Lodge Farm Primary School- Knowledge Organiser

Computing Topic: Coding 2.1

Year: 2 **Term:** Autumn 1

Key Knowledge/Content Coding:

- To understand what an algorithm is.
- To create a computer program using an algorithm.
- To create a program using a given design.
- To understand the collision detection event.
- To understand that algorithms follow a sequence.
- To design an algorithm that follows a timed sequence.
- To understand that different objects have different properties.
- To understand what different events do in code.
- To understand the function of buttons in a program.

Links to:

Prior learning:

Questioning 2.4 and Coding 1.1.

Future learning:

Progression of Coding though each year group.

Key vocabulary with definition:

Prior Vocabulary Coding:

- Instructions - Detailed information about how something should be done or operated.
- Object - Items in a program that can be given instructions to move or change in some way (action).
- Output Information that comes out of the computer e.g. sound.
- Properties - These determine the look and size of an object. Each object has properties such as the image, scale and position of the object.
- Run - Clicking the Play button to make the computer respond to the code.
- Action - Types of commands, which are run on an object. They could be used to move an object or change a property. 2Dos Free code chimp Tools.
- Background - In 2Code the background is an image in the design that does not change.
- Algorithm - A precise step by step set of instructions used to solve a problem or achieve an objective.

New Vocabulary Coding:

- Implement - When a design is turned into a program using coding.
- Interaction - When objects perform actions in response to each other e.g., a frog turning into a monkey when it collides with a tree.
- Interval - In a timer, this is the length of time between the timer code running and the next time it runs e.g., every 1 second.

By the end of this unit

All children can: **explain** and **give** examples that an algorithm is a set of instructions to complete a specific task.

Most children can: **create** a basic code and understand how to debug it.

Some children can: **create** code which contains a command and are able to **explain** where this command is positioned and what will happen.

Background understanding for teachers and parents:

Children learn the concept of coding and linking instructions and algorithms to a computer. They begin to debug codes and investigate a problem area.

Curriculum Driver (one):

Aspiration

Evidence outcome:

Children have an understanding of what coding is and which job prospects they could have in the future.