|  | **Autumn** | **Spring** | **Summer** |
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| **Generic Skills** | \*Typing Skills - two hands, multiple fingers\*Switching on / off & logging on / off\*Opening/closing programs\*Mouse control: left click, single click=select, click and drag, double click=execute a command (e.g. open)\*Right click (my best friend) Can this help you solve your problem?\*Pointer (on screen arrow)/cursor (flashing line in text documents)\*Keyboard layout: letters, numbers, backspace, delete\*Tab Key\*Shift-key/caps lock, special characters \*Highlighting copy/cut and paste, alignment, \*Saving and finding work on the server (pupil resources)\* Difference between SAVE and SAVE AS. \*Creating Folders and renaming Files and Folders\*Viewing open windows: minimise, maximise, close, dual screen view\*Printing Documents to most cost effective and eco-friendly printer (black and white / double sided)\*Understanding the Print screen function (especially with regards to social media) \*Use of Paint to edit a print screen and cut/copy into desired application (especially with regards to social media) |
| **Computer Science** | **Introducing Variables in Coding**Explain that variables can be anything you want; it is just a way of storing and using numbers (data) within a program. You can use the Scratch Lesson Plans on the server: Curriculum > Computing > Scratch Lesson Plans > Y5 or Y6 (check with the last teacher where the class got to). Or you can provide children with the Shark Attack Game (Computing Curriculum > KS2 > SoW > Y5 > CS > Shark Attach. This game uses repeat until and sensing. By allowing pupils to follow the crib sheet they will encounter glitches that they should have the knowledge to debug. (E.g. setting the rotational style) The introduction to variables within the crib sheet is clear and simple. Note the extension example files that demonstrate how multiple variables can be used and introduces the Operators scripts. **Variables and selection**Mini Game on the server (same place as Shark Attack). This next game is similar to Shark Attack but uses one way selection, if… then. Allow pupils to play the game. Compare Mini game and Shark attack and discuss the similarities and differences. Both use selection, Shark Attack uses repeat until, Mini game uses one way selection, if…then. Allow time for pupils to create and alter the game to see how the code influences the game. | Now that pupils have experienced sequence, selection and repetition, develop their understanding of the algorithms they are working with by highlighting the difference between sequence, repetition and selection. See Algorithm to Flow Chart Activity (same place as Shark Attack on Server: see left).**Introducing mathematical operators, 2 way selection and variables**If pupils added a timer to the Shark Attack game or their own game they will have some knowledge of mathematical operators.(See Server for these resources: see left for links). The Maths Quiz game allows pupils to develop their understanding of 2 way selection through the use of mathematical operators.Show pupils the Reading Code Notebook and ask them to unpick the output of the code.Give pupils time to explore the two Scratch examples.Question pupils about the questions they want to ask in their maths quiz and instruct them to plan their maths quiz using the planning sheet.Use the planning guide to scaffold pupils through the creation of their quiz. | **Free game design**Provide a range of games for pupils to play and explore the scripts (games on the Server in Computing Curriculum > KS2 > SoW > Y6 > CS >Pong GamrAngry BirdsGolf GameFlappy ParrotSet pupils the challenge to design their own game. Provide a design briefe.g. The game should include:Use of 2 way selection (if…then…else)Variables (they need to assign values)Use of OperatorsProvide planning time for pupils away from the computer and encourage the use of a flowchart to plan out their game. |
| **Information Technology** | **Green Screening**Children to make their own green screen films that have 3 layers (background, actor and animations). Link to topic work and especially literacy.**Blogging**Children to produce their own blog on Eschools (a possible homework activity). Discuss suitable content and link to eSafety work. What are they happy to share online / what is appropriate to share on online? | **Formatting Word documents**Children to use Word to produce a document (e.g. final draft of a poem). Children to format the document with regards to font size and colour, indentations and embedded images.**Produce a radio show**Children to plan, rehearse and record a live radio show to be broadcast through the radio website. Link to topic work (e.g. radio show on the Vikings). Children to record show and then edit show in post-production. All shows can then be broadcast and archived on the radio website. | **Personal Presentation**Children to produce a multimedia presentation using PowerPoint or similar. Encourage children to embed images and videos in the presentation. Link to topic work or residential. |
| **Digital Literacy** | **Strong Passwords**Pupils discuss how to create secure passwords in order to protect their private information and accounts online (with reference to Eschools and Times Table Rockstars).**Digital Citizenship Pledge**Pupils work together to outline common expectations when using digital communication tools (e.g. Eschools chat function). Each member of the class signs a Digital Citizens Pledge.**Staying safe online**Pupils learn that the Internet is a great place to develop rewarding relationships. But they also learn not to reveal private information to a person they know only online. (Individual lesson plans on Server: Curriculum > Computing > Esafety Lesson Plans OrCurriculum > Computing > Computing Curriculum > KS2 > SoW > Y5 / Y6 > Digital Literacy**Super Digital Citizen**Pupils explore Spider-Man's motto, "with great power comes great responsibility" through the lens of digital citizenship. They create comic strip or animation show a digital superhero who witnesses an act of poor digital citizenship, and then helps resolve it (individual lesson plan on server:Curriculum > Computing > Computing Curriculum > KS2 > SoW > Y5 / Y6 > DL | **Privacy Rules**Pupils learn that children’s websites must protect their private information. They learn to identify these secure sites by looking for their privacy policies and privacy seals of approval (padlock in the toolbar)**What’s Cyberbullying**Pupils explore how it feels to be cyberbullied, how cyberbullying is similar to or different than in-person bullying, and learn strategies for handling cyberbullying when it arises.Individual lesson plans on Server (see left for links). Also visit NSPCC and BBC Bitesize websites for a range of up-to-date videos.**What is Spam**Pupils learn what spam is, the forms it takes, and then identify strategies for dealing with it.You could send all the children spam emails and non-spam emails via Eschools and children to discuss the difference. | **Altering Pictures**Pupils learn how photos can be altered digitally. They will consider the creative upsides of photo alteration, as well as its power to distort our perceptions of beauty and health. Children can distort photos of themselves using Paint or Apps on the iPad.**Selling Stereotypes**Pupils explore how the media can play a powerful role in shaping our ideas about girls and boys. They practice identifying messages about gender roles in two online activity zones for children. Individual lesson plan on server (see left for links)**Appreciate how search results are ranked**Discuss basics of how search engines rank their results. Look at website addresses and use of key words to search effectively and safely. See BBC Bitesize for up-to-date videos. You could also use A Packet’s Tale resource on the server (see left for link). |