

Coding – Year 2

Autumn 1 2023

Computing Knowledge

Organiser



Key Learning

- 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.
- To understand and debug simple programs.

Key Resources



2Dos



Free code chimp



Tools



Exit Design
Switch to code mode in 2Code.



Design
Open design mode in 2Code.



A timer code block.



An object property.



Open, close or share a file.



Save your work.



Watch the instruction video.

Key Vocabulary

Action

Types of commands, which are run on an object. They could be used to move an object or change a property.

Button

An object on the screen which can be clicked on.

Design Mode

Used to create the look of a 2Code computer program when it is run.

Collision Detection

Detecting when two characters on the screen touch each other.

Event

Something that causes a block of code to be run.

Algorithm

A precise step by step set of instructions used to solve a problem or achieve an objective.

Key Pressed

Pushing down a key on the device's keyboard.

Background

The part of the program design that shows behind everything else. It sets the scene for the story or game.

Debug/Debugging

Looking for any problems in the code, fixing and testing them.

Nesting

When you write a command inside something else e.g. a block of commands could be nested inside a timer.

Object

An element in a computer program that can be changed using actions or properties.

Run

To cause the instruction in a program to be carried out.

Test

When code is run to check that it works correctly.

Predict

Say what you think will happen when a piece of code is run.

Scale

The size of an object in 2Code.

Text

Typed letters on the screen.

Properties

All objects have properties that can be changed in design or by writing code e.g. image, colour and scale properties.

Scene

A visual aspect of a program.

Timer

Use this command to run a block of commands after a timed delay or at regular intervals.

Sequence

When a computer program runs commands in order.

Sound

This is a type of output command that makes a noise.

When clicked/swiped

An event command. It makes code run when you click or swipe on something (or press/swipe your finger on a touchscreen).

Key Questions

What is an algorithm?
Why is it useful in coding?

Why is it important to know there are different object types?

If you are good at coding, you don't need to debug. Is this true?