Computer Science

You will need The Innovation Centre 2020 login details   **Username: Crossflatts**   **Password :   NinetyEarthAway=25**

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocab.		Commands Control Sequence Device	Algorithm Debugging Input Output Repetition	Repetition Algorithm Debugging Input Output Forever loop Event	Algorithm Sequencing Selection Variable Debugging Genre Input Output Forever loop Event	Algorithm Decompose Pseudocode (placing code into everyday English) Sequencing Selection Variable Debugging Genre Input Output Forever loop Event Flow chart Abstraction	Algorithm Feedback Refine Variables Pseudocode (placing code into everyday English) Elements Computer Networks Input Output Repetition Selection Conditions Debugging
N.C. Objectives		• **Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions** • **Create and debug simple programs** • **Use logical reasoning to predict the behaviour of simple programs**		• **Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts** • **Use sequence, selection, and repetition in programs; work with variables and various forms of input and output** • **Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs** • **Understand computer networks including the internet; how they can provide multiple services, such as the World Wide Web** • **Appreciate how [search] results are selected and ranked**		
Key Learning		• Know that an algorithm is a series of instructions, commands or rules. Work through appropriate activities to show algorithms in everyday life broken into a series of commands/instructions • Explore a range of toys and devices such as remote control toys and Bee-Bots to understand they can be controlled by a single or series of commands/instructions (algorithm). Understand the individual commands such as forward and turn. Explore outcomes when individual buttons are pressed on a programmable device or icons/objects are clicked on a computer screen. • I'dentify and combine a series of commands to create an algorithm to control a real or virtual device. Discuss solutions as a group. Understand the need to be accurate when describing an algorithm and the importance of ordering commands in the correct sequence. What would the outcomes be if the commands in an algorithm were in a different sequence? • Have experiences of controlling other devices such as sound recording devices, music players, video recording equipment and digital cameras, iPods, iPads, TV recording devices controls, Wiis, Xbox Kinect, Dance mats. Explore the use of technologies beyond school.	• Children are encouraged to explore and play with a range of virtual and physical programmable devices and discuss what they have learnt. Children share how they have controlled these devices in different ways. • Discuss examples of instructions for everyday situations and ensuring the individual steps are accurate and sequenced correctly to create an algorithm. Describe the use of controlling devices through a series of commands such as navigating to a program/app or a shared drive on the school network. • Provide children with simple predefined algorithms and they have to predict the outcome of executing that algorithm. Predict the path drawn by a programmable device by analysing a series of commands (algorithm). • Combine a series of commands into a single program to control a real or virtual device to carry out a pre-determined route. Make predictions and estimate distances and turns.	• Plan, input and execute a series of commands using age appropriate programs and apps. Introduce and use repetition commands to create more efficient programs for example creating 2D shapes. Review and improve their algorithms. Share their algorithms with others and discuss which algorithms are the most efficient/effective and why? • Discuss the concepts of inputs and outputs in the real world such as remote controls, traffic lights, barcode readers, mice, keyboards, touchscreens, etc. Discuss that each of these inputs and outputs are controlled through programming algorithms. • Discuss how previous programs have been executed by a single input command and that more complex programs can be created that incorporate inputs such as a touchscreen, keyboard or mouse. Children create algorithms to control onscreen objects using a variety of input methods. Understand that the output is the defined action triggered by the input.	• Talk about the various games they play and explore a range of games available in school and identify the key features of these games. What features are common to the games? Identify some common genres of games such as a quiz, driving games, etc. • Look at a variety of games, apps and web content where access to the code is available. Understand that there are different languages and types of codes. Begin to identify what parts of the code do and alter them to see the changes. • Debug a series of commands containing deliberate mistakes • Use the information they have learnt about features of specific game genres to plan their own simple game for example character movement, scoring and other objects. Create and refine code to control the behaviour of the various characters and objects. • Understand the concept of selection (if X happened do Y) and examine examples of this. Use selection in their game to allow characters and objects to interact.	• Decompose real life events down into smaller sub events and then break them into parts e.g. coming to school broken into getting up, getting washed, feeding etc. Break examples of games into parts and sub parts, movement, scoring, interaction with objects etc. • Look at code in a program, discuss its meaning then write what it is trying to achieve in English. In planning their own programs children describe what is happening in English before converting to real code. • Create a variable in a game e.g. the score or number of lives left. • Plan and create a game for a specified audience that contains more than one example of selection e.g. in a driving game if your car hits an odd number you lose five points if it hits an even number you gain ten points. Refine the game based on audience feedback in terms of appeal and difficulty. • To identify input and output devices in real life (pelican crossing, traffic lights, smoke alarm) discuss how they function and understand that they are processed by a computer. Children create flow charts using software or on paper to explain how these systems work.	• Describe a problem that needs solving. Plan a program to solve it including a written description of what the program will do and create drawings as part of the plan. Break the program down into its constituent parts and write a description of the each part of the code in everyday English as an algorithm. Begin to build the game importing any sound or graphics needed. Code the program adding selection, variables and repetition where appropriate. Design a feedback form for the intended audience, collect feedback and refine the program where necessary and keep notes of changes made. • Use variables for key elements of a program such as lives left, score, or a timer. Create at least one example where selection is linked to a variable such as if your score > 100 say "You win!" or if lives = 0 end the game. Make outputs react to conditions met by inputs that are sensors e.g. if it gets dark, turn lights on or if a sound is heard set off an alarm. • Create a resource that explains the different services that are provided by the internet such as email, wikis, world wide web, video streaming, Skype, online gaming through consoles and all the devices that use the internet. Locate where web sites on the world wide web are hosted on a map using online tools. • Understand how a common search engine such as google works in principle.

Crossflatts Computing Curriculum

• Create and test algorithms to achieve a range of specific outcomes to achieve given and chosen outcomes. Understand that trial and error is an expected part of the programming process. Children independently evaluate their programs and debug them as required. Compare and discuss solutions with others. • Explain to others the benefits of using a range of technology beyond school. What are the benefits of these technologies on our lives such as supermarkets, libraries, cinemas, restaurants, etc.?	• Look at examples of real life instructions and code where the same command is carried out multiple times and how we can replace this series of repeated commands with a shorter or single command. Explore forever and until loops in real life and in their coding. Create algorithms using repetition that allow the same outcome to be achieved more efficiently.	• Understand the basic principles and skills learnt through coding in one application apply this understanding to another application. For example, sequencing commands appropriately and including selection (if X happened do Y).	Children then write algorithms to control input and output devices using real or virtual on-screen devices. • Children create simple diagrams (abstractions) of computer networks such as the one in school. They show how information is broken down into data packets when it is sent and reassembled when it is received. They illustrate how they use the internet for different services such as Skype, video streaming services, email and the world wide web.	

Evidence of working at the expected standard

• Sequence a series of pre-written instructions to create an algorithm. (CS1) • combine more than one command into a device to make a simple program. (CS2) • Break an activity down into simple steps. (CS1) • Enter multiple commands into a device to create a program. (CS2 and CS3)	• Create a simple program to achieve a simple goal with the commands correctly sequenced (CS5) • Create a correctly sequenced series of commands that controls a real or virtual device from their own algorithm. (CS5) • Predict what a series of commands will do before testing a program (CS7)	• Create a simple program using one input (CS13) • Use repetition in a program (CS14) • Create a program using input and output devices (CS13)	• Debug one instance of pre written code with deliberate mistakes. (CS17) • Create a program with selection in their code to allow characters and objects to interact. (CS19) • Analyse code in a program, explain what parts of the code does and make simple changes. (CS16)	• Write an algorithm that shows how a simple variable works (such as the score in a program) (CS23) • Create a variable and use it in a program (CS23). • Create a program that can be used on a physical system such as a Lego Wedo (CS25)	• Create a program including some simple selection (CS27 and also CS19-year 4) • Design, create, debug a program for a specific purpose (CS27) • Create a program for practical use on a physical device – Lego Wedo – creating their own code to solve a problem (CS28) • Create a program on a physical device that uses variable to count events.(CS28) • Create a game with several difficulty levels. (CS27 see Game Maker's Toolkit is resources for CS27)

Possible evidence of greater depth understanding

• Independently list the steps in their own algorithms, test them and correct any mistakes. (CS1) • Independently convert an algorithm to a program or vice versa (CS3)	• Independently create their own programs through the process of sequencing and debugging. (CS6) • Independently predict what code will do in longer, more complex algorithms or programs and debug them if necessary. (CS7) • Can add repetition to their programs.	• Independently create a new program using inputs and outputs to trigger events (CS13)	• Independently create a program based around a theme that uses more than one or more example of selection (CS19)	• Independently create a new program that uses variables (CS23)	• Create a program on a physical device that uses variable to count events. (CS28) • Create a game with several difficulty levels. (CS27 see Game Maker's Toolkit is resources for CS27)

These are hyperlinks straight to the resources you need. You may need to create an account for some of these resources.

Resources

• BBC COMPUTER SCIENCE KS1 • BBC DIGITAL LITERACY KS1 • BEEBOT • BEEBOT FOCUS ON LESSON ACTIVITIES 1 • BEEBOT TINKERING • HELLO RUBY- LEARN ABOUT COMPUTING WITH FREE, OFFLINE AC.. • J2E.COM JUNIOR INFANT TOOLS (JIT) • SCRATCH JUNIOR KEY STAGE ONE ACTIVITIES These are hyperlinks straight to the resources you need. You may need to create an account for some of these resources.	• BBC COMPUTER SCIENCE KS1 • BBC DIGITAL LITERACY KS1 • BEEBOT • BEEBOT FOCUS ON LESSON ACTIVITIES 1 • BEEBOT TINKERING • HELLO RUBY- LEARN ABOUT COMPUTING WITH FREE, OFFLINE AC.. • J2E.COM JUNIOR INFANT TOOLS (JIT) • SCRATCH JUNIOR KEY STAGE ONE ACTIVITIES • TEACHING ACTIVITY CS5	• HOUR OF CODE- USING REPEAT LOOPS • J2CODE CODING ACTIVITIES • TEACHING ACTIVITY CS11 ANIMATION WITH SCRATCH 3.0 (LAPT... • TEACHING ACTIVITY CS11. ANIMATION WITH SCRATCH JUNIOR • TEACHING REPEAT COMMANDS USING THE HOPSCOTCH APP • TEACHING ACTIVITY CS12 UNDERSTAND AND IDENTIFY SIMPLE I... • CS13 TEACHING ACTIVITY CREATE SIMPLE PROGRAMS COMBINING...	• TEACHING ACTIVITY CS15 UNDERSTAND AND EXPLORE DIFFERENT... (CS15) • INTRODUCTION TO KODU (CS19) • WHAT MAKES A GOOD COMPUTER GAME? BBC BITESIZE (CS19) • GAME GENRES- SHOOTING- SPACE INVADERS IN SCRATCH! • CHANGE THE CODE IN WEB PAGES USING X RAY GOOGLES (CS16) • CS16 TEACHING ACTIVITY UNDERSTAND GAMES ARE MADE OF COD... (CS16) • CS17 TEACHING ACTIVITY DEBUGGING EXERCISE (CS17) • DEBUGGING 2D SHAPES (CS17)	• DECOMPOSING A POEM • MIND MAP FREE- DECOMPOSE IDEAS WITH MIND MAPS • TEACHING ACTIVITY CREATING MATHS QUIZZES IN SCRATCH CS... • TEACHING ACTIVITY CS22 CONVERT ALGORITHMS INTO LINES O.. • ROBO BOOGIE (CS23) • CS 23 TEACHING ACTIVITY UNDERSTAND AND USE VARIABLES • SCRATCH TUTORIALS - USING SELECTION AND VARIABLES (CS23) • TEACHING ACTIVITY CS23 DESIGNING WITH VARIABLES	• CREATE FLOWCHART ALGORITHMS IN POWERPOINT OR GOOGLE DRA... (CS27) • TEACHING ACTIVITY CS27 BUILD AN INTERACTIVE GUIDE (CS27) • THE GAME MAKER'S TOOLKIT (CS27) • TEACHING ACTIVITY CS28 CREATE A PROGRAM WHERE AN EVENT ... (CS28) • USE SELECTION IN PROGRAMMING- KODU (CS 28)

		• CS7 BEEBOTS. MATCH THE ROUTES TO THE ALGORITHMS • CS7 BEEBOTS. WHICH ROUTES ARE WRONG? • TEACHING ACTIVITY CS7 PREDICTION WITH SCRATCH JUNIOR • HUMAN CRANE • TEACHING ACTIVITY CS9 DEBUG PRE DEFINED PROGRAMS.	• TEACHING ACTIVITY CS13 USING THE HOPSCOTCH APP TO CREAT... • These are hyperlinks straight to the resources you need. You may need to create an account for some of these resources.	• DEBUGGING IN THE WATER CYCLE (CS17) • TEACHING ACTIVITY SCRATCH 3 TUTORIALS • CREATE FLOWCHART ALGORITHMS IN POWERPOINT OR GOOGLE DRA... (CS19) • TEACHING ACTIVITY CS19 EXPERIMENTING WITH SELECTION (CS19) • TEACHING ACTIVITY CS19 TEACHING SELECTION USING REAL W... (CS19) • CODE.ORG (CS19)	• CREATE FLOWCHART ALGORITHMS IN POWERPOINT OR GOOGLE DRA... (CS25)	• CREATE FLOWCHART ALGORITHMS IN POWERPOINT OR GOOGLE DRA. (CS28) • HTTP://WWW.TICBRADFORD.COM/COMPUTING-CURRICULUM/RESOURCES/COMPUTER-SCIENCE/SEARCH-BY/COMPUTER-SCIENCE?VALUE=CS29 (CS29)

Data Handling

You will need The Innovation Centre 2020 login details	Username:	Crossflatts	Password :	NinetyEarthAway=25

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocab.	**Sort** **Pictogram** **Data**	**Graph** **Pictogram** **Data** **Branching database**	**Database** **Analogue** **Digital** **Data** **Search** **Criteria**	**Database** **Spreadsheet** **Data** **Field** **Criteria** **Function**	**Database** **Spreadsheet** **Data** **Field** **Criteria** **Function** **Census** **Formulae** **Variables**	**Database** **Spreadsheet** **Data** **Field** **Criteria** **Function** **Census** **Formulae** **Variables** **Model** **Infographics**
N.C. Objectives	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.		• KS2 National curriculum links: Collect, analyse, evaluate and present data and information using a variety of applications on a range of digital devices.			
Key Learning	DH 1 Sort, organise and classify objects based on their properties - Sort and group objects using a variety of criteria physically and using technology. DH2 Represent and interpret simple data as pictograms.- Use an appropriate application to represent and interpret simple data as a pictogram. Use pictograms to create questions and help to answer them.	DH3 Represent information as a simple block graph or pictogram - Collect information and use it to create a simple pictogram or block graph using an application DH4 Organise and interpret data as a simple graph - Use a simple graphing/pictogram application to record information and label the axes. Enter data accurately and edit mistakes. Use graphs to create and answer questions and understand that if data has not been entered accurately it cannot be used to provide the answers to questions DH5 Sort and answer questions using yes/no answers - Ask questions that comply with the rule that it can only have a yes or no answer. Use a branching database to identify objects using yes or no questions	DH6 Collect and organise information to find answers to questions - Compare interpreting data using analogue and digital methods. DH7 Create different graphs that show data for different purposes across the curriculum - Examine and interpret existing graphs related to different curricular subjects and create their own. Be able to answer questions from their graphs and begin to check data for accuracy. DH8 Store and access data using a database - Understand the terms field and record in a database. Use an existing standard database to answer questions- Answer questions in an existing database.(DH8)	DH9 Represent data in a database using appropriate data types - Enter data into a pre-defined database and use the information to answer a specific question. Place information in the correct fields using the correct conventions e.g. Text data in text fields Numeric data in number fields (be aware of spelling errors and case sensitivity whilst entering data). Begin to use sort, search and create graphs to interpret / question data. DH10 Turn questions into search criteria and use database tools to find answers- Translate questions into search criteria to find information using the appropriate sort / search / graph facility of the software. DH11 Use a spreadsheet to enter data and perform simple calculations.- Enter data accurately into a spreadsheet and understand cell references. DH12 Convert data in a spreadsheet into different graph types for different purposes - Use the spreadsheet to create bar or line graphs and pie charts with correctly labels axes and titles. DH13 Change elements of a spreadsheet and understand the effects on other calculations.- Enter labels and numbers into a spreadsheet and use the 'SUM' function to calculate the total of a set of numbers in a range of cells. Use a prepared spreadsheet and manipulate the data to answer questions supporting work in mathematical / scientific investigations. Use a spreadsheet to model possible outcomes by adding and changing data.	DH14 Create charts using appropriate data to interpret and answer a specific question. Collect data (consider using an online quiz, survey or poll) and create correctly labelled graphs or charts for a specific purpose and add them to a relevant document or presentation. DH15 Create a database to store and search relevant information. Create a database to organise relevant data. DH16 Interrogate a database using suitable questions. Design questions using key words to search a large pre-prepared database. Use and / or / greater / less than (Boolean) to search and sort data when looking for relationships and patterns in data. Modify search criteria in order to find more specific information. Check for accuracy by checking data, using different views, search tools, and graphing. DH17 Use technology to search and sift through large amounts of different types of information. Examine a large database such as items offered by an online retailer or a Victorian census. Create paper cards for some records and sort them physically before doing so with technology DH18 Use a range of calculations and functions in a spreadsheet. Enter formulae into a spreadsheet and modify the data. Paste formulae to enable the calculation of several sums simultaneously. DH19 Use a spreadsheet to model given problems. Change the data to answer 'what if...?' questions and check predictions. Create and use a spreadsheet to investigate possible solutions to mathematical / scientific problems / investigations. Create or use a prepared spreadsheet and manipulate the	DH20 Identify and collect appropriate data to answer their questions. Solve problems involving selecting, processing, presenting and interpreting data. Construct and interpret a range of appropriate tables and graphs relating to task. Collect and represent data using online quizzes, surveys or polls and posters including graphical representation of data (e.g. what are the differences in heart rates resting, during and after exercise). DH21 Use data in an appropriate application to test a theory/hypothesis. Present findings to outline a theory or hypothesis to a specified audience and display this information in appropriate applications (e.g. poster, multimedia, word processing). DH22 Refine, search, filter, sort and graph data for purpose in a database or spreadsheet. Collect and organise data in an efficient and accurate way by designing fields and records in a database. Sort, filter and present the data to answer questions. DH23 Use a spreadsheet to create real life models of information to offer a solution to a real life problem. Use spreadsheets to solve mathematical problems and identify, enter and modify data and formulae appropriately DH24 Collect and represent data using infographics. Represent data in infographics such as Word Clouds and understand the benefits of representing data in a pictorial fashion.

					data to answer questions supporting work in mathematical / scientific investigations.	
Evidence of working at the expected standard	Create a simple pictogram (DH2) **Create a** pictogram and to interpret the data it represents. (DH2) - Develop more complex criteria (and or questions) to create their own pictograms. Start to change the data independently and comment on the effects of the change.	Create a simple graph (the data may be given to the pupil) (DH4) Collect data and display it in the form of a graph (DH4) Use a branching database to identify objects using yes or no questions (DH5)	Create simple graphs using ICT to organise, present and understand data. (DH7) Answer questions in an existing database.(DH8)	Enter data into a prepared spreadsheet or database. (DH9 for databases DH11 for spreadsheets) Use the SUM formula to add values in a spreadsheet (DH11) Turn questions into search criteria to find information in a database or a spreadsheet (DH10)	Use the SUM formula to add rows and columns in a spreadsheet (DH18) Enter formula accurately into a spreadsheet.(DH18)	**ADH25** Enter formula accurately into a spreadsheet and use a simple formula (DH23 and DH18 -y5) Design and create a spreadsheet to solve a real life problem.(DH22) Create a hypothesis and test it by collecting data and interpreting it.(DH21)
Possible evidence of greater depth understanding	Change the data independently in a pictogram and comment on the effects of the changes. (DH2)	Ask questions that comply with the rule that it can only have a yes or no answer. Use a branching database to identify objects using yes or no questions	Use the search function in a database - Be able to search a database using more than one search term. (DH8)	Create a new spreadsheet to represent information from data. (DH11) Use more advanced database searches e.g. and/or searches.	Build a spreadsheet to model different calculations (DH18) Organise data in an appropriate application and use appropriate complex searches/ sorts to find the answers to question or test hypothesis. Discuss how using formula in spreadsheets can enable them to test different variables.	Be able to make decisions based on independently collecting analysing and sorting data in a spreadsheet. (DH21 and 22) Solve a problem by planning and carrying out data collection, by organising and analysing data using a suitable data-handling package, and by drawing conclusions and presenting findings to a specific audience. Collect data from a range of sources and use a spreadsheet to process the data through sorting and calculations
	These are hyperlinks straight to the resources you need. You may need to create an account for some of these resources.					
Resources	FURBLES J2E.COM **J2E – DATA – A must for this part of the Curriculum** PICTOGRAM MAKER PICTOGRAM: HOW I GET TO SCHOOL	BRANCHING DATABASE EXAMPLE J2E.COM – BRANCHING TOOL J2E – DATA – A must for this part of the Curriculum	ARGOS TOY DIRECTORY HANDLING DATA J2E – DATA – A must for this part of the Curriculum	PIRATE SPREADSHEET RAILWAY TIMETABLE TEACHING ACTIVITY BOOM! USING VOLCANOES TO TEACH THE Y4... J2E.COM – J2E DATA	CARS GRAPHING INFORMATION FILTERING DATA IN SPREADSHEETS GREENFIELD ROAD PIRATE SPREADSHEET J2E DATA VICTORIAN CRIME AND PUNISHMENT DATABASE	AUTOTRADER FANTASY FOOTBALL STATISTICS INFOGRAPHICS – HOW TO CREATE THEM ON PPT PIRATE SPREADSHEET PREMIER LEAGUE AND PURPLE MASH DATA HANDLING PROJECT TEACHING ACTIVITY DH24 INFOGRAPHICS TAGXEDO

Crossflatts Computing Curriculum

Media

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocab.	**Keyboard** **Sounds** **Animation** **Image**	**Accuracy** **Communication** **Record** **Graphics** **Capture**	**Crop** **Combine** **Copy** **Paste** **Audio** **Story board** **Evaluate**	**Software** **2D/3D Plan** **Slideshow** **Compose** **Refine** **Film shots** **Animation** **Crop**	**2D/3D Graphics** **Computer Aided Design** **Evaluate** **Criteria** **Animation** **Audio** **Slideshow**	**Computer Aided Design** **Non Linear** **Multi layered** **Animation** **Audio** **Story boarding** **Slideshow**
N.C. Objectives	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.		• Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information			

Key Learning

Year 1

M1 Communicate simple ideas through the use of text, images and sounds.
Create original work using predefined templates or blank documents by adding text and a given image to their work. Record sounds into their work. Develop keyboard familiarity and effective typing skills, control a mouse/touch screen to edit text appropriately and save/load their work.

M2 Understand sound and music can be created using a range of simple technology. Discuss where they access their music and how it can be made. Demonstrate a range of technologies that can be used to create sound/music and allow the children to explore them. Talk about and share their music making.

M3 Record sound using simple technologies and play back the recordings.
Record voices, sounds or simple music using physical instruments/objects and with technology. Playback the recording and discuss it. Introduce the children to a simple music composition application and model how to create simple musical phrases. Allow the children to create their own musical compositions and share/discuss them with others.

M4 Create an image/animation in a simple graphics application.
Explore the basic tools of a simple graphics application to see what affect they have. Practice and become competent using basic tools in a graphics application. Combine the use of basic tools in a graphics application effectively to create an appropriate image. Explain how they created their images using a

Year 2

M6 Make simple changes to improve the look and clarity of their work.
Further develop keyboard skills for speed and accuracy of typing and be able to change basic formatting such as font, text size and colour. Begin to reflect on their work and discuss/apply changes to improve their work. Save and retrieve work independently.

M7 Organise and communicate ideas for a specific purpose using appropriate layout and media. Use different presentational features such as title, paragraph, label, etc. Use different layouts and templates to create short narrative and or non-narrative texts. Make use of appropriate graphics, video or sound to enhance their digital creations.

M8 Record, locate and review sounds and add them to their digital creations. Select and use devices for recording appropriate sounds including voice and singing. Create, edit and refine musical phrases for a specific purpose such as a rap, song, background music or music for a poem and talk about their creations.

M9 Add music and or a sound to affect the mood and atmosphere of their work. Explore the effect of different music and sounds on a piece of work such as a multimedia presentation, a short film or a game. Locate and add existing sound files or music they have created to their work.

Year 3

M12 Combine and refine text, sound and graphics to communicate information for a given audience. Continue to develop keyboard skills to add and edit text with speed and accuracy. Combine text, audio and graphics from the school network, Internet or other sources purposefully. Use design features such as text boxes, columns, etc. and appropriate proofing tools to ensure their work is clear and error free such as spell checker and thesaurus. Cut, copy and paste in order to refine and reorder content within applications.

M13 Recognise the key features of different types of information/genres and use appropriate layouts. Evaluate a range of printed and digital texts and discuss the key features, similarities and conventions of these texts. Create their own multimedia work showing a basic understanding of these conventions

M14 Understand how audio can enhance multimedia projects including radio and films by creating/choosing appropriate audio to fit a given context
Explore further the effect of different music and sounds on a piece of work such as a multimedia presentation, a short film or a game. Become increasingly competent with applications that allow easy manipulation of existing sounds and creation of new sounds and music including recording their voice. Choose and create appropriate audio

Year 4

M18 Capture appropriate, quality still and moving images.
Capture digital images thinking about the purpose of the image taking into consideration lighting and framing.

M19 Develop an understanding of differing film shots and their effective use. Understand what a long shot, a medium shot and a close up are and why they are used.
Create a short film that includes at least two shot types

M20 Create a 2D plan view using basic shapes.
Explore the creation and manipulation of 2D shapes including rotate and resize.

M21 Plan, create and edit an animation, film or slideshow.
Create appropriately detailed storyboards for films, slideshows and animations. Record a short stop-motion animation reviewing and editing to correct mistakes. Add credits and titles to an animation/film/slideshow appropriately.

M22 Compose, combine and refine music or sounds.
Select and import copyright free existing sound files into an audio production. Use layers to combine a variety of sounds including spoken word and edit them into one piece of audio appropriate to task. Use music applications and sound library to create single or multi-track music.

Year 5

M25 Create and amend a range of 2D graphic representations using appropriate applications.
Use 2D shape tools in an application to develop a scaled plan view of a given space (such as a playground) using the grouping tool to create composite shapes. Amend, enhance and resize images for export to other applications or websites and be aware of appropriate file types and sizes.

M26 Create simple 3D graphics using a CAD application.
View real world examples of 3D design, create and manipulate simple 3D shapes to make simple models.

M27 Plan, create and edit an animation, film, slideshow or presentation, then reflect on its efficacy.
Plan and create, then evaluate a short animation, film, slideshow or presentation adding titles, credits and audio. Learn what approaching and retreating shots are and create examples in a short film.

M28 Source, edit and refine music and sound for a given audience or project.
Locate appropriate copyright free sound files independently from a variety of locations. Listen to audio productions and identify different sound elements and discuss the audience they are aimed at. Import and edit existing sounds using computer applications e.g. normalise sound and explore pitch, tempo and volume. Use a multi-track application to layer sound, adding voice, music and sound effects appropriately. Begin to have an awareness of different sound file formats e.g. MP3 files are smaller than WAVs

Year 6

M30 Independently combine various forms of media purposefully as part of a project.
To use appropriate technical language when storyboarding a film, such as panning, approaching, retreating, close up, medium and long shots. Create a short film using various media types (still images, sound, video, animation, green screening) linked to a writing genre. Use extra equipment where necessary such as tripods, green screens or autocues to ensure a more professional production. Acquire suitable image and sounds from appropriate sources taking into consideration copyright issues and acknowledge sources where necessary. Create and manipulate images using a range of techniques to develop a particular style or genre. Design and deliver a presentation before an audience. Create a non-linear presentation such as a quiz.

M31 Use a CAD application (3D design tool) to create a representation of an object.
Use a CAD application to create a scaled, 3D representation by adding, rotating, resizing and grouping 3D shapes.

M32 Edit and manipulate multi-track music and sound and refine for a given audience or project.
Listen to and evaluate professional broadcasts and comment upon how their elements are designed with a target audience in mind. Independently choose and use appropriate devices to record sounds and save in an appropriate format. Create a multi-layered, audio composition including music, spoken voice/singing and sound effects. Continue to develop and use criteria to evaluate the design and layout of digital content which may include presentations, apps, websites and printable media such as posters.

M33 Evaluate and adapt individual features to enhance the overall presentation.
In light of comments made by peers and audience amend and improve their work

	combination of the tools. Explore how images can be altered and combined to create simple animated sequences using technology. M5 Capture images using a range of technologies and share with others. Capture still images/videos whilst being aware of the health and safety issues of shooting into the sun or bright light sources. Talk about their images/videos and why some are better than others and take improved images using this feedback.	M10 Capture and create images in different graphic applications. Capture a range of images and discuss the quality of their image including simple framing and blurring. Make decisions about deleting images and reshooting them to improve them. Explore the more complex tools of a variety of graphics application to see what affect they have for example enhance photographs and pictures through cropping, re-colouring and resizing. M11 Understand and create simple animations Explore and create simple onscreen animations using a sequence of images	files for their own work and comment on their use and effect. M15 Capture, create and enhance new and existing digital images to communicate ideas Retrieve images from cameras and other sources and use a variety of graphic manipulation applications to change and alter images (such as filters). M16 Plan and create a simple animation. Create a short-animated sequence to communicate a specific idea making use of a simple storyboard. M17 Understand that evaluation and improvement is a vital part of a design process and technology allows changes to be made quickly and efficiently. Discuss the need to reflect on their work with others and use selected criteria to evaluate the success of their work for a specific audience. Be able to make appropriate changes quickly and effectively and understand that this is much easier to achieve using technology than physical media.	M23 Identify features of good digital creation design Evaluate a range of multimedia appropriate to task and recognise key features of layout and design. M24 Collect, create and insert appropriate (fit for purpose) graphics and sound files to create a multimedia presentation Combine text, sound and graphics appropriately and consistently to communicate meaning for a given audience	and may be more suited to import into a multimedia presentation. M29 Develop criteria for evaluating theirs and others work. Develop and use criteria to evaluate the design and layout of digital content which may include presentations, apps, web sites and printable media such as posters. Consistently use the same styles of font, colour, size for headings, body text etc. throughout a document or a set of web pages.	
Evidence of working at the expected standard	Type a phrase with spaces between letters. (M1) Add text to images or images to text. (M1)	Make simple formatting changes to documents such as changing the font of text. (M6) Use layouts and templates to create types of documents such as leaflets, postcards, newspapers etc. (M6) Record or locate sounds and add them to digital creations (M8)	Combine text, audio and images in a document. (M12) Create a simple animation (M16) Cut, copy and paste text. (M12)	Create a simple presentation with more than one slide. (M21) Understand basic design rules and follow them in their own creations. Create a presentation including copyright free media children have searched for.(M21)	Create a short animation film or presentation. (M27) Plan, create and deliver a multimedia presentation to an audience that it has been written for. (M27) Create either an animation or film with titles and added sound such as narration, music or sound effects (M27)	Combine two or more forms of media in a project (M30) Combine a variety of media which may include video, sound, animation, images and text to create a product.(M30)
Possible evidence of greater depth understanding	Change font, size colour and style appropriately. (M1)	Independently create and format a document with images and recorded sounds. (M6) (M8)	Create a document with a specific layout sourcing images from copyright free locations. (M12) Create an animation with a detailed storyboard. (M16)	Plan and create a presentation and deliver it to an audience. Use copyright free images. (M21)	Independently create an animation or film on a topic of their choice (M27)	Independently create a project using a variety of media editing and refining each element for purpose and audience. (M30)

Crossflatts Computing Curriculum

These are hyperlinks straight to the resources you need. You may need to create an account for some of these resources.					
TEACHING THE MEDIA STRAND	TEACHING THE MEDIA STRAND	TEACHING THE MEDIA STRAND	TEACHING THE MEDIA STRAND	TEACHING THE MEDIA STRAND	TEACHING THE MEDIA STRAND
BEGINNER TYPING SKILLS	MUSIC CREATION	CREATE AND EDIT IMAGES	EXAMPLE OF 2D PLAN	2D/3D ROOM PLANNER	ANIMOTO
TYPING RACING CARS	DANCE MAT TYPING	DANCE MAT TYPING	TEACHING ACTIVITY (M20) CREATE A 2D PLAN USING BASIC SHAPES	3D IKEA KITCHEN PLANNER	2D/3D ROOM PLANNER
KEYBOARDING ZOO	HOW TO CROP IMAGES	2D/3D ROOM PLANNER	EXAMPLE OF GOOD/BAD PRESENTATIONS	3D IKEA KITCHEN PLANNER
CREATE ANIMATIONS	CUP STACK TYPING GAME	SEARCH IMAGES	ANIMATION CREATOR	PREZI	EXAMPLE OF GOOD/BAD PRESENTATIONS
J2E.COM – JIT5- PAINT	CREATE ANIMATIONS	J2E.com- JIT5- ANIMATE	BOOK CREATOR APP	MICROSOFT POWERPOINT	BOOK CREATOR APP
COLOUR, DRAW, PAINT	ISLE OF TUNES - RESOURCE TO CREATE TUNES	J2E.com- JIT5- WRITE	HOW TO CROP IMAGES	ANIMOTO	SEARCH IMAGES
CBEEBIES SONGS	PIC COLLAGE	PREZI	FIND SOUNDS	BOOK CREATOR APP	ISLE OF TUNES - RESOURCE TO CREATE TUNES
MUSIC CREATION	BOOK CREATOR APP	MICROSOFT WORD	DOWNLOAD FREE SOUNDS	SEARCH IMAGES	HOW TO MAKE A NEWS PROGRAM IN IMOVIE
BOOK CREATOR APP	MICROSOFT WORD	PIC COLLAGE	IMPORTING SOUNDS ON SOUNDATION	GOOGLE DRAWINGS	EXAMPLE OF NON LINEAR PRESENTATION
ISLE OF TUNES - RESOURCE TO CREATE TUNES	J2E.COM – JIT5- WRITE	YOUTUBE - AUDIO LIBRARY	SEARCH IMAGES	IPAD TUTORIALS	PREZI
	GOOGLE DRAWINGS	ONLINE VOICE RECORDER	J2E.com- JIT5- ANIMATE	ISLE OF TUNES - RESOURCE TO CREATE TUNES	MICROSOFT POWERPOINT
		DOWNLOAD FREE SOUNDS	SENTENCE FILMING RESOURCE (M19)	ONLINE VOICE RECORDER	3D DESIGN
		ISLE OF TUNES - RESOURCE TO CREATE TUNES	ISLE OF TUNES - RESOURCE TO CREATE TUNES	3D DESIGN	TEACHING ACTIVITY (M26) CREATE SIMPLE 3D GRAPHICS USING A CAD APPLICATION
		ANIMOTO	IMOVIE	TEACHING ACTIVITY (M26) CREATE SIMPLE 3D GRAPHICS USING A CAD APPLICATION	TEACHING ACTIVITY M30 FILM AND EDIT A FILM REVIEW
			MICROSOFT POWERPOINT	HOW TO MAKE A NEWS PROGRAM IN IMOVIE	TEACHING SEQUENCE - THE SUGAR TAX
			PREZI		
			HOW TO MAKE A NEWS PROGRAM IN IMOVIE		
			ONLINE VOICE RECORDER		
			EXAMPLE OF A STORYBOARD		
			TEACHING THE MEDIA STRAND		
			TEACHING ACTIVITY. ROMANS, IPADS AND PERSUASION. (M18 M22 M24)		
			ANIMOTO		
			GOOGLE DRAWINGS		

Resources

Crossflatts Computing Curriculum

E-Safeguarding

You will need The Innovation Centre 2020 login details	Username: Crossflatts	Password : NinetyEarthAway=25

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocab.	Online safety Safe behaviour Trusted adult Internet Private Rules Virtual world	Login Password Online safety Safe behaviour Trusted adult Internet Private Rules Virtual world	Hyperlink Attachments Personal information Bullying Reliable Trusted adult	PEGI Ratings Password Personal information Age appropriate Awareness Trust	Plagiarism Copyright Blocking Unsubscribing Reporting Interaction Security	Digital footprint Balanced lifestyle Personal data Antivirus Firewall Security updates Pop up blocker Safeguarding PEGI Ratings
N.C. Objectives	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies		Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact..			
Key Learning	ES1 Identify trusted adults and ensure a trusted adult knows what they are doing online and inform them if online content makes them feel sad, scared or confused. Be able to identify safe behaviours in their day to day world such as not talking to or meeting strangers and how this applies in the online world. Understand what constitutes a trusted adult and identify the trusted adults in their lives and how they help to make sure they are safe and secure Discuss the activities they do online, the content they have come across and how they shared this with their trusted adult. Understand that they should only go online or play games that are approved by trusted adults and that if they come across something upsetting to tell a trusted adult immediately. What systems exist in the home to ensure trusted adults know what their children are doing? ES2 Behave in a kind and considerate way to others in the real and virtual world. Discuss how they behave towards and with others in school and at home and discuss the benefits of positive behaviour. Understand these positive behaviours should be applied with regard to virtual world interactions. Identify the activities, content and games they are accessing in school / home and demonstrate or talk about how they would do so safely and politely. ES3 Understand that the internet is fun but just like there are rules in the real world to keep you safe there are rules for keeping them safe in the online world. Identify and discuss some of the basic rules that keep them safe in the real world and why they are important. Discuss and share some basic rules for ensuring they stay safe online	ES4 Know login details and passwords should only be shared with trusted adults. Discuss what a login is and why they often have a password. Why is it important to use logins and passwords? Discuss the need to protect the content they are creating or accessing from others and that to do this they need a secure password that can only be shared with a trusted adult. What might happen if somebody else has their login details? ES5 Understand that they can be connected to many people in their life (real life and online). Understand that when they are playing games or online the characters they are interacting with could be computer generated characters or real people in other parts of the world and they should be able to identify if they are real or fictitious. Play some online games and ask the children to identify if the characters are real people or computer generated, can they always tell? ES6 Be polite and respectful when communicating & playing games online. Identify appropriate online communication that is polite and respectful. Understand that just because they cannot see the person they are communicating with it doesn't mean that they should communicate differently. The person will still be hurt or upset by things you say or do online that are unpleasant. ES7 Talk to a trusted adult before sharing information about themselves online. Begin to understand the idea of personal information and that this	ES9 Identify the dangers of clicking links they receive when using technology. Understand what a hyperlink is and what they look like. Why do we send them and what are they used for? Know to get a trusted adult's approval before clicking links, pop ups and attachments that they may come across online and in games and be aware of some of the consequences of clicking such links. ES10 Identify personal information about themselves and others. Be able to identify / classify personal information about themselves, their friends and others and comment on the types of information they can find about people in the newspapers and online. ES11 Explain the possible consequences of sharing personal information online Be able to identify a range of personal information and justify who they might safely share it with in discussion with a trusted adult. Understand that sharing personal information is dependent on who they share it with. Understand that sharing personal information with people they do not know or trust (through games and other online activity) could lead to strangers trying to meet up with them or communication they find upsetting or confusing. Children should know to report such communication to a trusted adult immediately. ES12 Know that bullying through the use of technology is called online bullying and how to report it.	ES14 Identify age limits and PEGI ratings for games and understand the importance of only accessing age appropriate content. Understand the PEGI system and be able to describe the icons for the ratings. Be able to classify some of the games they play and explain why they are or are not appropriate for a given age group. Discuss the importance of talking to their parents about their games so that they can help them choose appropriate games to play. ES15 Explain the possible consequences of submitting personal information online Understand that many websites ask for personal information to set up an account and why this is often age restricted to 13. Know not to enter personal information online without the help of a trusted adult and question why the site needs their information and what they will do with it. Possibly look at some simple T&Cs to raise awareness that such documentation is available to explain how data is and that parents need to do this. Describe some of the reasons this information might be shared and the problems it might cause. ES16 Ensure information submitted online is only accessed by the people they trust What information have you submitted or shared online, this includes information shared through games, any social media (could be a school blog), texts, email etc. Who can see this information? Share and discuss ways that this information is only accessed by the people you want to access it? Can you guarantee this? ES17 Identify the similarities and differences of virtual and real world	ES19 Understand the terms plagiarism and copyright and be aware of the implications of copying and sharing content without permission. Know what plagiarism / copyright are and understand people often plagiarise without thinking by cutting and pasting. Understand the legal and moral reasons not to plagiarise or infringe copyright, the impact it can have on the creator of the content and know legal download sites for video and music. Understand how to simply reference others people's work you have permission to use and know how to search for copyright free content. ES20 Use blocking / unsubscribing / reporting mechanisms appropriately. Children should know how to report or block users within games, apps and websites they access where online content / interactions are unsolicited or make you feel sad, scared, threatened or confused. Children should know how they can unsubscribe and block emails they do not wish to receive. They should know how to make reports to external agencies including CEOP and ChildLine in conjunction with a trusted adult. ES21 Control who they interact with online and the information they share. Discuss that the information that is shared online can be stored and shared with others and is almost impossible to remove. Children should be able to differentiate between online only 'friends' and real world friends they connect to online. Children should know not share personal information with people they do not know in the real world and be aware that even if they share it with trusted people it could still be shared wider than they had planned / anticipated. Know how to configure appropriate security settings including	ES23 Explain the importance of a balanced lifestyle with respect to technology use. Understand the concept of a balanced lifestyle and be aware of the amount of time they are spending in front of a screen and the impact this may have on their physical and mental health. Describe non-screen activities they can engage in to ensure they have a balanced lifestyle. Understand what addiction is and where to go for help to deal with addiction to technologies and content. ES24 Explain the importance of a positive 'digital footprint'. Understand that any information about them shared online by themselves and others could be accessed by anybody in years to come and that this 'trail' of digital information creates a 'digital footprint' about them. Identify all the different sources and types of information that might already be online about themselves and what control they have over this information. Describe positive and negative implications of anybody accessing their 'digital footprint' now and in the future. Describe what steps they can take to creating a 'positive online image' including defining acceptable and unacceptable online behaviour and the benefits this will have to them now and in the future. ES25 Appropriately configured and secure all devices used to access personal data Understand that to remain safe and secure online you need to ensure the devices you use to connect online are suitably secure and that you are using a secure connection including games consoles, tablets and mobile phones. Ensure you have approval from a trusted adult before using a webcam. Understand the terms including antivirus, firewall, security updates, pop up blocker, etc. Create and regularly update strong passwords and do not use the same password for all accounts and devices. ES26 Evaluate whether games, websites and social media are appropriate for specific ages. Use PEGI ratings and other criteria to identify the (e)Safeguarding issues with regard to a range of games

Crossflatts

	includes their full name, address, school name, phone number and date of birth and why using a nickname is a safer way to interact online. Know to talk to a trusted adult before submitting or sharing their full name, address, school name, phone number and date of birth online. Ensure a trusted adult is aware of who they are interacting with online and has approved the interactions because some people online may not be who they say they are. ES8 Know that some of the people they interact with online may not be who they say they are. Talk to the children about what they do online and who they communicate with, do they know them in the real world? How can you be sure the people online are who they say they are or appear to be? Reinforce the fact that children should have the approval of a trusted adult before interacting or communication with others online and to tell a trusted adult if others are communicating / interacting with them in an unpleasant manner.	Discuss examples of bullying and how to respond to it in the real world. Identify some acceptable and unacceptable ways to communicate / interact with others in the real world. Discuss the various technologies they use to communicate / interact with each other and how they can be used to communicate in a positive manner. Understand the term online bullying and be able to explain what to do if they or a friend is bullied online. ES13 Understand that not all information you access online is accurate or reliable. Know not to believe or accept everything they see online as correct or truthful and know to check this with a second site or only use sites recommended by trusted adults. What examples of inaccurate material can they find and how do they know it is inaccurate?	communication to develop an understanding of positive online communication. Identify the similarities and differences between written and verbal communication and understand that sometimes these can be misinterpreted. Understand the concept of 'Netiquette' and how other online users can make positive and negative judgements about a person based solely on our online interactions. Describe and share ways our online interactions can ensure that we create a positive online persona. ES18 Use strong passwords for all online accounts and devices. Understand what constitutes a strong password and discuss strategies for creating strong personal passwords that are easy to remember. Describe the reasons to set passcodes / passwords for all devices and the implications of leaving these devices unlocked when not in use.	accepting and blocking 'friends' and ensure their parents are aware of all the online friends they are interacting with. ES22 Describe the causes and consequences of online bullying and discuss behaviours and strategies to prevent and stop online bullying. Understand how technology can be misused to bully and the short and long-term consequences this can have on the victims. Outline strategies and behaviours they can embrace to ensure they are not involved in online bullying and how to report online bullying incidents using real world and online reporting mechanisms.	and online content to make informed judgements on the suitability of the content for a given age range. Talk to parents about the online games they are playing so that joint decisions can be made with regard to accessing appropriate online content and games.
Evidence of working at the expected standard	Identify an adult they trust. (ES1) Explain what constitutes a trusted adult (ES1)	Understand that a password should only be shared with trusted adults.(ES4) Explain why it is important not to share passwords. (ES4)	Identify personal information about themselves.(ES10) Explain the possible consequences of personal sharing information online.(ES10) Understand what cyberbullying is and how to report it.(ES11)	Explain the possible consequences of submitting personal information online (ES15) Identify age limits and PEGI ratings for games and understand the importance of only accessing age appropriate content Identify the similarities and differences of virtual and real world communication	Understand what blocking and reporting is.(ES20) Use blocking / unsubscribing / reporting mechanisms appropriately.(ES20) Control who they interact with online and the information they share (ES21)	Explain the importance of a balanced lifestyle with respect to technology use. (ES23) Explain the importance of a positive 'digital footprint'.(ES24)
Possible evidence of greater depth understanding	Talk to a trusted adult about what they do online	Explain what may happen if someone uses their login details.(ES4)	Give examples of how to communicate online in a positive manner.(ES11)	Explain strategies for setting strong passwords.(ES18)	Outline strategies and behaviours to avoid being bullied online. (ES22)	Evaluate whether games, websites and social media are appropriate for specific ages. (ES26)
	These are hyperlinks straight to the resources you need. You may need to create an account for some of these resources.					
Resources	CEOP SMARTIE THE PENGUINE ONLINE SAFETY STORY DIGI DUCK ONLINE STAFETY STORY A GOOD STORY TO PROMOTE ONLINE SFAETY E SAFETY HECTORS WORLD ONLINE SAFETY TIPS FOR KS1 ONLINE SAFETY WEB SERIES ES1 LESSON ONE PLAN ES1 LESSON TWO PLAN ES2 LESSON PLAN	CEOP ONLINE SAFETY EPISODES ONLINE SAFETY PICTURE BOOK E SAFETY HECTORS WORLD SMARTIE THE PENGUINE ONLINE SAFETY STORY DIGI DUCK ONLINE STAFETY STORY ONLINE SAFETY WEB SERIES	CEOP FOLLOW DIGITAL TRAIL GOOGLE INTERLAND LESSON IDEAS SMART CREW- WHAT SHOULD YOU ACCEPT? ESAFETY TOP TIPS ESAFETY THROUGH DRAMA IDEAS SMART CREW- WHAT IS RELIABLE? SMART CREW- WHAT SHOULD YOU KEEP SAFE?	CEOP FOLLOW THE DIGITAL TRAIL VIDEO GOOGLE INTERLAND HECTORS WORLD SERIES HOW SECURE IS MY PASSWORD? NET SMARTZ EPISODES SETTING A PERFECT PASSWORD SMART CREW- WHAT SHOULD YOU ACCEPT? CYBER PIGS : PROTECTING INFORMATION	CEOP E SAFETY EPISODE - PLAGIARISM SHARING PHOTOS POSTER GOOGLE INTERLAND HORRIBLE HISTORIES - PROTECT PRIVACY SETTINGS NEWSROUND: INTERNET SAFETY VIDEO: IS THIS PLAGIARISM? JIGSAW VIDEO: SOCIAL NETWORKING LESSON PLAN - LEARN ABOUT LOCATION LESSON PLANS: ESAFETY	CEOP THINK U KNOW: DIGITAL FOOTPRINT SHARING PHOTOS POSTER LESSON PLAN- DIGITAL CITIZEN GOOGLE INTERLAND HOOKED ONLINE: ESAFETY EPISODE HOW SECURE IS MY PASSWORD? NEWSROUND: INTERNET SAFETY ESAFETY: BE CAREFUL WHAT YOU DOWNLOAD

Crossflatts Computing Curriculum

			SMART CREW- WHAT SHOULD YOU TELL?		CYBER BULLYING- A SHORT FILM	LIMIT SCREEN TIME EPISODE
	ES3 LESSON PLAN				CYBER PIGS : PROTECTING INFORMATION	CYBER PIGS : PROTECTING INFORMATION
					LESSON PLAN: BLOCKING AND REPORTING	VIDEO: TECH CONTROL

Information Literacy

You will need The Innovation Centre 2020 login details   **Username:**   **Crossflatts**   **Password :**   **NinetyEarthAway=25**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocab.	Computers Information Technology Websites Mouse Touch screen Menu Tablets Links	Media Website Website address Search engines Questions Encyclopaedia	Search technology Keywords Copy Paste Edit Search engines	Modify searches Key words Search engine Skim Sift Evaluate	Valid information Bias Fake news Advanced features Search engine Filtering	Plausibility Validity Skim Scan Trusted websites Ranked results
N.C. Objectives	Use technology purposefully to source and manipulate digital content.		Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.			
Key Learning	IL1 Access information comes from a variety of different sources and understand technology allows quick access to these resources. Talk about and name technologies for finding information within and beyond school and explain their use. Talk about how this technology can give access quickly to a wide variety of resources and information. IL2 Explore a variety of digital information as part of a given topic. Access different types of information from different sources e.g. using books, apps, websites, TV, DVD etc. IL3 Find / access information using technology Use a mouse/touchscreen/tablet to follow the appropriate buttons to navigate to websites or find network resources. Begin to understand that digital devices use icons, menus and links to navigate to information.	IL4Identify information through a range of appropriate forms of media.. Recognise information in its different forms (pictures, text, sounds and video) and use it to answer questions and understand that not all information found is useful. IL5 Recognise the layout of a web page and interact with it appropriately Navigate within a website using links and menus to locate information and understand that websites have a specific address e.g. www.bbc.co.uk. IL6 Search for information using child friendly search engines Enter text into a child friendly search engine to find specific given web sites understanding that the internet contains a large amount of information. Develop questions about a specific topic and use information to answer those questions.	IL7Use search technologies effectively by identifying specific keywords. Understand that technology enables access to a wide range of information and converting questions into keywords helps to search for specific information using search engines / technologies. Understand that some pieces of information found through searching are more relevant than others. IL8 Find and choose appropriate information and use it in other digital forms. Use the information located purposefully to complete specific tasks e.g. copy, paste and edit relevant information. IL9 Locate specific information online and recognise that web pages can be organised in different ways Find information on a given topic and understand that information may be linked by different media e.g. graphics, links and text.	IL10Carry out and modify searches developing keywords to improve search accuracy. Use keywords and enter them into a chosen search engine and access relevant information quickly and modify the keywords in a search if the results are not useful. Understand the summary information for a site on a page of search results and its ranking according to relevance to their enquiry. IL11Check the relevancy and accuracy of search results. Understand websites are not always accurate and that information should be checked before it is used. Be able to skim read and sift information quickly to understand if the search result is relevant. IL12 Locate online content using some of the available advanced features in search engines To be able to discuss the different search engines and their features and know that they can use search engine tools for different types of media e.g. CC Search, Google Image Search, video and sound but understand that the results are not always what you expect. Evaluate and compare some of these tools.	IL13 Interpret and validate information from a range of online sources. Select appropriate search engines to find information related to their topic and use a range of keywords to find different sources of information. Compare sources of information for content accuracy and discuss the impact of using inaccurate or incorrect data found online. IL14 Recognise that the Internet may contain material that is irrelevant, bias, implausible and inappropriate. Be aware that anybody can publish information online and identify examples such as blogs, Wikipedia, YouTube, etc. Identify simple steps to help ensure information is accurate and reliable such as using multiple sources and identifying reliable sources such as the BBC, National Museums, etc. IL15 Search for and save differing types of media using search engine functions. Discuss different strategies for finding relevant information e.g. using different keywords or filtering for copyright free images and be aware of the dangers of downloading content from the web. IL16 Use more advanced features of search engines. Use search engines for other functions, such as a calculator, conversion tool, distance and mapping, translations and show an awareness of the (e)Safeguarding features.	IL17 Check plausibility of information from a variety of chosen sources on the same topic. Talk about validity and plausibility of information by checking other sources and recognise the impact of using incorrect information in their work. IL18 Make informed judgments as to the validity of information on a website and be aware of bias. Skim and select information checking for bias and different viewpoints. Talk about where web content might originate from by looking at web address, author, other linked pages and understand some websites can be trusted more than others when questioning accuracy and authenticity of the information published. Develop a range of criteria for assessing a website (navigation/value of information/trustworthiness/objectivity). Use these criteria to rate sites and compare findings with peers. IL19 Understand how search engines work and rank results. To understand the dynamics of different search engines and how results are ranked.
Evidence of working at the expected standard	Use a mouse/touchscreen/tablet to follow the appropriate buttons to navigate to websites (IL2) Access different types of information from different sources (IL2)	Retrieve information from a child friendly search engine or encyclopaedias with help from others. (IL6) Use a child friendly search engine or encyclopaedias to find specific given web sites and select useful information.	Find relevant information online from a page they are given. (IL8) Find information from one online source and use it in other digital forms (IL8)	Decide which results in s search are the most useful (IL11) Check the relevancy and accuracy of search results. (IL11)	Decide if information they find online is 6tyureliable. (IL14) Compare sources of information for content accuracy and plausibility (IL14) Discuss different strategies for finding relevant information. (IL14)	Talk about validity and plausibility of information. (IL17) To understand the dynamics of different search engines and how results are ranked.(IL19)

Crossflatts Computing Curriculum

Possible evidence of greater depth understanding	Describe how to use a menu to navigate to required information (IL3)	Use child friendly search engines and talk about the validity of different search results.(IL6)	Find information from multiple online sources and re use it in other digital creations.(IL8)	Compare and evaluate different search tools such as different image searches (IL12)	Give detailed reasons for decisions regarding the validity and plausibility of information found online. (IL14)	Develop a resource for explaining how to check bias and plausibility of information online. (IL17)

These are hyperlinks straight to the resources you need. You may need to create an account for some of these resources.

| Resources | BBC-INFORMATION LITERACY

CBEEBIES: USE TO HELP CONTROL A WEBSITE

TYPING SKILLS

DK: AN EASY WEBSITE TO NAVIGATE

USING COMPUTERS IN EVERY DAY LIFE | BBC-INFORMATION LITERACY

DK: AN EASY WEBSITE TO NAVIGATE

J2E.com

SAFE SEARCH

SAFE SEARCH 2

GOOGLE SAFE SEARCH

USING COMPUTERS IN EVERY DAY LIFE | VIDEOS TO SUPPORT INFORMATION LITERACY

J2E.com

SAFE SEARCH

KIDDLE

SAFE SEARCH 2

GOOGLE SAFE SEARCH | VIDEOS TO SUPPORT INFORMATION LITERACY

SAFE SEARCH - IMAGES

SAFE SEARCH

KIDDLE

SAFE SEARCH 2

GOOGLE SAFE SEARCH

TOP 5 SOURCES FOR IMAGES AND PHOTOS ON YOUR IPAD | VIDEOS TO SUPPORT INFORMATION LITERACY

NEWSROUND: GOOD FOR EVALUATING SITES

GOOGLE VIDEO- FILTER AND REFINE YOUR SEARCH

SPOTTING FAKE NEWS - NEWSROUND

FAKE NEWS: GOOGLE WIND

REAL OR FAKE?

GOOGLE SEARCH TIPS

HOW TO USE GOOGLE IMAGE SEARCH TOOLS

TIPS TO USE GOOGLE SEARCH EFFECTIVELY

OPEN CLIP ART

SAFE SEARCH - IMAGES

SAFE SEARCH

KIDDLE

SAFE SEARCH 2

GOOGLE SAFE SEARCH

SEARCH ENGINE INFORMATION TABLE | VIDEOS TO SUPPORT INFORMATION LITERACY

FAKE NEWS: GOOGLE WIND

SPOTTING FAKE NEWS - NEWSROUND

PREZI: WAS HENRY VIII CRUEL OR COOL?

HOW DO SEARCH ENGINES WORK?

HOW SEARCH ENGINES WORK 2#

GOOGLE: HOW SEARCH ENGINES WORK

SIMPLE WIKIPEDIA

TOP 5 SOURCES FOR IMAGES AND PHOTOS ON YOUR IPAD

SAFE SEARCH

KIDDLE

SAFE SEARCH 2

GOOGLE SAFE SEARCH |