Subject- Computer

Threshold Concepts and Milestones

Threshold Concept		Year 2	Content
Code This concept involves developing an understanding of instructions, logic and sequences.	**Motion**	Control motion by specifying the number of steps to travel, direction and turn.	• Children program beebots to navigate a maze. • Children use the advanced stages of "2go" in Purple Mash to navigate mazes using diagonal, horizontal and vertical movments. They also program a sequence of commands rather than individual movments.
	Looks	• Add text strings, show and hide objects and change the features of an object.	• Children create their own games in Espresso Coding, adding in buttons or key presses for movment. • Children learn how to add backgrounds and adjust the size and shape of objects within their games. • Add text strings to notify players of a game being over.
	Sound	• Select sounds and control when they are heard, their duration and volume.	• Children add sounds to conditional events in Espresso Coding • Children use the "2Beat" and "2Sequence" to create rhythm and looped melodies.
	Draw	• Control when drawings appear and set the pen colour, size and shape.	• Children create a picture using a particular art style such as pointillism using "2Paint a picture". They adjust water amount, dot size and colour combinations.

	Events	• Specify user inputs (such as clicks) to control events.	• Children complete sections 2a (inputs) and 2b (buttons and instructions) on Espresso Coding.
	Control	• Specify the nature of events (such as a single event or a loop).	• Using Espresso coding, children learn how to loop movements of objects within their apps.
	Sensing	• Create conditions for actions by waiting for a user input (such as responses to questions like: What is your name?).	• Whilst children create app based games in Espresso coding, they are required to create a controllable object or character that is moved via key press or button press. • Children practise using databases to play a game of guess who.
Connect This concept involves developing an understanding of how to safely connect with others.		• Participate in class social media accounts (Class Dojo). • Understand online risks and the age rules for sites.	• In year 2, children have an opportunity to use "2email" and "2blog" to create virtual social media posts and messages. • Children watch "band runner" series that covers aspects such as sharing images and videos, meeting people online and how to deal with cyber bullies
Communicate This concept involves using apps to communicate one's ideas.		• Use a range of applications and devices in order to communicate ideas, work and messages.	• In year 2, children have an opportunity to use "2email" and "2blog" to create virtual social media posts and messages. • Using "2connect" to share ideas within a class on a given topic
Collect This concept involves developing an understanding of databases and their uses.		• Use simple databases to record information in areas across the curriculum.	• Children practise using databases in Purple Mash to play a game of guess who. • Children use "2count" to create charts and data based on their science work