Year 4

(Lower) Key Stage 2 NC Objectives:

- design, write and debug programs that accomplish specific goals; ... solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs;
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating 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
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Area of Computing Curriculum General ICT skills Children should be aware of the basic difference between our standard laptops/PCs, which use a Windows operating system, and our "ChromeBooks", which are "cloud based". A Windows laptop can be used to run Microsoft Word/Powerpoint/Publisher and many other applications, and can save work to the school server. The ChromeBooks are more limited, and save to Google Drive, but are great for accessing online apps, and quicker to boot up. iPads are similar to ChromeBooks, but have their own set of apps, including apps that link to Google Drive. Quick to load, touch screen. Children should develop confidence using both hands when typing – use Dance Mat Typing https://www.bbc.com/bitesize/articles/z3c6tfr Children should be taught/reminded how to access Mathletics/j2e BLAST/timestables.co.uk to practice math skills, including practice for the Year 4 Multiplication Check. Children should be shown how to access Google Classroom, and use to open up and work on 'assignments' (set by the teacher), which are then automatically shared with the teacher. They should be taught how to 'share' with a partner or small group for collaborative working. Teacher Input and Task/s Recap differences between PC, laptop, chromebook and ipads, remind children how to log in to each of these, and discuss advantages and disadvantages. Discuss the different locations of saved	Maths Date Taught
Children should be aware of the basic difference between our standard laptops/PCs, which use a Windows operating system, and our "ChromeBooks", which are "cloud based". A Windows laptop can be used to run Microsoft Word/Powerpoint/Publisher and many other applications, and can save work to the school server. The ChromeBooks are more limited, and save to Google Drive, but are great for accessing online apps, and quicker to boot up. iPads are similar to ChromeBooks, but have their own set of apps, including apps that link to Google Drive. Quick to load, touch screen. Children should develop confidence using both hands when typing – use Dance Mat Typing https://www.bbc.com/bitesize/articles/z3c6tfr Children should be taught/reminded how to access Mathletics/j2e BLAST/timestables.co.uk to practice math skills, including practice for the Year 4 Multiplication Check. Children should be shown how to access Google Classroom, and use to open up and work on 'assignments' (set by the teacher), which are then automatically shared with the teacher. They should be taught how to 'share' with a partner or small group for collaborative working. Teacher Input and Task/s Recap differences between PC, laptop, chromebook and ipads, remind children how to log in to Kahoot quiz	Maths
Teacher Input and Task/s Assessment/Evidence Lesson 1 Recap differences between PC, laptop, chromebook and ipads, remind children how to log in to Kahoot quiz	e Date Taught
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work – folders in studentshare, MyDrive on google cloud, camera roll on ipads. Children to work in pairs, log into a ChromeBook and open GoogleClassroom. Open up blank assignment and create a chart of adv. and disadvantages of PCs, laptops, chromebooks and ipads.	of
Kahoot quiz on what has been learnt.	
Differentiation Peer support for LA T/TA support HA/G&T – include 'where my work is saved' and think about the advantages and disadvantages of cloud based storage.	
Show/remind chn how to access BBC Dance Mat, and discuss the reasons for learning to touch type. Teach/model how to position laptop/keyboard, how to sit, how to hold hands and position fingers in the correct starting position. Teacher to check that children are sitting correctly and using correct fingers to type	
Children to work through the touch typing exercises. Remind children to focus on using correct fingers, not looking at the keyboard, and accuracy over speed.	
Repeat this lesson – 10-15 mins weekly.	
Differentiation T/TA to support as necessary. Chn work through exercises at own pace, developing the skill.	
Recap how to login to Mathletics (either through google using .306, or with Mathletics Username/QR code), and j2Blast (.306). Show timestables.co.uk which has several games to help learn times tables, as well as a practice test in a similar format to the Year 4 Multiplication Check. Class leaderboard	
Give chn time to complete set tasks on Mathletics, have a go at 'playing live' against their classmates, and expore the other areas of the program. Remind children that they should aim to earn a Bronze certificate each week.	
Use Mathletics or timestables.co.uk regularly in maths lessons (once every 2-3 weeks).	
Area of Computing Curriculum Key Skills to Develop/Suggested Activities Key Vocabulary	Cross-Curricula Links
**Digital Citizenship & Online-safety	PSHE
Lesson 4 – Our Digital Citizenship Pledge Lesson 5 – The Power of Words Search Email	

	Lesson 6 – Is Seeing Believing? Might be useful to link in/support the above sessions: Google Be Internet Legends https://beinternetlegends.withgoogle.com/en-gb Resources for Y3/4, structured around five pillars: Sharp, Alert, Secure, Kind, Brave. Interland games for chn to play to reinforce messages.	Send Receive Share Permission Consent	
	Teacher Input and Task/s	Assessment/Evidence	Date Taught
Lesson 1	Rings of Responsibility L.O. To know your responsibilities as a digital citizen Students will be able to: • Examine both in-person and online responsibilities. • Describe the Rings of Responsibility as a way to think about how our behaviour affects yourselves and others. • Identify examples of online responsibilities to others. Teacher Input See https://www.commonsense.org/education/digital-citizenship/lesson/your-rings-of-responsibility Show video, and work through group activities and discussions.	Wrap-up quiz to assess understanding Completed worksheets Posters	
	Key Questions: According to the video, how could throwing a bottle out of your window be similar to something you do online? According to the video, what are the Rings of Responsibility? Have you ever heard the term "digital citizen"? What comes to mind when you hear that term? Task Complete related worksheet giving examples of different responsibilities as a digital citizen. Differentiation HA: To produce a poster showing "Rings of Responsibility" for display SEN: TA support to ensure understanding of key vocabulary — pre-teach if necessary		
	Key Vocabulary: community, digital citizen, responsibility		
Lesson 2	Password Power Up L.O. To understand the need for a strong password Students will be able to: Define the term "password" and describe a password's purpose. Understand why a strong password is important. Practice creating a memorable and strong password. Teacher Input See https://www.commonsense.org/education/digital-citizenship/lesson/password-power-up Key Questions: What is something in your life that you take steps to protect? Why and how do you protect it? Let's think about when we use devices, like a phone or computer. How do you limit who can access something that you want to protect, and why would you limit access? Based on these scenarios, why do you think it is important to have a strong password? Task If Then scenarios – group discussions. Create own Power Password Differentiation SEN: TA support to ensure understanding Key Vocabulary: Password, protection Our Digital Citizenship Pledge	Wrap-up quiz to assess understanding Wrap-up quiz to assess	
	L.O. To think about what makes a positive online community Teacher Input See https://www.commonsense.org/education/digital-citizenship/lesson/our-digital-citizenship-pledge Key Questions: What is a community? What makes a positive community? What online communities are you part of? (All part of Google Classroom) Task Chn work in small groups to create rules/norms for being part of online communities (Google Classroom) by completing the statements: "When I share with others" "When I respond with others" "When I play with others" "When I work with others". Encourage chn to be specific. Plenary Each group to feedback their ideas. CT to write up the rules which chn sign to show that they agree to them. Remind chn that these rules apply whenever they use Google Classroom at school/home.	understanding	

Differentiation		
HA: Scribe for the group SEN: CT/TA support		
The Power of Words L.O. To build empathy for others and learn strategies to use when confronted with cyberbullying. Students will be able to: • Understand that it's important to think about the words we use, because everyone interprets things differently. • Identify ways to respond to mean words online, using S-T-O-P. • Decide what kinds of statements are OK to say online and which are not. Teacher Input See https://www.commonsense.org/education/digital-citizenship/lesson/the-power-of-words Key Questions: Who has heard of the saying "Sticks and stones may break my bones, but words can never hurt me"? Is this true? Why do you think those other players said those things to Guts? What does Guts do in response to the mean words? Teach the acronym S-T-O-P for responding to mean words online. Task Chn complete "Words Can Hurt" handout. Plenary Play Ok/Not OK game. Differentiation	Wrap-up quiz to assess understanding	
SEN: CT/TA support		
Is Seeing Believing? L.O. To build empathy for others and learn strategies to use when confronted with cyberbullying. Students will be able to: Recognize that photos and videos can be altered digitally. Identify different reasons why someone might alter a photo or video. Analyse altered photos and videos to try to determine why. Teacher Input See https://www.commonsense.org/education/digital-citizenship/lesson/is-seeing-believing Show examples of photos and videos that have been altered. What do you think about altering photos? Is it OK to do? Does it depend on the type of alteration? How so? Task Chn analyse photos and videos to try to determine whether they are fake or have been digitally altered, and what the reason for the alteration was. Differentiation SEN: CT/TA support	Wrap-up quiz to assess understanding	
	Key Vocabulary	Cross-Curricular
1 22	-	Links
Google Docs/MS Word Children should continue to use Google Docs and/or MS Word and should develop their touch typing skills through word processing pieces of work from other curriculum areas. They should be able to use the following features: • Open/Save – (understand that google docs autosaves to cloud, within their GoogleDrive, word saves to folders on school server – chn should save into relevant year group folder and be aware of the importance of saving work regularly) • Font style/size/colour • Underline/bold • Delete, insert and replace text using mouse or arrow keys • Word art/text effects • Insert a picture from the internet • Cut, copy and paste text/images (including keyboard shortcuts – CTRL X/C/V) • Use spell checker • Insert a bullet pointed/numbered list • Insert a table, add, delete and re-size rows and columns • Add a page border Google Slides (Powerpoint) Children should work collaboratively on a shared Slides presentation related to another curriculum area. Use features of Docs, plus: • Backgrounds	Font style/size/colour Underline/Bold Word Art/Text Effects Insert Picture Insert Text Box Re-size Cut, copy, paste Delete Backgrounds Transitions Animations Bullet Points Numbering Slides Pie/Bar Chart Hyperlink Video Sound	Word Processing Literacy – Jessie poems Data Processing Science??
	HA: Scribe for the group SEN: CT/TA support The Power of Words L.O. To build empathy for others and learn strategies to use when confronted with cyberbuiltying. Students will be able to: Understand that it's important to think about the words we use, because everyone interprets things differently. Identify ways to respond to mean words online, using S-T-O-P. Decide what kinds of statements are OK to say online and which are not. Teacher Input See https://www.commonsense.org/education/digital-citizenship/lesson/fihe-power-of-words Key Questions. Who has heard of the soying "Sticks and stones may break my bones, but words can never hurt me"? it hirs true? Why do you think those other players soil those things to Guts? What dose Suts do in response to the mean words? Teach the ocronym S-T-O-P for responding to mean words online. Task Chn complete "Words Can Hurt" handout. Plenary Play Ok/Not OK game. Differentiation SEN: CT/TA support Is Seeing Believing? L.O. To build empathy for others and learn strategies to use when confronted with cyberbuiltying. Students will be able to: Recognize that photos and videos can be altered digitally, Identify different reasons why someone might alter a photo or video. Analyse altered photos and videos to try to determine why. Teacher Input See https://www.commonsense.org/education/digital-citizenship/lesson/is-seeing-believing Show examples of photos and videos that have been altered. What do you think about altering photos? Is it OK to do? Does it depend on the type of alteration? How so? Task Chn analyse photos and videos to try to determine whether they are fake or have been digitally altered, and what the reason for the alteration was. Differentiation SEN: CT/TA support Key Skills to Develop/Suggested Activities Google Docs/MS Word Chnidren should continue to use Google Docs and/or MS Word and should develop their touch typing skills through word processing pieces of work from other curriculum areas. They should be able to use the following features: Open/Save—u	The Power of Words L.O. To build empathy for others and learn strategies to use when confronted with cyberbullying. Students will be able to: Understand that it is important to think about the words we use, because everyone interprets things differently. Identify ways to respond to mean words online, using S-T-O-P. Decide what kinds of statements are OK to say online and which are not. Teacher Input. See https://www.commonsense.org/education/digital-citzenship/lesson/the_gower-of-words See https://www.commonsense.org/education/digital-citzenship/lesson/the_gower-of-words See https://www.commonsense.org/education/digital-citzenship/lesson/the_gower-of-words See https://www.commonsense.org/education/digital-citzenship/lesson/the_gower-of-words See https://www.commonsense.org/education/digital-citzenship/lesson/the_gower-of-words See https://www.commonsense.org/education/digital-citzenship/lesson/the_gower-of-words See https://www.commonsense.org/education/thesson/the_gower-of-words See https://www.commonsense.org/education/digital-citzenship/lesson/the_gower-of-words Wrap-up quiz to assess understanding Wrap-up quiz to assess understanding to mean words Task Differentiation See: Not. Cit Alia support See https://www.commonsense.org/education/digital-citzenship/lesson/the-seeing-believing Show examples of photos and videos to try to determine why. Teacher Input See https://www.commonsense.org/education/digital-citzenship/lesson/the-seeing-believing Show examples of photos and videos to try to determine why. Teacher input See https://www.commonsense.org/education/digital-citzenship/lesson/the-seeing-believing Show examples of photos and videos to try to determine why. Teacher input See https://www.commonsense.org/education/digital-citzenship/lesson/the-seeing-believing Font style/size/colour Font sty

	Data Processing (j2e) Use j2Data (Chart) to produce pie/bar/line charts – related to maths/science		
	Teacher Input and Task/s	Assessment/Evidence	Date Taught
Lesson 1	L.O. To insert a table into GoogleDocs, add, delete and resize rows and columns Teacher Input/Task	GoogleDocument, saved in GC, marked by teacher	Date raugiit
	Demonstrate how to use GoogleDocs to create a reading record chart, to be added to over the year. (Teacher to set up as an assignment in Google Classroom) Include a title, in large font of own choice/colour Insert a table, consisting of columns for book title, author, comments, rating, date Show how to add rows Complete first row for current book Add image of current book to book title box		
	Give document a title (auto saved) "Turn in" document for teacher to 'mark' Explain that children should add books to this document as they read them, and then turn in		
	regularly (every Friday) for teacher review.		
Lesson 2	L.O. To work on a shared GoogleSlides presentation (cc. Geography – Reasons to Visit the Coast)	GoogleSlides, saved in GC, marked by teacher	Taught as Home Learning April 2020
	Teacher Input Remind chn how to open up a shared assignment, and recap the rules for working collaboratively — only work on your own slide, no deleting or editing others' work. Explain that the teacher is able to see all edits, and who has done what! If children accidentally alter someone else's work, they should try to use undo/tell the teacher immediately.		
	Task Children should: Add a slide to work on Change the background Create an interesting and informative slide on a Coastal Region of their choice Insert relevant images – use google search		
	Differentiation LA to work in pairs G&T to offer peer support		
Lesson 3	L.O. To add hyperlinks and sound to a GoogleSlides presentation	GoogleSlides, saved in GC	Taught as Home Learning
	Teacher Input Demonstrate how to add a hyperlink to their slide to a relevant video or website, giving further information about a particular aspect Show how to select an audio file and add this to the slide		April 2020
	Task Children to add hyperlink and audio to own slide created last lesson		
	Differentiation LA to work in pairs G&T to offer peer support		
Lesson 4	L.O. To create own engaging GoogleSlides presentation (cc Geography – Coastal Regions Comparison)	GoogleSlides, saved in GC, peer evaluated	
	Teacher Input Explain that over the next few lessons the children will be creating their own presentation, to showcase the Coastal Regions of Brighton, Malaga and Rio, ending with a recommendation as to which to go to for a holiday. They also need to show their skills in computing, including as many features of GoogleSlides as possible. Generate a list of WMG Slideshow, to be used for peer evaluation.		
	Task Children to create first slide, about Brighton, including images, text, colour and a hyperlink. Show their slide to a partner, to evaluate against WMG – WWW/EBI. Give time to respond.		
Lesson 5	L.O. To add a table (cc Geography – Coastal Regions Comparison)	GoogleSlides, saved in GC	
	Teacher Input Model how to add a table with two columns: Reasons to go to Rio, Reasons Not to go to Rio		
	Task Chn to use the internet to research Rio de Janeiro, and add a table to their presentations with reasons to go/not to go.		

	G&T: Add images and hyperlink		
Losson C	L.O. To add transitions and animations	GoogleSlides, saved in	
Lesson 6	(cc Geography – Coastal Regions Comparison)	GC GC	
	Teacher Input Model how to 'animate' an image, for example to 'fly in' to the screen, and how to add		
	'transitions' between slides.		
	Task		
	Chn to use create a postcard from Malaga, image and text. Animate these. Then add transitions		
	between their slides, and run through as a presentation.		
	G&T: Chn record themselves reading out their postcards, using the iPads, import the audio file into		
	their GoogleDrive and then add to their Slide		
Lesson 7	L.O. To add bullet points/numbered list (cc Geography – Coastal Regions Comparison)	GoogleSlides, saved in GC	
	Teacher Input Model how to add bullet points and change the shape/style.		
	Woder now to dud banet points and change the shape, style.		
	Task Chn to make their recommendation as to which coastal region to visit, backing up with bullet		
	pointed reasons.		
Area of Computing Curriculum	Key Skills to Develop/Suggested Activities	Key Vocabulary	Cross-Curricular
Programming	Chn should recap sequence, loops/nested loops, and be taught to use events/conditionals	Algorithm	Algorithms
	'if/else' 'while' statements (https://www.bbc.com/bitesize/articles/z23q7ty). They should have experience with controlling or simulating physical systems, such as Microbits.	Sequence Decomposition	
	They should have experience with controlling of simulating physical systems, such as whereasts.	Block Programming	
	Suggested activities:	Debugging	
	Code.org Express Course (Lessons 9 - 15 - Loops, Conditionals, If/Else, While, Until)	Sprite Costume	
	https://studio.code.org/courses	Co-ordinates	
	Teacher to log in through Google, and import class, chn can then login through google using .306 - allows teacher to monitor progress. Chn can work in pairs, by selecting their partners name to	Goto Commands	
	work as a team. (See Drive for Lesson Overviews)	Code	
	And/or Programming projects with Scratch	Loops/Repetition Nested Loops	
	For ideas see Code-It Website http://code-it.co.uk/	Events/Conditionals	
	See Drive for Code-it Workbook with printable sheets for chn; choose projects from Code Book 2 for chn at expected level (Book 3 for above), e.g. Maths Quiz, Slug Trail Game	If/Else While	
	Tor criff at expected level (Book 3 for above), e.g. Matris Quiz, slug Trail Gaine	wille	
	BBC Microbit Projects https://makecode.microbit.org/ e.g. Flashing Heart, Dice		
	Teacher Input and Task/s	Assessment/Evidence	Date Taught
Lesson 1	Code.org Express Lesson 9 – Loops (Snowflakes with Ana and Elsa) L.O. To break apart code into the largest repeatable sequences using both loops and nested	Can you make everything	
	loops. Recognize the difference between using a loop and a nested loop. Describe when a loop,	a nested loop can with just a normal loop? Can	
	nested loop, or no loop is needed.	you draw out an	
	Teacher Input	example? Answer: Yes, you can, but	
	Begin by asking chn what they can remember about coding from Year 3. What vocabulary did they	it is a lot more difficult.	
	learn? What is meant by: Algorithm	Nested loops make programs simpler.	
	Sequence	programs simpler.	
	Code Decomposition		
	Debugging		
	Loop		
	Nested Loop Remind chn how to log in to code.org (through google) and go back to the video on Nested Loops,		
	in Lesson 8, Step 3. Work through some of Lesson 8 together as a recap. Show chn how to get to Lesson 9 and set them to work through in pairs.		
	Task Complete Express Course Lesson 9 in pairs.		
	Differentiation		
	LA/SEN Peer/adult support as necessary. Some won't complete the whole lesson.		
Losson 3	G&T to be paired with each other and move on to Course D Lesson 8 as an extension.		
Lesson 2	Code.org Express Lesson 10 – Loops (Looking Ahead With Minecraft) L.O. To define circumstances when certain parts of a program should run and when they shouldn't. Determine whether a conditional is met based on criteria.		
	To show to work		
	Teacher Input	<u> </u>	<u> </u>

Gather the class together and ask two volunteers to walk straight in some direction in the classroom. If they encounter a chair out of place, they must step over it. If they reach a wall, they must sit down. Once all of the students are sitting down, ask how you would program a robot to respond to a wall or a chair. Remind students that you cannot simply say "Step over chair" unless you know there is a chair, and you will not always know there is a chair. It might be helpful to translate the task into instructions like: while there is a path ahead o walk forward o if there is a chair, step over it sit down Tell students they will be using conditionals during this lesson. Give the definition of: Condition: A statement that a program checks to see if it is true or false. If true, an action is taken. Otherwise, the action is ignored. • Conditionals: Statements that only run under certain conditions. Open up a discussion of when you might use a conditional in your code. Task Complete Express Course Lesson 10 in pairs. Differentiation **LA/SEN** Peer/adult support as necessary. Some won't complete the whole lesson. **G&T** to be paired with each other and can move on to https://code.org/minecraft when finished Code.org Express Lesson 11 - Conditionals (Looking Ahead With Minecraft) Lesson 3 Select one person to L.O. To translate spoken language conditional statements into a program. Solve puzzles using a stand in front as the combination of looped sequences and conditionals. Caller. The Caller chooses a condition and asks everyone who meets that **Teacher Input** Pull up puzzle 9. Ask the class what the bee should do when it gets to the cloud. The bee should condition to take a step forward. If you have a red use a conditional to check for a flower or a honeycomb. Use the if at flower / else block. Ask the class what the bee should do if there's a flower. If there's not a flower, there will be a honeycomb. belt, step forward. If you are wearing sandals, take What should the bee do then? The bee should get nectar if there is a flower and make honey if there is a honeycomb. a step forward. Try switching it up by saying Fill in the rest of the code and press Run . Discuss with the class why this worked. things like "If you are not blonde, step forward." Complete Express Course Lesson 11 in pairs. Differentiation LA/SEN Adult support as necessary to work on the verbal concept of if/else (unplugged). **G&T** to be paired with each other Code.org Express Lesson 12 – Conditionals (While Loops with the Farmer) What is the difference Lesson 4 L.O. To distinguish between loops that repeat a fixed number of times and loops that repeat as between a while loop and long as a condition is true. Use a while loop to create programs that can solve problems with a normal repeat loop? unknown values. Give an example of a puzzle where you would **Teacher Input** use a while loop, but not Introduce 'while' command: "While there is a hole, fill it with dirt". What does "while" mean? use a repeat loop. Can What would they do? How long would they do that? When you use a word like "while", you are you give an example of a relying on a condition to tell the computer how long the loop should run. A condition is a puzzle where you would use a repeat loop, but not statement that is tested and found to be true or false. In the case above, the condition is if there is a hole. It's only possible for there to be a hole or for there not to be a hole, thus the statement is a while loop? only ever true or false. While loops allow the programmer to repeat a command as long as a condition is still true. In the previous example, the condition is the existence of a hole. Task Complete Express Course Lesson 12 in pairs. Differentiation **LA/SEN** Adult support as necessary to work on the verbal concept of while (unplugged). **G&T** to be paired with each other Code.org Express Lesson 13 – (Conditionals in Minecraft: Voyage Aquatic) Lesson 5 Ask a child to lead the L.O. To determine whether a conditional is met based on criteria. class in carrying out some conditional statements, **Teacher Input** e.g. if you are a boy, jump Recap what is meant by a 'conditional' (a statement that only runs under certain conditions). What 3 times. examples have we learnt? (While, if/else). Explain that today is another Minecraft activity to gain further practice with conditionals. Task Complete Express Course Lesson 13 in pairs. Differentiation **LA/SEN** Adult support as necessary to work on the verbal concept of if/else/while (unplugged). **G&T** to be paired with each other

Lesson 6	Code.org Express Lesson 14 – Conditionals (Until Loops in Maze) L.O. To build programs with the understanding of multiple strategies to implement conditionals. Translate spoken language conditional statements and loops into a program.	What's the difference between an until loop and a while loop?	
	Teacher Input Explain that today we will be creating loops that only run until a condition is true. For example: Have students touch their nose until you tell them to stop. Go through Lesson 14, Step 4 as a		
	whole class. Task		
	Work through Express Course Lesson 14 in pairs.		
	Differentiation LA/SEN Adult support as necessary to work on the verbal concept of if/else/while/until (unplugged). G&T to be paired with each other		
Lesson 7	Code.org Express Lesson 15 – Conditionals (Harvesting with Conditionals) L.O. To pair a loop and conditional statement together.		
	Teacher Input Share the backstory: The harvester is trying to pick crops like pumpkins, lettuce, and corn. However, the farmer has forgotten where she planted these crops, so she needs to check each plant before harvesting.		
	Task Work through Express Course Lesson 15 in pairs.		
Lesson 8	BBC MICROBITS		
	Teacher Input/Task Introduce BBC Microbit, https://microbit.org/get-started/first-steps/set-up/ and demonstrate what it can do. Guide chn step-by-step to code simple programs and download to Microbit: https://microbit.org/get-started/first-steps/leds-and-buttons/		
	Ext: Create a Dice that generates a random number between 1-6 when the Microbit is shaken.		
Area of Computing Curriculum	Key Skills to Develop/Suggested Activities	Key Vocabulary	Cross-Curricular Links
Digital Media, Communication & Collaboration	Film/Animation Use Zu3D/CloudStopMotion software (on iPads or Laptops with camera/webcams) to create a short film or animation. See Zu3D website for tutorials and ideas. https://www.zu3d.com/films/areas/tutorial/ https://cloudstopmotion.com/ Publish (blog) work to GC. Once teacher has moderated this, the children can then peer assess by adding comments on each other's work (comments will also be moderated). Use Google Classroom to access/share resources/add comments Websearching Use keywords to search for information/images related to topic.	Animate Frame Copy Delete Onion Layer Publish/Blog Moderate Green Screen	Websearching History Geography
	Teacher Input and Task/s	Assessment/Evidence	Date Taught
Lesson 1	L.O. To use Google Classroom to post and comment. Explain that Google Classroom can be used for posting comments about our learning. Go over rules for this: Comments must be linked to the learning. No inappropriate comments. Stress that all comments are logged and moderated and teachers will delete anything inappropriate, and may block the user if necessary.	Recap the rules for posting comments.	March/April 2020 (Home learning period)
	Task: Chn to use time to log in to GC, upload an appropriate image saved from the internet, and then comment on each other's pictures.		
	Differentiation HA: to support LA/SEN SEN: Peer support		
Lesson 2	L.O. To create a short stop-motion animation using digital characters	Save and Export Animations	
	Teacher Input Use j2e JIT ANIMATE or Lgfl Stop Frame Animator https://content.lgfl.org.uk/secure/stopframe/ to recap how to animate, starting with creation of a background, and then planning the movement. Stress that animations take time and should not be rushed. They will need many frames to make a few seconds of film. Show some good examples from previous year. Generate a list of WMG animation.		
	Task Children work in pairs to create an animation of their choice. Show finished piece to another pair, who should evaluate based on the criteria.		
Lesson 3	L.O. To create a short stop-motion animation using physical characters (whole day project)	Save and Export	
	Teacher Input/Task	Animations	

FAIRCHILDES PRIMARY COMPUTING CURRICULUM		
Show Zu3D tutorial videos on making stop motion animations, and how to use the software. Put children into groups, and set the task of producing an animation showing the Viking invasion of Lindisfarne (or other scenario). Children should start with a group discussion, breaking down the task into sections (decomposition). What will need to be done? How will they sub-divide the group? Discuss initial thoughts as a whole class. Guide groups to come up with following list of tasks as a minimum: draft a storyboard, design backdrop, practice using software, practice moving objects carefully, test runs, final recording, evaluation.		