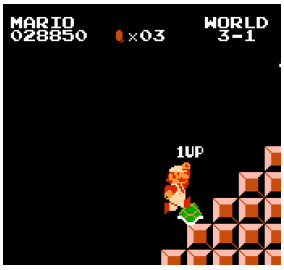
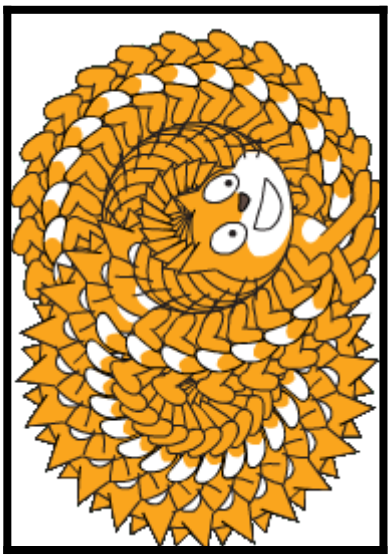
Year 4 Computing Knowledge Organiser- Programming

Prior Learning: instructions as algorithms, instructional language, understanding 'debug' as correcting mistakes in programing.

Facts	Vocabulary
1. **What is an algorithm?** • An algorithm must follow a logical sequence. • A sequence is a series of logical steps that must be carried out in a specific order.	1. Variable 2. Loop 3. Repeat
2. What is a variable? • A **variable** is something that can be changed. • In **computer** programming we use **variables** to store information that might change and can be used later in our program. • Variables could be used to store the score in a game, the number of cars in a car park or the cost of items on a till. • If you were programming a computer game, you could make a variable called **'score'**. This would store information about the number of points you have won during a game. • A supermarket till uses variables to store information about all the items you buy. As more items are scanned the variable's total would **increase**. • Automated barriers in a car park use variables to count cars in and out. These can then be used to see if there is any space to let more cars in.   	3. **What is a loop?** A **loop** is a sequence of instruction s that is continually **repeated** until a certain condition is reached. In Scratch, "Forever" blocks are used to create loops.  
Youtube: https://youtu.be/xPlGz7WPYH4 Variables in Playlab	