

Computing – Year 2 Autumn 1
Coding

Lesson	Title	Success Criteria
<u>1</u>	Algorithms	<ul style="list-style-type: none"> • Children can explain that an algorithm is a set of instructions. • Children can describe the algorithms they created. • Children can explain that for the computer to make something happen, it needs to follow clear instructions.
<u>2</u>	Collision Detection	<ul style="list-style-type: none"> • Children can plan an algorithm that includes collision detection. • Children can create a program using collision detection. • Children read blocks of code and predict what will happen when it is run.
<u>3</u>	Using a Timer	<ul style="list-style-type: none"> • Children can create a program that uses a timer-after command. • Children can explain what the timer-after command does in their program. • Children can predict what will happen in a program that includes a timer-after command.
<u>4</u>	Different Object Types	<ul style="list-style-type: none"> • Children can create a computer program that includes different objects types. • Children can modify the properties of an object. • Children can use different events in their program to make objects move.
<u>5</u>	Buttons	<ul style="list-style-type: none"> • Children can create a computer program that includes a button object. • Children can explain what a button does in their program. • Children can modify the properties of a button to fit their program design.
<u>6</u>	'Smelly Code' Debugging	<ul style="list-style-type: none"> • Children can explain what debug (debugging) means. • Children can use a design document to start debugging a program. • Children can debug simple programs.

Computing – Year 2 – Autumn 2

Online Safety

Lesson	Title	Success Criteria
<u>1</u>	Searching and Sharing	<ul style="list-style-type: none"> • Children can use the search facility to refine searches on Purple Mash by year group and subject. • Children can share the work they have created to a display board. • Children understand that the teacher approves work before it is displayed. • Children are beginning to understand how things can be shared electronically for others to see both on Purple Mash and the Internet.
<u>2</u>	Email Using 2Respond	<ul style="list-style-type: none"> • Children know that Email is a form of digital communication. • Children understand how 2Repond can teach them how to use email. • Children can open and send an email to a 2Respond character. • Children have discussed their own experiences and understanding of what email is used for. • Children have discussed what makes us feel happy and what makes us feel sad.
<u>3</u>	Digital Footprint	<ul style="list-style-type: none"> • Children can explain what a digital footprint is. • Children can give examples of things that they would not want to be in their digital footprint.

Lesson	Title	Success Criteria
<u>1</u>	Reviewing The Use of Spreadsheets	<ul style="list-style-type: none"> • Children can explain what rows and columns are in a spreadsheet. • Children can open, save and edit a spreadsheet. • Children can add images from the image toolbox and allocate them a value. • Children can add the count tool to count items.
<u>2</u>	Copying, Cutting, Pasting and Totals	<ul style="list-style-type: none"> • Children can use copying, cutting and pasting to help make spreadsheets. • Children can use tools in a spreadsheet to automatically total rows and columns. • Children can use a spreadsheet to solve a mathematical puzzle.
<u>3</u>	Using a Spreadsheet to Add Amounts	<ul style="list-style-type: none"> • Children can use images in a spreadsheet. • Children can work out how much they need to pay using coins by using a spreadsheet to help calculate.
<u>4</u>	Creating a Table and Block Graph	<ul style="list-style-type: none"> • Children can create a table of data on a spreadsheet. • Children can use the data to create a block graph manually.

Year 2 – Computing – Spring 1
Questioning

Lesson	Title	Success Criteria
<u>1</u>	Using and Creating Pictograms	<ul style="list-style-type: none"> • Children understand that the information on pictograms cannot be used to answer more complicated questions.
<u>2</u>	Asking Yes / No Questions	<ul style="list-style-type: none"> • Children have used a range of yes/no questions to separate different items.
<u>3</u>	Binary Trees	<ul style="list-style-type: none"> • Children understand what is meant by a binary tree. • Children have designed a binary tree to sort pictures of children.
<u>4</u>	Using 2Question - a Computer-Based Binary Tree Program	<ul style="list-style-type: none"> • Children understand that questions are limited to 'yes' and 'no' in a binary tree. • Children understand that the user cannot use 2Question to find out answers to more complicated questions. • Children have matched 2Simple item pictures to names using a binary tree.
<u>5</u>	Using 2Investigate: a Non-Binary Database.	<ul style="list-style-type: none"> • Children understand what is meant by a database. • Children have used a database to answer simple and more complex search questions.

Computing – Year 2 – Spring 2

Creating Pictures

Lesson	Title	Success Criteria
<u>1</u>	Introduction and Impressionism	<ul style="list-style-type: none"> • Children can describe the main features of impressionist art. • Children can use 2Paint a Picture to create art based upon this style.
<u>2</u>	Pointillist Art	<ul style="list-style-type: none"> • Children can explain what pointillism is. • Children can use 2Paint a Picture to create art based upon this style.
<u>3</u>	Piet Mondrian	<ul style="list-style-type: none"> • Children can describe the main features of Piet Mondrian's work. • Children can use 2Paint a Picture to art based upon his style.
<u>4</u>	William Morris and Pattern	<ul style="list-style-type: none"> • Children can describe the main features of art that uses repeating patterns. • Children can use 2Paint a Picture to create art by repeating patterns in a variety of ways. • Children can combine more than one effect in 2Paint a Picture to enhance patterns.
<u>5</u>	Surrealism and eCollage	<ul style="list-style-type: none"> • Children can describe surrealist art. • Children can use the eCollage function in 2Paint a Picture to create surrealist art using drawing and clipart.

Computing – Year 2 – Summer 1

Making Music & Online Safety

Lesson	Title	Aims (Objectives)	Success Criteria
<u>1</u>	Introducing 2Sequence	<ul style="list-style-type: none"> To be introduced to making music digitally using 2Sequence. To explore, edit and combine sounds using 2Sequence. 	<ul style="list-style-type: none"> Children understand what 2Sequence is and how it works. Children have used the different sounds within 2Sequence to create a tune. Children have explored how to speed up and slow down tunes. Children understand what happens to the tune when sounds are moved.
<u>2</u>	Making Music	<ul style="list-style-type: none"> To add sounds to a tune to improve it. To think about how music can be used to express feelings and create tunes which depict feelings. 	<ul style="list-style-type: none"> Children have added sounds to a tune they have already created to change it. Children have considered how music can be used to express feelings. Children can change the volume of the background sounds. Children have created two tunes which depict two feelings.
<u>3</u>	Soundtracks	<ul style="list-style-type: none"> To upload a sound from a bank of sounds into the Sounds section. To record their own sound and upload it into the Sounds section. To create their own tune using the sounds which they have added to the Sounds section. 	<ul style="list-style-type: none"> Children have uploaded and used their own sound chosen from a bank of sounds. Children have created, uploaded and used their own recorded sound. Children have created their own tune using some of the chosen sounds.

Lesson	Title	Aims (Objectives)	Success Criteria
<u>1</u>	Searching and Sharing	<ul style="list-style-type: none"> To know how to refine searches using the Search tool. To know how to share work electronically using the display boards. To use digital technology to share work on Purple Mash to communicate and connect with others locally. To have some knowledge and understanding about sharing more globally on the Internet. 	<ul style="list-style-type: none"> Children can use the search facility to refine searches on Purple Mash by year group and subject. Children can share the work they have created to a display board. Children understand that the teacher approves work before it is displayed. Children are beginning to understand how things can be shared electronically for others to see both on Purple Mash and the Internet.
<u>2</u>	Email Using 2Respond	<ul style="list-style-type: none"> To introduce Email as a communication tool using 2Respond simulations. To understand how we talk to others when they are not there in front of us. To open and send simple online communications in the form of email. 	<ul style="list-style-type: none"> Children know that Email is a form of digital communication. Children understand how 2Repond can teach them how to use email. Children can open and send an email to a 2Respond character. Children have discussed their own experiences and understanding of what email is used for. Children have discussed what makes us feel happy and what makes us feel sad.
<u>3</u>	Digital Footprint	<ul style="list-style-type: none"> To understand that information put online leaves a digital footprint or trail. To begin to think critically about the information they leave online. To identify the steps that can be taken to keep personal data and hardware secure 	<ul style="list-style-type: none"> Children can explain what a digital footprint is. Children can give examples of things that they would not want to be in their digital footprint.

Computing – Year 2 – Summer 2

Creating Pictures

Lesson	Title	Aims (Objectives)	Success Criteria
<u>1</u>	Presenting a Story Three Ways	<ul style="list-style-type: none"> To explore how a story can be presented in different ways. 	<ul style="list-style-type: none"> Children have examined a traditional tale presented as a mind map, as a quiz, as an e-book and as a fact file. Children know that digital content can be represented in many forms.
<u>2</u>	Presenting Ideas as a Quiz	<ul style="list-style-type: none"> To make a quiz about a story or class topic. 	<ul style="list-style-type: none"> Children have made a quiz about a story using 2Quiz. Children can talk about their work and make improvements to solutions based on feedback received.
<u>3</u>	Making a Non-Fiction Fact File	<ul style="list-style-type: none"> To make a fact file on a non-fiction topic. 	<ul style="list-style-type: none"> Children have extracted information from a 2Connect file to make a publisher fact file on a non-fiction topic. Children have added appropriate clipart. Children have added an appropriate photo. Children know that data can be structured in tables to make it useful.
<u>4</u>	Making a Presentation	<ul style="list-style-type: none"> To make a presentation to the class. 	<ul style="list-style-type: none"> Children can use a variety of software to manipulate and present digital content and information. Children can collect, organise and present data and information in digital content. Children can create digital content to achieve a given goal by combining software packages.