ST LAWRENCE C.E. PRIMARY SCHOOL SUBJECT MANAGER OVERVIEW

SUBJECT: COMPUTING UNIT: SCRATCH CONCEPT: LEADERSHIP YEAR:2

BIG QUESTION	How can I create program?	
END OF UNIT OUTCOME	An animal story created in Scratch Junior	
NC 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 • 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.	
WEEK	**KEY KNOWLEDGE**	**RESOURCES**
1	Know how to use **technology** safely Know to keep **personal information** private • Playing Games: Year 2 people **online** may try to manipulate others Know how this may make people feel Know how to identify and approach adults who can help Know what personal information is and the importance of not sharing this Know how to recognise different feelings I may encounter online and how my body might tell me something "doesn't feel right" Know how to identify up to four adults in my life who I trust and how to ask them for help if I have a problem online	**T:\Computing\e-safety\ThinkUKnow\2019\ Key Stage 1 2019\Thinkuknow Jessie & Friends Resources**
RICH TASKS	Annotate big question Use Think U know resource - Jessie and Friends. What online games do we know? How can people play online? Share with class. Explain you will be watching a cartoon called Jessie & Friends: Playing Games. • Show the children Picture - Tia and Jem. Imagine Jem has asked Tia for advice about how to stay safe playing an online game called Avelzon. What could she tell him? • Children to individually write their ideas onto post-it notes, and then share them.	

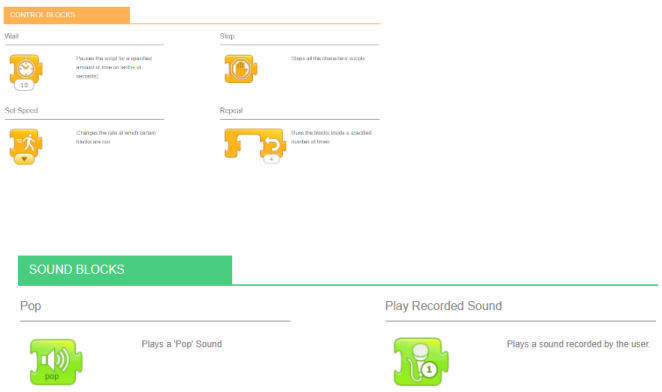
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	Watch the video and discuss what we have seen to check understanding. Put picture of Mo onto the screen. the board/piece of paper. •Show some items that belong to Mo - mobile phone, birthday badge, school jumper, addressed envelope. What personal information is on these objects? (phone also represents phone number) See if children can identify any other personal information which Mo shouldn't be sharing with people he doesn't know online. [eg: username, password, pictures, information about activities such as after school clubs, swimming pools or local leisure centres.] • Inform children that if anyone asks them to share their personal details – both online or offline - they should always tell an adult they trust and they can help. Look at Mo's warning signs - he doesn't think it's a good idea to tell the stranger their power words in the online game - it doesn't feel right. How might he be feeling in his body? Annotate image. If you have a warning sign like this - speak to a trusted adult. Who are your trusted adults? Draw round your hand. You are the thumb. Write down 4 adults who you could speak to if you were worried about something online. How could Mo start a conversation with his trusted adult? Come up with some ideas.	
2	**What is an algorithm?** - algorithms are set of detailed instructions - algorithms are implemented as programs on digital devices **Scratch Junior: Know how each type of block works.** - find out what each does by holding finger on it - each set of blocks are within menus of different types - the green blocks are sound, you can record and use sound blocks - orange blocks are control blocks ("wait", "stop" "change speed" and "repeat") - red blocks are end blocks - use the "end" and "repeat forever" blocks -	

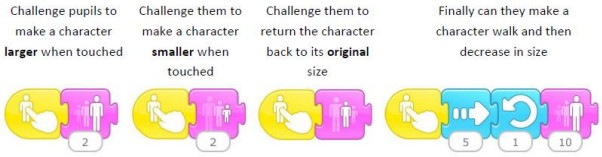
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RICH TASKS	Children create a verbal algorithm for their partner. Their partner has to exactly follow their instructions - model. How can they improve their algorithm? **Scratch Jr** House image – project home page. As you create projects they will appear here Press + to open new or tap on existing project to edit Rename a project – open and then tap yellow tab in top right corner – type name of project and child's name iPad will automatically save your work when you click on house image when returning to home page Recap various blocks (printed and held up) – ask children to complete these commands Create a background, character and use a sound block. 	
3 and 4	**Know how to create a series of code to achieve a given goal.** - computers have no intelligence and do nothing until a program is executed - precise instructions are essential when programming - check for a simple error in Scratch Jr code and correct the code - debug a simple program in Scratch Jr - use logical reasoning to predict the behaviour of simple programs	
RICH TASKS	Create dance routine (see sheet in resources) Use Air Server to show premade example 1. Watch dance routine videos 2. Chn create their own short dance routine that involves some repeated moves. 3. Chn turn their dances into dance algorithms either on whiteboards or using the algorithm planner sheet.	

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	4. Convert Algorithm to Program – one character 5. Add music 6. Add background Once children have followed my instructions to create their dance routine, let them experiment with other routines they can create.	
5	Recap previous learning.	
END OF UNIT OUTCOME	Create an animal story (see sheet in resources) Use Air Server to show premade example 1. Add, delete and rename characters – what characters would be suitable for an animal story? 2. Make characters talk when you touch them 3. Make a character flash show hide & repeat 4. Make characters disappear  6. Add text 7. Moving from one scene to the next 8. Share programs 9. Evaluate programs	

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HELP GUIDE

* Along the top of screen there is: option to display in presentation mode toggle between grid being on or off – helps understand the distances to move

** Cog image just changes language – they do not need to touch this at all – but if it appears in another language, this is what they've done and how to change it back to English!

***Book image top right gives four tabs along the bottom:

1st – background info – not needed

2nd – Interface guide – tap on each numbered section for more information

3rd – paint editor guide – as above for when you are adapting a character in anyway

4th – blocks guide – organised by colour according to the different menus

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Blue "Movement" blocks Once in the programming area tap on the number to change the number of grid squares the character will move. Create a sequence of movements and test
Purple "Looks" blocks You can type in text that the character will say from a speech bubble – max 20 characters which will appear for about 5 seconds You can get the character to grow, shrink and return to normal size, hide and show
Green "Sounds" blocks There is a preset "pop" sound or they can record their own sounds – for which they will need to be taught where the microphone is and how to take the recording. Unwanted recordings can be deleted by holding down on the block in the Blocks Palette and tapping on the red cross that appears.
Orange "Control" blocks 10 is equivalent to 1 second on the wait block; you can change the rate at which certain blocks are run, stop all characters' scripts or repeat the blocks within the repeat block a specified number of times
Red "End" blocks You can choose to end the script, repeat the script forever or change to a specified page of the project