

What should I already know?

- Algorithms · Logical decision making · Sequencing instructions · Following instructions
- Use of 2Dos · Saving, opening and editing work · Sharing work · Copying and pasting · Mouse, keyboard and device skills

What will I know by the end of the unit?

How do computer programs work by following instructions called code?

- You can give and follow instructions. · You can draw symbols to represent instructions. · You can arrange code blocks to create a set of instructions.

What are objects and actions?

- You can create a program using code blocks. · You can use object and action code blocks.

How do I use an event to control an object?

- You can create a simple program using code blocks. · You can use event, object and action code blocks.

How does code execute when a program is run?

- You can create a simple program using code blocks. · You can use event, object and action code blocks. · You can notice when their code executes when their program is run.

What are backgrounds and objects?

- You can edit a scene by adding, deleting and moving objects. · You can change the size of objects using the attributes (properties) table

How can I make a computer program?

You can create a design plan for their Free Code Scene program. · You can use code to make the program they have designed work.

Key Vocabulary

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

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

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

Code Instructions written using symbols and words that can be interpreted by a computer.

Command A single instruction in a computer program.

Debug/Debugging Finding a problem in the code and fixing it.

Event Something that causes a block of code to be run.

Execute To run a computer program.

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

Instructions Detailed information about how something should be done.

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.

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

Run To cause the instruction in a program to be carried out. **Scale** The size of an object in 2Code

Scene The background and objects together create a scene.

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).

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.

Purple Mash Resources

- 2Dos, Free Code Chimp, Tools

