

# Year 6 Computing Autumn Term Coding

### Key Learning

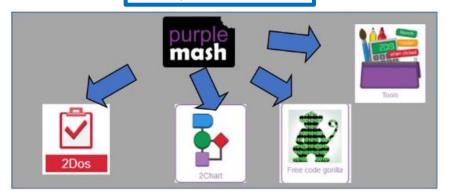
To use the program design process, including flowcharts, to develop algorithms for more complex programs using and understanding of abstraction and decomposition to define the important aspects of the program.

To code, test and debug from these designs.

To use functions and tabs in 2Codeto improve the quality of the code.

To code user interactivity using input functions.

## Key Resources



# Key Vocabulary Action Types of commands, which are run on an object. They could be used to move an objector change a property. Algorithm A precise step by step set of instructions used to solve a problem or achieve an objective. Code Design Design what a program will look like and what it will do. **Fvent** Something that causes a block of code to be 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. In 2Code, buttons, characters and vehicles are types of objects. This is when a computer program runs commands in order. In Sequence 2Code this can also include "repeat" or a timer. Simulation A model that represents a real or imaginary situation. Variable A named area in computer memory. A variable has a name and value. The program can change this variable value.

#### 9 hours over Autumn Term

# 2 Type Activity

# Online Safety

# Message in a game

# Online Safety

Identifying benefits and risks

#### Coding: Lessons 1 & 2

To design a playable game with a timer and a score.

To plan and use selection and variables.

To understand how the launch command works.

#### Coding: Lesson 3

To use **functions** and understand why they are useful.

To understand how functions are created and called

# Coding: Lesson 4

To use **flowcharts** to test and **debug** a program.

To create a **simulation** of a room in which devices can be controlled.

## Coding: Lesson 5

To understand the different options of generating user input in 2Code. To understand how user input can be used in a program.

## Coding: Lesson 6

To understand how 2Code can be used to make a text-based adventure game.