Beech Hill Primary School Knowledge Organiser

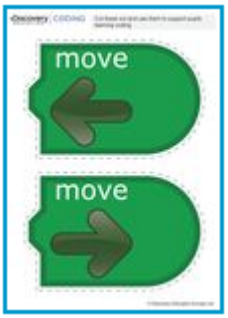
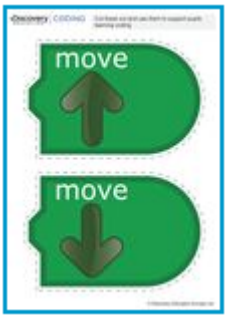
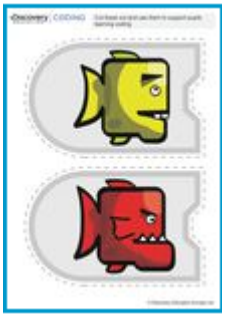
Topic: Computing – Computer Science	Year group	Term
Espresso On The Move	Year 1	Spring 2 6 sessions

Background knowledge
Children will have learned about coding physical objects (Bee Bots) in the Autumn Term.

What should I already know?
Articulate their ideas and thoughts in well-formed sentences. • Connect one idea or action to another using a range of connectives. • Use talk to help work out problems and organise thinking and activities explain how things work and why they might happen. • Use new vocabulary in different contexts. • Share their creations, explaining the process they have used. • Use a range of small tools, including scissors, paintbrushes and cutlery.

National Curriculum Objectives / Key Skills	The Journey
<u>Subject intent</u> To stay safe online and understand the positives and negatives of being online. Develop basic computing skills to prepare for the world of work. To understand what algorithms are and how they are expressed using symbols. To create and change simple programs. I know what an algorithm is and I can express simple algorithms using symbols. I can create a simple program. I can run, check and change programs.	1. To understand that when a computer does something it is following instructions called code. 2. Practise giving instructions to make objects on the screen move when the program starts. 3. Learn how to make objects move when they are clicked. 4. Practise coding to make things move when they are clicked. 5. Learn to add your own images and make them move when the program starts up. 6. Learn to add your own images and make them move when they are clicked.

Outcomes
An overview of what children will know / can do Working towards: Pupils learn that programs work by following clear instructions. With help, they begin to drag and click objects to make simple programs work on their screen. Expected: Pupils learn that programs work by following clear instructions. They are introduced to the fact that programs respond to inputs to do different things. The children begin to make their own examples of programs which use these inputs. Exceeding: Pupils learn that programs work by following clear instructions. They are introduced to the fact that programs respond to inputs to do different things and the children can use a range of inputs including directions, clicks, drags. The children can make their own examples of programs which use these inputs.

Key Vocabulary	Timeline / Diagrams
Algorithm - The set of steps to solve a problem. Click – Use the mouse buttons to give the computer instructions. Code - A list of commands in a computer program. Directions – up down left right Drag – To hold down the mouse button and move an object. Object - Something on screen, in Espresso coding an object can be a picture, a button or a piece of text. Program - A set of instructions in a programming language or code that tells a computer what to do. Run - To make a program follow its instructions.	  

Key people / places
"Writing code is a young person's job." Michael Crichton

Assessment questions / outcomes
If we want a computer to do something, what do we have to give it? In which directions could you move the wizard? What can you do with a mouse to make objects move? What things can you add to your own programme? How can you make your objects move in a different order?