PURPLE MASH COMPUTING SCHEME OF WORK - KNOWLEDGE ORGANISER

2simple

Unit: 1.7 – Coding

Key Learning

To understand what coding means.

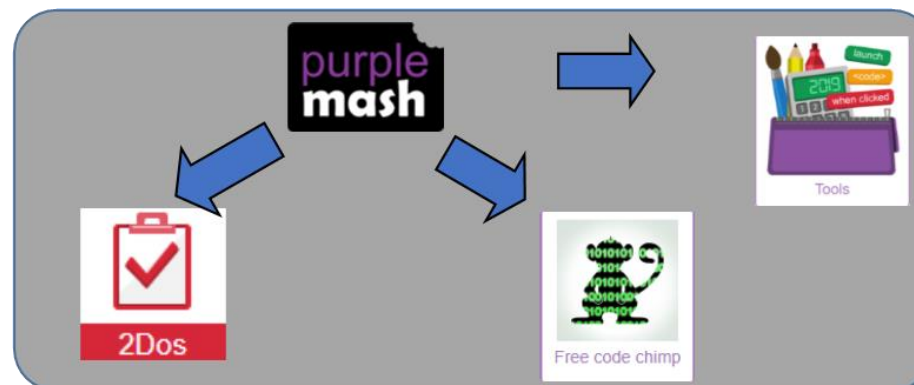To use design mode to set up a scene.

To add characters.

To use code blocks to make the character perform actions.

To use collision detection.

To save and share work.

To know the save, print, open and new icon.

Key Resources

Key Vocabulary

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

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

Button – An object on the screen, which can be clicked on.

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

Code block - A group of commands that are joined together and are run when a specific condition is met or when an event occurs.

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.

Collision Detection - Detecting when two characters on the screen touch each other.

Command - A single instruction in a computer program.

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

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.

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.

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

When Key - An event command. It makes code run when you press the specified key on the keyboard.

Key Images

Open the main menu

Save your work

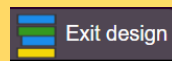Watch the instruction video

Get a hint when you are stuck in 2Code
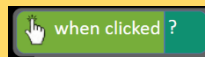
Open design mode in 2Code
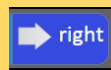
Switch to code mode in 2Code
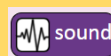
The background object

A 'when clicked' code block

An object property

Sound output block

Key Questions

What is coding?

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

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.

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.