

**Phase:** 5/6

**Subject:** Computing

**Focus:** 6.1 Coding

**Term:** Autumn

## What I should already know?

This work builds on what I learnt in Years 1 to 5 about Coding.

## Vocabulary

Action	Types of commands, which are run on an object. They could be used to move an object or change a property.
Alert	This is a type of output. It shows a pop-up of text on the screen.
Algorithm	a precise step by step set of instructions used to solve a problem or achieve an objective.
Bug	A problem in a computer program that stops it working the way it was designed.
Code Design	Design what a program will look like and what it will do.
Command	A single instruction in a computer program.
Control	These commands determine whether parts of the program will run, how often and sometimes, when.
Debug/ Debugging	Looking for any problems in the code, fixing and testing them.
Event	Something that causes a block of code to be run.
Function	A type of procedure or routine.
Get Input	This puts the text that a user types into the computer's temporary memory to be used to control the program flow.
If	A conditional command. This tests a statement. If the condition is true, then the commands inside the block will be run.
If/Else	A conditional command. This tests a statement. If the condition is true, then the commands inside the 'if block' will be run. If the condition is not met, then the commands inside the 'else block' are run.
Input	Information going into the computer. Can include moving or clicking the mouse, using the keyboard, swiping and tilting the device.
Output	
Object	
Repeat	


## Knowledge

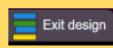
Coding is the method of giving instructions to a computer to perform a specific task.

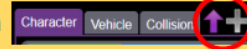
Coding, or computer programming, is a creative process programmers perform to tell a computer how to perform a task.

Coding teaches us how to think!


There are an increasing number of businesses who rely on computer code, not just those in the technology sector; Computer programming is the future


Open design mode in 2Code 

Switch to code mode in 2Code 

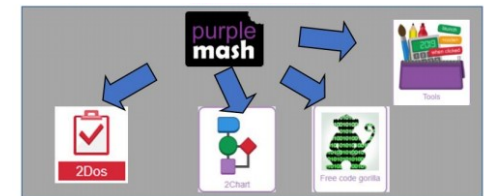
Add a new Tab to your code or move code blocks between tabs 

Creating a variable or function in 2Code   
Gorilla

Example of combining variables and strings to print to the screen 

A change variable block. Also used to call a function 

A function called 'square' that is called by clicking on a button called btnSquare. 



## By the end of the unit I should know...

How to use the program design process, including flowcharts, to develop algorithms for more complex programs.

How to code, test and debug from these designs.

How to use functions and tabs in 2Code to improve the quality of the code.

How to code user interactivity using input functions.

<u>Question 2</u>	<u>Start of Unit</u>	<u>End of Unit</u>
Don't know		

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Don't know		

<u>Question 3</u>	<u>Start of Unit</u>	<u>End of Unit</u>
Don't know		

<u>Question 4</u>	<u>Start of Unit</u>	<u>End of Unit</u>
Don't know		

<u>Question 5</u>	<u>Start of Unit</u>	<u>End of Unit</u>
Don't know		

<u>Question 6</u>	<u>Start of Unit</u>	<u>End of Unit</u>
Don't know		

<u>What I would like to find out?</u>

<u>Answers to my questions...</u>