Prior and Future Learning

Year 1

Purple Mash Computing Scheme: Prior and Future Learning Links – Year 1 – Creative Computing

Introduction to Purple Mash
- Login/Log out
- 2Dos
- Tools area
- Managing work area

Creative Computing

Animated Stories
- Painting tools

Creating Pictures
- Painting tools

Used in all Units
- Use of 2Dos
- Saving, opening and editing work
- Sharing work
- Copying and pasting
- Mouse, keyboard and device skills

Animation
- Animating images

Game Creator
- Designing in a 3D environment
- Game playability

Quizzing
- Instruction screens
- Game playability

3D Modelling
- Creative tools
- Designing in 3D

Purple Mash Computing Scheme: Prior and Future Learning Links – Year 1 – Data Explorers

Introduction to Purple Mash
- Login/Log out
- 2Dos
- Tools area
- Managing work area

Data Explorers

Creating and Following instructions
- Using a logical process

Questioning
- Collecting and presenting data
- Using 2Count

Spreadsheets
- Working with data
- Producing graphs

Coding units
- Process of logical thinking leading to algorithmic thinking
- Debugging

Branching Databases
- Binary questioning
- Using and making branching databases

Spreadsheets
- Working with data
- Producing graphs

Effective Searching
- Choosing effective keywords as the criteria for returned information

Databases
- Interrogating and filtering data using criteria

Spreadsheets
- Working with data
- Producing graphs
- Using data to draw conclusions and make decisions

Graphing
- Ways of presenting data
- Visualising data to draw conclusions

Data Detectives
- Complex data searching
- Grouping data

Spreadsheets
- Working with data
- Using data to draw conclusions and make decisions

Purple Mash Computing Scheme: Prior and Future Learning Links – Year 1 – Creating and Following Instructions

Introduction to Purple Mash
- Using 2Dos
- Painting tools
- Use of common tools and menus

Creating and Following Instructions

Coding
- Instructions
- Algorithms
- Programs
- Debugging

Route Explorers
- Following and creating instructions
- Algorithms
- Debugging

Questioning
- Logical decision processing
- Forward planning towards a solution

Coding
- Algorithms
- Logical thinking
- Coding a program using specific commands.

Branching Databases
- Logical decision processing
- Forward planning towards a solution

Route Planners
- Longer algorithms
- Coding
- Debugging

Coding
- Algorithms
- Flowcharts
- Repetition

Logo
- Logo text-based coding language
- Creating patterns and shapes
- Sequencing
- Using angles, repetition and procedures

Coding
- Algorithms
- Flowcharts
- Repetition
- Selection and loops

Coding
- Algorithms
- Repetition
- Selection and loops
- Functions and variables

Coding
- Flowcharts
- Control simulations
- Functions and variables

Purple Mash Computing Scheme: Prior and Future Learning Links – Year 1 – Animated Stories

Introduction to Purple Mash
- Login/Log out
- 2Dos
- Tools area
- Managing work area

Animated Stories

Creative Computing
- Painting tools
- Using menus
- Making digital art

Creating Pictures
- Painting tools
- Digital art

Making Music
- Digitally creating music and sound effects

Presenting ideas
- Mixed media presentations
- Vector art
- Animation

Animation
- Animating images
- Consideration of frame-by-frame animation
- Digital art skills

Sound Stories
- Sound effects
- Focus on the audio of a story
- Narration

Game Creator
- Designing in a 3D environment
- Animation in 3D
- Game-based story telling

3D Modelling
- Creative tools
- Designing in 3D

Coding units
- Sequencing to produce animated effects using code; a relevant contrasting experience to using animation tools.

Purple Mash Computing Scheme: Prior and Future Learning Links – Year 1 – Coding

Creating and Following instructions
- Understanding algorithms
- Creating instructions for a sequence

Coding

Data Explorers
- Using a logical process
- Grouping and sorting in an ordered and logical way

Questioning
- Logical decision processing
- Forward planning to achieve a solution

Coding
- Algorithms
- Timers
- Object types
- Debugging

Route Explorers
- Building an algorithm
- Creating Commands
- Coding with 2Go

Branching Databases
- Logical decision processing
- Modelling selection on a binary model

Coding
- Flowcharts
- Timers
- Repeat
- Code, test, debug

Route Planners
- Building sequential and repetition algorithms
- Creating Commands
- Coding with 2Go

micro:bit
- Coding for an external device
- 2Code

Coding
- IF statements
- Repeat Until and IF/ ELSE Statements
- Number Variables

Logo
- Text-based coding
- Understanding of coding structures

Animation
- Sequencing and animation in logical steps

micro:bit
- Coding for an external device.
- 2Code

Coding
- Simulating a Physical System
- Decomposition and Abstraction
- Friction and Functions
- Introducing Strings
- Text Variables and Concatenation

External Devices: Purple Chip\micro:bit
- Program external devices
- Program interaction with inputs and outputs from external devices
- Monitor real world conditions
- Create physical simulations

Coding
- Simulating a Physical System
- Decomposition and Abstraction
- Functions
- Text Variables

Binary
- Use of 2Code to understand binary conversion algorithms

Introduction to Python
- Text-based coding
- Creating coding structures in Python
- Design view

micro:bit
- Program external devices
- Monitor real world conditions

Introduction to Purple Mash
- Login/Log out
- 2Dos
- Tools and Work area

Technology Around Us

The Internet
- Understand what the internet is
- Connecting to the internet
- Accessing the World Wide Web

Online Safety
- Connects themes covered with 2BeSafe

All Units
- Use of information technology for a purpose

Unpacking Hardware and Software
- Identifying different types of technology
- Hardware and software and how they work together
- Parts of a computer system

Networks
- How network facilitate online connection
- Types of networks
- Internet services

Introduction to Purple Mash
- Login/Log out
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Making Beats

Animated Stories
- Adding simple sound effects to stories in 2Create a Story

Making Music
- Understanding a more complex digital music tool (2Sequence)
- Composing music digitally

Composing Beats
- Using the Busy Beats tool to explore and compose music digitally
- Understanding pitch and texture

Sound Stories
- Sound effects
- Focus on the audio of a story
- Narration

Game Creator
- Adding sound effects and background music to themed 3D games