Unit: 3.1
Coding

Key Learning

- To understand what a flowchart is and how flowcharts are used in computer programming.
- To understand that there are different types of timers and select the right type for purpose.
- To understand how to use the repeat command.
- To understand the importance of nesting.
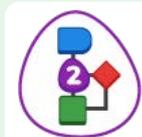- To design and create an interactive scene.
-

Key Resources

purple mash

Tools   2Dos   2Chart   Free code chimp

Key Vocabulary

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

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

Control
These commands determine whether parts of the program will run, how often and sometimes, when.

Alert
This is a type of output. It shows a pop-up of text on the screen.

Code Design
Design what your program will look like and what it will do.

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

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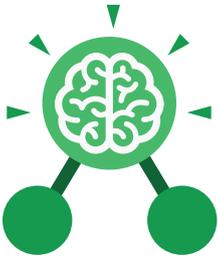A precise step by step set of instructions used to solve a problem or achieve an objective.

Command
A single instruction in a computer program.

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

Bug
A problem in a computer program that stops it working the way it was designed.

Need more support? Contact us:
Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: @2simplesoftware

2 simple

Unit: 3.1
Coding

Key Vocabulary

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

Flowchart
A diagram which represents an algorithm.

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

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

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

Object
An element in a computer program that can be changed using actions or properties. In 2Code, buttons, characters and vehicles are types of objects.

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

Repeat
This command can be used to make a block of commands run a set number of times or forever.

Sequence
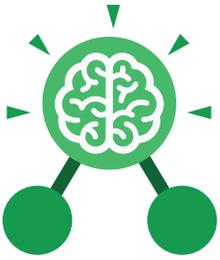when a computer program runs commands in order.

Computer Simulation
A program that models a real-life situation.

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

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).

2simple

Unit: 3.1
Coding

Key Images

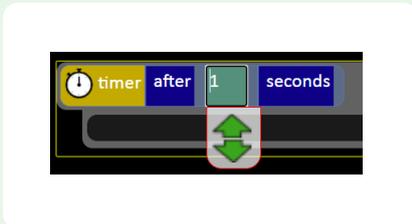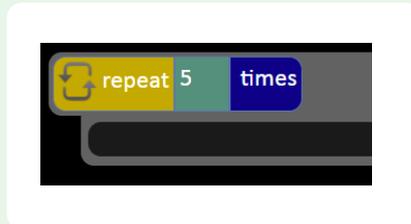|	
Open, close or share a file.	Save your work.
Open design mode in 2Code.	Exit Design — Switch to code mode in 2Code.

A timer code block.

Repeat block.

Key Questions

Why is it useful to use a flowchart to design a computer program?

Using a flowchart to design a computer program is helpful as you can see it in its simplest form as inputs and outputs. You can see where the program is going which will prevent mistakes when creating the code.

What does repeat mean in computer programming?

Using the repeat command will make a block of commands run for a set number of timers or forever. These saves rewriting the code many times.

What is the difference between 'timer after' and 'timer every'?

A 'timer after' means after a certain amount of seconds, the action will occur. 'Timer every' means that the action will re-occur every certain amount of seconds on a loop.

2simple