Computing Knowledge Organiser

Unit

Spheros

Topic Overview

Children will programme a sphero using algorithms. They will learn how to draw instructions and how to use blocks to create an algorithm. Once they have mastered this they will begin to tinker with sound, colour and speed. They will also begin to debug their algorithms by finding, removing or correcting any errors.

Key Vocabulary

algorithm	An algorithm is a set of sequenced instructions or rules for solving a problem or completing a task in logical order.
animate	To bring something to life through interactive features, such as moving objects, sounds and buttons.
debug	To find, remove or correct errors in a computer programme.
deconstruct	Breaking down existing algorithms into smaller parts to see what they do
sequence	The order in which a set of instructions are performed or carried out.

Learning Objectives

- Plan a program using a block language which includes appropriate loops to produce a given outcome
- Debug errors in increasingly complex programs to accomplish specific goal
- Independently decompose a problem into smaller steps in planning a project

Key Skills

- Using blocks to create an algorithm
- Debugging errors to improve an algorithm
- Working collaboratively to plan their own project.