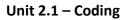
## Purple Mash Scheme of Work - Year 2





Lesson	Title	Aims (Objectives)	Success Criteria
1	Algorithms	<ul> <li>To understand what an algorithm is.</li> <li>To create a computer program using an algorithm.</li> </ul>	<ul> <li>Children can explain that an algorithm is a set of instructions.</li> <li>Children can describe the algorithms they created.</li> <li>Children can explain that for the computer to make something happen, it needs to follow clear instructions.</li> </ul>
2	Collision Detection	<ul> <li>To create a program using a given design.</li> <li>To understand the collision detection event.</li> </ul>	<ul> <li>Children can plan an algorithm that includes collision detection.</li> <li>Children can create a program using collision detection.</li> <li>Children read blocks of code and predict what will happen when it is run.</li> </ul>
3	Using a Timer	<ul> <li>To understand that algorithms follow a sequence.</li> <li>To design an algorithm that follows a timed sequence.</li> </ul>	<ul> <li>Children can create a program that uses a timer-after command.</li> <li>Children can explain what the timer-after command does in their program.</li> <li>Children can predict what will happen in a program that includes a timer-after command.</li> </ul>
4	Different Object Types	<ul> <li>To understand that different objects have different properties.</li> <li>To understand what different events do in code.</li> </ul>	<ul> <li>Children can create a computer program that includes different object types.</li> <li>Children can modify the properties of an object.</li> <li>Children can use different events in their program to make objects move.</li> </ul>
5	Buttons	<ul> <li>To create a program using a given design.</li> <li>To understand the function of buttons in a program.</li> </ul>	<ul> <li>Children can create a computer program that includes a button object.</li> <li>Children can explain what a button does in their program.</li> <li>Children can modify the properties of a button to fit their program design.</li> </ul>
6	'Smelly Code' Debugging	<ul> <li>To know what debugging means.</li> <li>To understand the need to test and debug a program repeatedly.</li> <li>To debug simple programs.</li> </ul>	<ul> <li>Children can explain what debug (debugging) means.</li> <li>Children can use a design document to start debugging a program.</li> <li>Children can debug simple programs.</li> </ul>

## Unit 2.2 – Online Safety

Lesson	Title	Aims (Objectives)	Success Criteria
1	Searching and Sharing	<ul> <li>To know how to refine searches using the Search tool.</li> <li>To know how to share work electronically using the display boards.</li> <li>To use digital technology to share work on Purple Mash to communicate and connect with others locally.</li> <li>To have some knowledge and understanding about sharing more globally on the Internet.</li> </ul>	<ul> <li>Children can use the search facility to refine searches on Purple Mash by year group and subject.</li> <li>Children can share the work they have created to a display board.</li> <li>Children understand that the teacher approves work before it is displayed.</li> <li>Children are beginning to understand how things can be shared electronically for others to see both on Purple Mash and the Internet.</li> </ul>
2	Email Using 2Respond	To introduce Email as a communication tool using 2Respond simulations.  To understand how we talk to	<ul> <li>Children know that Email is a form of digital communication.</li> <li>Children understand how 2Repond can teach them how to use email.</li> <li>Children can open and send an email to a 2Respond character.</li> <li>Children have discussed their own experiences and understanding of what email is used for.</li> <li>Children have discussed what makes us feel happy and what makes us feel sad.</li> </ul>
3	Digital Footprint	<ul> <li>To understand that information put online leaves a digital footprint or trail.</li> <li>To begin to think critically about the information they leave online.</li> <li>To identify the steps that can be taken to keep personal data and hardware secure</li> </ul>	<ul> <li>Children can explain what a digital footprint is.</li> <li>Children can give examples of things that they would not want to be in their digital footprint.</li> </ul>

## Unit 2.3 – Spreadsheets

Lesson	Title	Aims (Objectives)	Success Criteria
1	Introduction to Spreadsheets	<ul> <li>To understand what a spreadsheet is used for.</li> <li>To understand what a spreadsheet looks like.</li> <li>To be able to navigate around a spreadsheet and enter data.</li> <li>To learn new vocabulary related to spreadsheets.</li> </ul>	<ul> <li>Children can navigate around a spreadsheet.</li> <li>Children can enter data into cells.</li> <li>Children can explain what rows and columns are.</li> </ul>
2	Adding Images to a Spreadsheet	<ul> <li>To add different types of images to a spreadsheet.</li> <li>To use image as calculation aids.</li> <li>To use the 'move cell' tool to make images draggable.</li> </ul>	<ul> <li>Children can use the menu buttons to add different types of images.</li> <li>Children can use the apparatus images to solve maths questions.</li> <li>Children can use the 'move cell' tool so that images can be dragged around the spreadsheet.</li> </ul>
3	Exploring images and values	<ul> <li>To use clipart images in a spreadsheet.</li> <li>To assign values to images.</li> <li>To use assigned values in calculations.</li> </ul>	<ul> <li>Children can use the clipart gallery to add images to a spreadsheet.</li> <li>Children can give images a value.</li> <li>Children can make use of the assigned values in calculations.</li> </ul>
4	Totalling tools	<ul> <li>To use 2Calculate totalling tools.</li> <li>To use 2Calculate to solve a simple puzzle.</li> </ul>	<ul> <li>Children can use tools in a spreadsheet to automatically total rows and columns.</li> <li>Children can use a spreadsheet to solve a mathematical puzzle.</li> </ul>
5	Using the 'Speak' and 'Count' Tools to Count Items	To use the 'speak' and 'count' tools in 2Calculate to count items.	<ul> <li>Children can use the count tool to count items.</li> <li>Children can use the speak tool so that the items are counted out loud</li> </ul>
6	Creating a Table and Block Graph	<ul> <li>To add and edit data in a table layout.</li> <li>To find out how spreadsheet programs can automatically create graphs from data.</li> </ul>	<ul> <li>Children can create a table of data on a spreadsheet.</li> <li>Children can use a spreadsheet program to automatically create charts and graphs from data.</li> </ul>

## Unit 2.7 – Making Music

Lesson	Title	Aims (Objectives)	Success Criteria
1	Introducing 2Sequence	<ul> <li>To be introduced to making music digitally using 2Sequence.</li> <li>To explore, edit and combine sounds using 2Sequence.</li> </ul>	<ul> <li>Children understand what 2Sequence is and how it works.</li> <li>Children have used the different sounds within 2Sequence to create a tune.</li> <li>Children have explored how to speed up and slow down tunes.</li> <li>Children understand what happens to the tune when sounds are moved.</li> </ul>
2	Making Music	<ul> <li>To add sounds to a tune to improve it.</li> <li>To think about how music can be used to express feelings and create tunes which depict feelings.</li> </ul>	<ul> <li>Children have added sounds to a tune they have already created to change it.</li> <li>Children have considered how music can be used to express feelings.</li> <li>Children can change the volume of the background sounds.</li> <li>Children have created two tunes which depict two feelings.</li> </ul>
3	Soundtracks	<ul> <li>To upload a sound from a bank of sounds into the Sounds section.</li> <li>To record their own sound and upload it into the Sounds section.</li> <li>To create their own tune using the sounds which they have added to the Sounds section.</li> </ul>	<ul> <li>Children have uploaded and used their own sound chosen from a bank of sounds.         Children have created, uploaded and used their own recorded sound.     </li> <li>Children have created their own tune using some of the chosen sounds.</li> </ul>