

### National Curriculum subject content:

- ✓ Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- ✓ Create and debug simple programs.
- ✓ Use logical reasoning to predict the behaviour of simple programs.
- ✓ Use technology purposefully to create, organise, store, manipulate and retrieve digital content

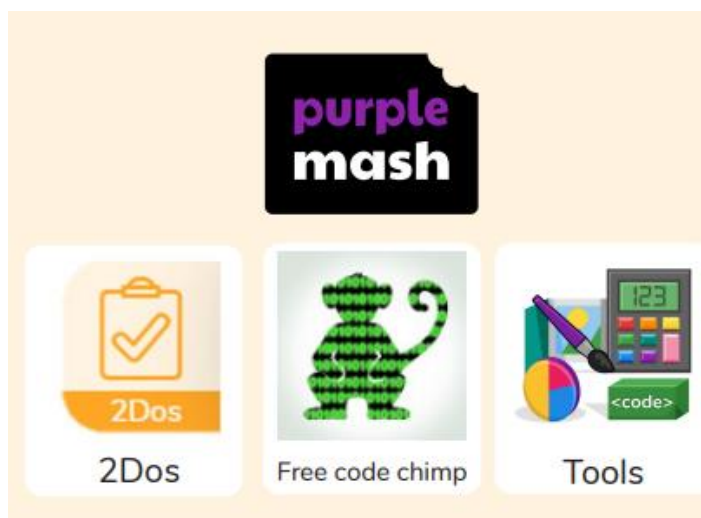
### National Curriculum theme:

- ✓ Computer Science
- ✓ Information Technology

### Computing:

#### Y2 spring term

Key Vocabulary:	
Algorithm	A precise step by step set of instructions used to solve a problem or achieve an objective.
Action	Types of commands, which are run on an object. They could be used to move an object or change a property.
Collision Detection	Detecting when two characters on the screen touch each other.
Debug/Debugging	Looking for any problems in the code, fixing and testing them.
Event	Something that causes a block of code to be run.
Nesting	When you write a command inside something else e.g. a block of commands could be nested inside a timer.
Run	To cause the instruction in a program to be carried out.
Sequence	When a computer program runs commands in order.
Test	When code is run to check that it works correctly.
Timer	Use this command to run a block of commands after a timed delay or at regular intervals.
Impressionism	The impressionist movement began in the 1860s and became most popular in the 1870s and 1880s. It differed from the common art of the time because it wasn't religious art, showing scenes from religious stories or specific events, but was just intended to capture a scene at a moment. The art gave an 'impression' of the scene.
Palette	Within computer graphics, this is the range of colours or shapes available to the user.
Pointillism	Pointillism was a development of impressionism. It was invented mainly by George Seurat and Paul Signac. Pointillist paintings are created by using small dots in different colours to build up the whole picture. Colours are placed near each other rather than mixed.
Surrealism	An instance of posting or reposting something on a social media website or application.
Template	Something that serves as a model for others to copy.



**Computing:**

**Y2 spring term**

Sequence of Learning:										
Objectives (key knowledge):										
Creating Pictures (Purples Mash Unit 2.6) 5 lessons					Coding (Purple Mash Unit 2.1) 6 lessons					
<b>Introduction and Impressionism</b> Objective 1: To explore 2Paint A Picture.	<b>Pointillist Art</b> Objective 2: To look at and recreate pointillist art using the Pointillism template.	<b>Piet Mondrian</b> Objective 3: To look at the work of Piet Mondrian and recreate it using the Lines template.	<b>William Morris and Pattern</b> Objective 4: To look at the work of William Morris and recreate it using the Patterns template.	<b>Surrealism and eCollage</b> Objective 5: To look at some surrealist art and create your own using the eCollage function in 2Paint A Picture.	<b>Algorithms</b> Objective 6: To understand what an algorithm is and create a computer program using an algorithm.	<b>Collision Detection</b> Objective 7: To create a program using a given design. To understand the collision detection event	<b>Using a Timer</b> Objective 8: To understand that algorithms follow a sequence. To design an algorithm that follows a timed sequence.	<b>Different Object Types</b> Objective 9: To understand that different objects have different properties. To understand what different events do in code	<b>Buttons</b> Objective 10: To create a program using a given design and understand the function of buttons in a program.	<b>'Smelly Code' Debugging</b> Objective 11: To know what debugging means and understand the need to test and debug a program repeatedly. To debug simple programs.