UKS2 Computing Rolling Programme

Year B	Knowledge & Skills	E-safety	Vocabulary
Autumn 1	Information Technology Multimedia To be able to confidently use ICT such as cameras, IPAD or other digital devices to record sounds and capture both still and video images to be saved and used at a later time. To be able to make multimedia presentations that contain sound, animation, slide transitions and buttons to navigate through the slide show. To be able to add and change the timings that slides are displayed on screen for. To be able to create a multimedia presentation that uses an appropriate design aimed at the target audience. To be able to produce a slide show that contains links to other pages e.g. clicking on a link within the contents. To be able to capture recorder sounds, video and still images and then edit these using an editing package so that they are fit for audience viewing. *Outcome* *To produce a presentation that includes, text, photos, pictures, sounds, animation and transitions.*	Staying Safe Online Pupils will further their understanding of online gaming and chat sites. *Outcome* *To understand that people we meet online might not be who they say they are.* *To explore what information and images we should and should not share online.*	Appropriate online tools Audience Atmosphere Structure Copyright Information collection HTML code Storing Responsible online communication Informed choices Virus threats Blogs Messaging
Autumn 2	Computer Science Scratch To control a number of sprites by giving direct instructions with support. To use more complex procedures to control multiple sprites simultaneously e.g. conversation and movement. To be able to use complex and repeating procedures to create an effect or manipulate the sprites e.g. fade, turn on touch. To use 'if…then…' and 'repeat forever'. To use more complex procedures to co-ordinate sprites e.g. speech back and forth, timing. To be able to check procedures for errors. To be able to create, test, modify and store a sequence of instructions *Outcome* *Create a sequence of story scenes with added audio.* *Structure and sequence the animation of characters in each scene.* *Use the repeat command to create animation effect.*	Staying Safe Online Pupils will further their understanding of online gaming and chat sites. Outcome Pupils learn that websites must protect their private information. Know how to identify secure sites by looking for their privacy policies.	Predicting outputs Plan, program, test & review a program Program writing Control mimics + devices Sensors Measure input Create variables Link errors Responsible online communication Informed choices Virus threats Blogs Messaging

	Make a character visible or invisible at the correct times.		
Spring 1	Information Technology Excel – Spreadsheets To be able to enter labels and numbers into a spreadsheet. To be able to enter formulae into a spreadsheet. To be able to use 'SUM' function to calculate the total of a set of numbers in a range of cells. To be able to use formulae to make adjustments to the spreadsheet as would be in real life e.g. household budget and bills. To be able to identify formulae and enter them into a spreadsheet with confidence. To be able to copy cells. To be able to use a spreadsheet to draw a graph. To be able to change data and formulae in a spreadsheet to answer 'what if…?' questions and check predictions. To be able to use ICT to create pie charts, line graphs and to explain them. *Outcome* *Be able to enter formulae into cells.* *Edit data and discuss the effect on results. Use further functions including AVERAGE, MIN and MAX.* *Create graphs.* *Design their own spreadsheet for a specific purpose*	Moving On Pupils will learn how to use the skills they have learnt to respond to any challenges they might face when they leave primary school when interacting with the online world. *Outcome* *To consider the impact of electronic communication content.* *To explore the meaning of emojis and text-talk and their impact when communicating.* *To identify features of phishing emails.* *To understand the terms copyright, plagiarism and fair dealing.* *To know the features of reliable and unreliable websites*	Generate Process Interpret Store Present information Plausibility Appropriate data tool Interrogate Investigations Responsible online communication Informed choices Virus threats Blogs Messaging
Spring 2	Digital Literacy Network I can add and retrieve information or files from the pupil shared network, such as class work or independent research. Understand in further depth what a computer network is and know that the internet is a network. To have an understanding that data is digitised numerally. Binary Code. Understand the term "protocol" or IP. Understand the range of communication via networks (such as email, video conferencing, blogs, forums, social networks) and collaboration, such as wikis (including Wikipedia). *Outcome* *to understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration*	Moving On Pupils will learn how to use the skills they have learnt to respond to any challenges they might face when they leave primary school when interacting with the online world. *Outcome* *To understand that people we meet online might not be who they say they are.* *To explore what information and images we should and should not share online.*	Information movement Connecting devices Different audiences Research strategies Search result rankings Acknowledge resources Responsible online communication Informed choices Virus threats Blogs Messaging
Summer 1	Information Technology Using & Applying Skills	My Online Life Pupils will develop their knowledge of social media and how the media can shape our views. They will	Appropriate online tools Audience Atmosphere

	The purpose of the 'Using & Applying' unit is to provide an engaging open-ended project for pupils to apply the skills they have developed by working on other units within the year group. Designed to be completed by pupils in groups working over a number of lessons (such as a final half term), the project incorporates software, skills and aims that have been covered in previous units. Pupils should be encouraged to plan thoroughly first, before dividing the separate tasks required to complete the whole project. Different elements of the project can be completed by different children, combining at the end but communicating and working together as a team throughout. *Outcome* *an opportunity for children in their groups to present their finished projects at the end, either to the rest of the class or even a wider school audience*	also look at online debt from games and how technology can impact on health.	Structure Copyright Information collection HTML code Storing Responsible online communication Informed choices Virus threats Blogs Messaging
Summer 2	Digital Literacy Online publishing Select, use and combine a variety of software to design and create a range of programs, systems and content that accomplish given goals in the context of writing and planning a short documentary film. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Understand computer networks including the internet and the opportunities they offer for communication and collaboration in the context of using the Internet to research their chosen documentary topic. Use a variety of software on a range of digital devices to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information in the context of filming documentaries using digital devices and importing them into video editing software. Use a variety of software on a range of digital devices to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information in the context of planning and executing video interviews recorded using digital devices and importing them into video editing software. Select, use and combine a variety of software on a range of	My Online Life Pupils will develop their knowledge of social media and how the media can shape our views. They will also look at online debt from games and how technology can impact on health.	Information movement Connecting devices Different audiences Research strategies Search result rankings Acknowledge resources Responsible online communication Informed choices Virus threats Blogs Messaging

digital devices to design and create a range of content that accomplish given goals, including presenting information in the context of using video editing software to combine and edit their videos into a finished film.

Select, use and combine a variety of software on a range of digital devices to design and create a range of content that accomplish given goals, including presenting information in the content of adding final touches to turn their videos into a finished film, saving as a movie file and presenting with a screening.

Outcome

plan additional elements for film-making such as locations and props;

evaluate whether information is reliable or not;

speak clearly into the camera when being recorded;

frame an appropriate filming shot when interviewing;

arrange video files to form a complete film