Medium Term Unit Planning

Topic Name: Computing (Bewdley)	
Learning outcome: To create an animation all about the history of Bewdley, in the style of 'Horrible Histories', using Scratch.	
Hook: To watch Horrible histories videos, identifying the key features of a good animation.	**Topic Showcase (e.g. display, museum, performance, presentation):** Presenting each other's final animations.
Oracy: Children to present their Scratch animations to the rest of Year 5.	**Key Vocabulary:** Scratch, programming, algorithm, debugging, coding, sprite, backdrop, operations.
Key Texts (whole class reading/end of the day book/Talk for Writing Texts etc.): • Coding for Kids by Carol Vorderman	
Citizenship/Community Opportunities (Focus – change in attitude/increase knowledge and awareness/make a difference): Opportunities for friends/family to play the Scratch games.	
Experiences/Visits/Visitors Visit from an animation designer.	
Main subjects covered: Computing	
Computing threshold concepts: **Code** This concept involves developing an understanding of instructions, logic and sequences.	

Medium Term Unit Planning

Notes: This scheme of work will be linked directly to our 'Bewdley' topic. The children will use their design and computing skills to create their own Scratch animation to communicate the history of their local town.			
Lesson title and learning Intention	**Threshold concepts (success criteria)**	**Milestones (success criteria)**	**Lesson structure/differentiation**
1. To plan an animation.	**Code** This concept involves developing an understanding of instructions, logic and sequences.	Combine the use of pens with movement to create interesting effects.	Explain the end goal to the children (to create an animation in the style of 'Horrible Histories' about the history or Bewdley). Children to work in pairs to plan their animation on a storyboard, deciding on backdrop and sprite designs and how their animation story will progress. Children to explore Scratch and how the design process works.
2. To create appropriate animations for a story scene.	**Code** This concept involves developing an understanding of instructions, logic and sequences.	Set IF conditions for movements. Specify types of rotation giving the number of degrees.	Recap coding, algorithms and debugging. Re-introduce Scratch, what can the children remember? Children to

Medium Term Unit Planning

			select appropriate characters or objects to fit within a scene, use rapid costume changes for a motion effect, use 'repeat' command to create gradual movement and use a succession of 'glide' commands.
3. To structure and control the timing of events.	**Code** This concept involves developing an understanding of instructions, logic and sequences.	Use IF THEN ELSE conditions to control events or objects. Set events to control other events by 'broadcasting' information as a trigger. Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions.	Children to use the 'broadcast message' block correctly, use the 'receive broadcast' block correctly and combine broadcasts in code to sequence actions.

Medium Term Unit Planning

4. To control when objects need to be visible.	**Code** This concept involves developing an understanding of instructions, logic and sequences.	Change the position of objects between screen layers (send to back, bring to front).	Children to locate and insert the 'show' and 'hide' blocks in a script, locate the correct place for a sprite to appear visible and make a sprite invisible when it is not active in the code.
5. To sequence events to create a story narrative.	**Code** This concept involves developing an understanding of instructions, logic and sequences.	Set events to control other events by 'broadcasting' information as a trigger. Use lists to create a set of variables.	Children to order a series of backdrop settings, narrate events with required timing and program the use of a button to change the backdrop.
6. To add voice sounds to enhance an animated story.	**Code** This concept involves developing an understanding of instructions, logic and sequences.	Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.	Children to record my own voice sounds, insert blocks to play my recordings, match the timing of sounds with speech bubbles and match character expression with speech.
7. To add interactive user features to a scene or story.	**Code** This concept involves developing an understanding	Combine the use of pens with movement to create interesting effects.	Children to add a sprite which remains hidden from the start, make a sprite

Medium Term Unit Planning

	of instructions, logic and sequences.	Change the position of objects between screen layers (send to back, bring to front). Use the Boolean operators () < () () = () () > () ()and() ()or() Not() to define conditions. Use the Reporter operators () + () () - () () * () () / () to perform calculations. Pick Random () to ()	visible on a particular key press, make a sprite invisible again after being animated and control the timing of interactive features.

Medium Term Unit Planning

		Join () () Letter () of () Length of () () Mod () This reports the remainder after a division calculation Round () () of ().	