This could be an extra web

	• I can annotate my code to identify what simple tags are used for. • I can identify the purpose of the Electronic Communications Act	web page independently by applying <IMG> tags and attributes. • I can create a CSS file to create my own house style. • I can explain my code in detail and assess what improvements are needed. • I can describe in detail the Electronic Communications Act with advantages and disadvantages.	between inline and blocks. • I can add an image to be used as the background. • I can implement the code required to create my web page with the CSS file attached and easily customise my web page. • I can evaluate my web page listing good points and bad points and give valid improvements. • I can fully explain the Electronic communications act including cryptography and electronic signatures.	page produced or extra tools used that have not been shown in class • I can implement images to my web pages, amend sizes and ensure consistency throughout. • I can confidently create and apply a css file to more than one web page. • I can evaluate my web page and act on feedback received to ensure my web page is professional with clear layout and content. • I can fully explain the Electronic communications act including cryptography and electronic signatures. And use real world examples of offences committed.

Half Term	Assessment Tasks
Autumn HT 1	Assessment 1 - Create a flowchart using the correct Sequence of events Assessment 2 - Understanding of using blocks, iteration, selection and variables. Assessment 3 - Create a virtual pet game with variables. Assessment 4 - Evaluation of my game Assessment 5 - Evaluate the impact of ICT games on society.
Autumn HT 2	Assessment 1 - Advantages and disadvantages of spreadsheets report Assessment 2- KS3 formula practice/zoo 1/2 worksheets printed. (Teacher choice) Assessment 3 - Graphs annotated Assessment 4 - Final assessment task
Spring HT3	Assessment 1 - Designs of front and back cover for PEAT Assessment 2 - Logo created using various tools. Assessment 3 – Leaflet for PEAT Assessment 4 – Data Protection Act report
Spring HT 4	Assessment 1 – INPUTS/OUTPUTS & Human computer Assessment 2 - Health and Safety leaflet Assessment 3- Wireless internet guide Assessment 4 – Computer Misuse Act
Summer HT 5	Assessment 1 - HTML code and Web page Assessment 2- Electronic Communications Act
Summer HT6	Assessment 1- Internet safety web page

ICT & Computer Science Homework Tasks Autumn Term	ICT & Computer Science Homework Tasks Spring Term	ICT & Computer Science Homework Tasks Summer Term
Homework 1 – Create a flow chart using various symbols Scratch Homework. **Homework 2** –Spreadsheet homework Other homework may be given throughout the year to improve work on software programs in order to achieve a higher grade.	**Homework 1** – Research information and collect images to use in the leaflet – DTP homework **Homework 2** – Computer Theory worksheet	**Homework 1** – Complete scenarios on internet safety. **Homework 2** – HTML evaluation

Y7 Overview

Half Term	Curriculum Content	Suggest Reading or Extension Activities
Autumn HT1	**Game control – (HT1)** Game control – Scratch programming Build skills use blocky code and develop own game using programming	https://scratch.mit.edu/
Autumn HT2	**Spreadsheets (HT2)** Modelling – using spreadsheets Develop skills to use formulae, update calculations and create graphs using Microsoft Excel	
Spring HT3 Spring HT4	**Computer theory and DTP (HT3)** **Computer theory and DTP (HT4)** Computer Theory and DTP Knowledge developed on input/output devices, Inside of a computer Binary code Wireless networks Network topologies Health and safety using IT	https://www.binaryhexconverter.com/binary-to-decimal-converter http://www.thewindowsclub.com/set-up-wireless-network-connection-windows https://www.techopedia.com/definition/ 26186/wireless-network http://www.bbc.co.uk/schools/gcsebitesize/ict/implications/3healthandsafetyrev1.shtml

	Computer Misuse Act	https://www.legislation.gov.uk/ukpga/1990/18/contents http://www.bbc.co.uk/schools/gcsebitesize/ict/legal/1dataandcomputermisuserev1.shtml
Summer HT5	**HTML and internet safety (HT5)** HTML – Computer programming Develop skills and knowledge to create a web page using HTML programming. Create a web page on Internet safety Ensure students are aware how to stay safe online, how to prevent cyber bulling, digital footprints	https://learn.playto.io/html-css/lesson/0
Summer HT6	Half Term 6 Develop own project to create a web page using skills developed using HTML *Building web pages from briefs to meet criteria*	https://learn.playto.io/html-css/lesson/0

Parents /Carers can help their child by:	Ensuring homework is complete. Practicing skills for ICT and Computing at home.
Useful websites	https://learn.playto.io/html-css/lesson/0 https://scratch.mit.edu/ http://www.teach-ict.com/ks3/year7/spreadsheets_modelling/spreadsheets_modelling.htm http://www.bbc.co.uk/bitesize/quiz/q36368506 http://www.bbc.co.uk/education/subjects/z8mtsbk http://www.safetynetkids.org.uk/personal-safety/staying-safe-online/ https://www.thinkuknow.co.uk/ https://www.nspcc.org.uk/preventing-abuse/keeping-children-safe/online-safety/ http://www.kidsmart.org.uk/ https://scratch.mit.edu/ https://www.gov.uk/data-protection/the-data-protection-act http://www.bbc.co.uk/schools/gcsebitesize/ict/legal/1dataandcomputermisuserev1.shtml http://www.legislation.gov.uk/ukpga/1990/18 http://www.bbc.co.uk/bitesize/ks3/ict/history_impact_ict/impact_ict_society/revision/2/
Revision Sources and Suggested Reading	As above
Extra Curricula Activities	Use ww3 schools to develop skills and use advanced features 02learn to learn HTML Computer Club after school

Who can I contact?	Head of Department	Miss A. Cain
	Subject Teachers	Mrs Johnson Ms Jackson Mrs Hogg