Beech Hill Primary School Knowledge Organiser

Topic: Computing – Computer Science	Year group	Term
Discovery Coding: Simple Inputs	Year 1	Summer 2 5 sessions

Background knowledge
Children will have already completed one Espresso unit in the Spring Term where they learned to click and drag objects to make events happen. They will have also learned about giving instructions in computer science when programming Bee Bots.

What should I already know?
Show resilience and perseverance in the face of challenge. I learn and use new vocabulary. I will use a range of resource to work on my fine motor skills. Shape. Set and work towards simple goals. Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. I will use i-pads to complete a simple program. I can use the whiteboard to complete simple programs independently. I will write instructions.

National Curriculum Objectives / Key Skills	The Journey
Pupils should be taught to: * 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 purposefully to create, organise, store, manipulate and retrieve digital content	1. To combine start events and click events to make a simple game. (Burst the Bubbles) 2. To combine start events and click events to make a simple game. (Catch the fish) 3. Can you explain your code to your partner? (Magic Castle) 4. To combine start events and click events to program cars and emergency vehicles in an animated traffic scene. (Emergency) 5. Debugging: Use your coding knowledge to fix the mistakes in a variety of programs.

Links to CAS progression pathways	
Programming and development • Knows that users can develop their own programs, and can demonstrate this by creating a simple program in an environment that does not rely on text. • Executes, checks and changes programs. • Understands that programs execute by following precise instructions. *Links to Curriculum for Excellence* • I understand that sequences of instructions are used to control computing technology. • I can develop a sequence of instructions and run them using programmable devices or equivalent.	

Outcomes
An overview of what children will know / can do Working towards: Children will practise coding activities where there is a mixture of start events and click events. They will start to understand the use of the hide block. They will select characters to start and characters to click in their own app. Expected: Children will be combine start events and click events including hiding. They will make their own apps using start and click events, backgrounds, characters. Exceeding: Children will be combine start events and click events including hiding by making their own apps with backgrounds and characters that match. The children will debug errors in codes.

Key Vocabulary

1. code, object, action, click, start event, click event
2. click, start, click event, start event, code, object, action
3. object, action, click, start, code
4. object, action, click, start, stop, code

Key people / places

"Writing code is a young person's job." Michael Crichton

Question of the week.

1. Can you explain how your code works by finishing these sentences? 'I used a click event to...', 'I used a start event to...'.
2. Can you explain your code to your partner?
3. How is this game similar to the one you made? How is it different?
4. What could you make these transport objects do?
5. What does it mean to debug a code?