

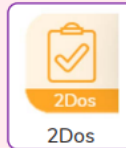


## Unit: 1.7 Coding

### Key Learning

- To understand what instructions are and predict what might happen when they are followed.
- To use code to make a computer program.
- To understand what object and actions are.
- To understand what an event is.
- To use an event to control an object.
- To begin to understand how code executes when a program is run.
- To understand what backgrounds and objects are.
- To plan and make a computer program.

### Key Resources

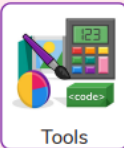


2Dos

2Dos



Free code chimp



Tools

### Key Vocabulary

#### Action

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

#### Character

A type of object in 2Code that can be programmed to change actions or properties.

#### Command

A single instruction in a computer program.

#### Design Mode

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

#### Debugging

Finding a problem in the code and fixing it.

#### Code Design

Design what your program will look like and what it will do.  
Coder - A person who writes computer code.

#### Coding

Writing instructions that can be interpreted by a computer to create a program.

#### Background

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

### Key Vocabulary

#### Input

Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.

#### Object

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

#### Output

Information that comes out of the computer e.g. sound.

#### Program

In 2Code, this is several commands that run purposefully together.

#### Properties

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

#### Scale

The size of an object in 2Code.

#### Stop command

A command that stops a character moving.

#### Sound

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

#### Scene

The background and objects together create a scene.

#### When clicked

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

### Key Questions

#### What is coding?

Writing instructions in a way that a computer can interpret them to make a program.

#### Why is it useful to design before coding?

It helps you to get a clear idea of what you want your program to do. You can use the design to decide which objects you need to add, what to call them and what actions they should perform.

#### How can you make characters move in a 2Code program?

In design mode, add a character. Change properties such as the name and scale. Exit from design mode and drag your character's code block into the coding window. From the properties menu, select right, left, up or down.

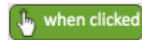
### Key Images



An object property



Sound output block



A 'when clicked' code block



Open, close or share a file



Save your work



Watch the instruction video



Get a hint when you are stuck in 2Code



Open design mode in 2Code



Switch to code mode in 2Code



The background object