

Teaching Sequence

Date	Phase 1 Retrieve Knowledge What do they already know/remember: questioning, Flashback 4	Phase 2 Direct Teaching Learning Objective	Phase 3 Application		Phase 4 Review Assessment Outcomes e.g. AfL, Quiz questions, knowledge organiser, assessment Project etc.
			Main Teaching and Learning i.e. direct teaching, modelling, questioning, Speak Well Structure, resources etc.	Differentiated Provision for SEND/INA	
Wk 1	Order pics about switching a computer on and off.	To use a computer independently.	Log on to the system independently. Ensure everyone is able to log on, open a program, close it, log off and shut down correctly. Re-cap the names of each component and the common keys on the keyboard (include the windows button). Introduce coding - Hour of code Minecraft – video and adventure.	Adult support.	
Wk 2	What is coding? What is it used for? Is it similar to anything else?	To use logical reasoning to predict the behaviour of simple programs (algorithms)	Human Crane activity (unplugged) Teacher explains that the automatic crane has broken down and that the children need to program it to move building blocks as shown on the challenge cards. They program it by arranging the action cards in order. The crane hand always starts above the left hand bowl. Challenge cards are ranked in order of complexity 1-12. Pupils sets up the bowls and block(s) as shown on the challenge card. One pupil creates algorithm of instructions to solve the challenge by arranging the cards in the order that will complete the challenge card task. Other pupil then checks to see if their instructions are correct by being the robot arm. Pupils then take a picture of their algorithm to record their work or ask teacher to view it before moving on to the next challenge and swapping roles. Pupils are allowed to use the block(s) to help them create their algorithms	Mixed ability pairs	
Wk 3	Flashback 4 activity	To use a range of inputs and selection within an algorithm	Hopscotch App Introduce the word input and explain to pupils that inputs are important as they allow the user to interact with technology. Explain that when a user interacts with the input , a message is sent inside the application or item of technology to make an action happen. Use a picture of an oven or toaster to explain this <i>i.e. The dials on the front are inputs as they allow someone to send a message to turn the</i>	Since the word input may be unfamiliar to pupils, when asking them to identify the inputs a good question to use is ' How do you use this? ' Pupils are likely to then say 'You touch the screen...' etc	

			<i>oven/toaster on and set its temperature. You may also show your phone and demonstrate interacting with it – dialing the school for example.</i> Lead a discussion with pupils on what inputs they can see on pieces of technology in the classroom around them. Write up their responses on a flipchart and discuss these – pupils may notice the interactive whiteboard, keyboard, mouse etc. Partner or individual work: Pupils should identify the different inputs on the devices shown in the four pictures on the worksheet (resources below). Model this before pupils start on the activity by explaining that one input for the computer is using the mouse.	which enables you to explain that this means the screen is an input as it enables users to be interactive with the piece of technology.	
Wk 4	What does edit mean?	To create a background using edit and paint.	Introduction to scratch - introduce pupils to Scratch software, allow children to explore the simple functions. Make links to the hour of code website that they explored during the first lesson.	Adult support	
Wk 5 and 6	Explain to a friend how to change the background.	To select a sprite and program it to glide across the screen on command	Scratch – Tell a story Chn design and create characters that interact with each other and the background. • Demonstrate a completed scratch animation and discuss its effectiveness and how it was created. • Story board and draw the characters and backgrounds (unplugged) • Create characters and backgrounds in Scratch • Code characters to glide, add dialogue and sound • Change background using delay to fit in with story • Peer evaluation, discuss as a class each game and identify positive features and possible improvements	Mixed ability pairs	