

# RECEPTION Computing

#### Online Safety - Education for a Connected World Framework 4 - 7 year olds:-

#### **Self-image and identity**

• I can recognise, online or offline, that anyone can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who makes them feel sad, uncomfortable, embarrassed or upset.

#### **Online relationships**

- I can recognise some ways in which the internet can be used to communicate.
- I can give examples of how I (might) use technology to communicate with people I know.

#### Online reputation

• I can identify ways that I can put information on the internet.

#### **Online bullying**

- I can describe ways that some people can be unkind online.
- I can offer examples of how this can make others feel.

#### **Managing online information**

- I can talk about how to use the internet as a way of finding information online.
- I can identify devices I could use to access information on the internet.

#### Health, well-being and lifestyle

- I can identify rules that help keep us safe and healthy in and beyond the home when using technology.
- I can give some simple examples of these rules.

#### **Privacy and security**

- I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location).
- I can describe who would be trustworthy to share this information with; I can explain why they are trusted.

Autumn	Spring	Summer
Children explore computing through mini mash on the Clevertouch boards and classroom computer to support them to develop the following skills:  Physical Development  To use a range of tools  Expressive Arts and Design	Children explore computing through mini mash on the Clevertouch boards and classroom computer to support them to develop the following skills:  Physical Development  Increasing pencil and small tool	Children explore computing through mini mash on the Clevertouch boards and classroom computer to support them to develop the following skills:  Physical Development  Show good control when using large
<ul> <li>To explore how sounds and movements can be changed.</li> </ul>	control.  Expressive Arts and Design	equipment and small tools safely and with care.



#### **Whitestone Infant School**

#### Personal, Social, Emotional Development

- To share and take turns
- To carry out tasks independently

#### **Communication and Language**

- To follow instructions
- To build vocabulary.
- To sit and concentrate for short periods of time.

#### **Understanding the World**

- About Online Safety
- To use simple programmes on the computer.

#### Personal, Social, Emotional Development

- Becoming an independent learner.
- Displaying high levels of involvement in activities.
- Explaining own knowledge and understanding.

#### **Communication and Language**

- Maintaining attention, concentrating and sitting quietly during carpet times and activities.
- Responding to instructions.
- Expanding our vocabulary
- Speaking in clear sentences.
- Using talk to organise, sequence and clarify our thinking.

#### **Understanding the World**

- Complete a programme on a computer or whiteboard
- Bee Bots
- Explore online safety

#### **Expressive Arts and Design**

- Make own music and control the sound and speed.
- Use a wide range of materials and tools in original ways, to demonstrate increasing skill and competence.

#### Personal, Social, Emotional Development

- Show consideration and be responsive to others.
- Take time to listen to each other and explain actions.
- Be able to negotiate and solve problems.
- Be able to talk about what we have learned.

#### **Communication and Language**

- Listen attentively and recall in detail what has been said.
- Respond with relevant comments.
- Ask questions
- Follow complex instructions.
- Answer 'how' and 'why' questions
- Clarify thinking, ideas, feelings and events.
- Listen carefully and use new vocabulary.
- Speak clearly and extend vocabulary.

#### **Understanding the World**

 Use a range of technology – Computers, BeeBots, Cameras, iPads.

<b>Computing Long Te</b>	rm Plan
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## **Whitestone Infant School**

Discuss staying safe online.

## YEAR 1 Computing

#### Online Safety – Education for a Connected World Framework 4 – 7 year olds:-

#### **Self-image and identity**

- I can recognise that there may be people online who could make someone feel sad, embarrassed or upset.
- If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust and how they can help.

#### **Online relationships**

- I can give examples of when I should ask permission to do something online and explain why this is important.
- I can use the internet with adult support to communicate with people I know (e.g. video call apps or services).
- I can explain why it is important to be considerate and kind to people online and to respect their choices.
- I can explain why things one person finds funny or sad online may not always be seen in the same way by others.

#### **Online reputation**

- I can recognise that information can stay online and could be copied.
- I can describe what information I should not put online without asking a trusted adult first.

#### **Online bullying**

• I can describe how to behave online in ways that do not upset others and can give examples.

#### **Managing online information**

- I can give simple examples of how to find information using digital technologies, e.g. search engines, voice activated searching).
- I know / understand that we can encounter a range of things online including things we like and don't like as well as things which are real or make believe / a joke.
- I know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable worried or frightened.

#### Health, well-being and lifestyle

• I can explain rules to keep myself safe when using technology both in and beyond the home.

#### **Privacy and security**

- I can explain that passwords are used to protect information, accounts and devices.
- I can recognise more detailed examples of information that is personal to someone (e.g where someone lives and goes to school, family names).
- I can explain why it is important to always ask a trusted adult before sharing any personal information online, belonging to myself or others.

#### **Copyright and ownership**

• I can say why it belongs to me (e.g. 'I designed it' or 'I filmed it'').





- I can save my work under a suitable title / name so that others know it belongs to me (e.g. filename, name on content).
- I understand that work created by others does not belong to me even if I save a copy

Use programmable toys and programs on the iPads e.g. Beebots, Codable Introduction to Team'sPurple Mash 1.2 Grouping and Sorting: 	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Use programmable toys and programs on the iPads e.g. Beebots, Codable Introduction to Team's    Purple Mash 1.1 Online Safety unit:    To learn how to find saved work in the Online Work area and find teacher comments.    To learn how to search Purple Mash    To sort items using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To sort items on the computer using a range of criteria.    To ro contribute to a class pictogram.    To record the results of an experiment    Purple Mash 1.6 Animated Story    Books unit:    To understand what object and actions are.    To understand what object and actions are.    To understand what an event is.    To understand what an event is.    To use a pictogram.    To use a pictogram.    To use a pictogram to record te examples of technology outside school.    To understand what an event is.    To use a pictogram.    To use a pictogram.    To use a pictogram.    To use a pictogram		1			•	
<ul> <li>To become familiar with the icons and types of resources available in the Topics section.</li> <li>To become familiar with the icons and types of resources available in the Topics section.</li> <li>To become familiar completing organize, store, manipulate and retrieve digital content.</li> <li>To add animation to a story.</li> <li>To add sound to a story.</li> <li>To add sound to a story, including voice recording voice recording is run.</li> </ul>	rules. Use programmable toys and programs on the iPads e.g. Beebots, Codable Introduction to Team's  Purple Mash 1.1 Online Safety unit:  To log in safely.  To learn how to find saved work in the Online Work area and find teacher comments.  To learn how to search Purple Mash to find resources.  To become familiar with the icons and types of resources available in the Topics	rules  Purple Mash 1.2 Grouping and Sorting:  To sort items using a range of criteria.  To sort items on the computer using the 'Grouping' activities in Purple Mash.  Purple Mash 1.4 Lego Builders unit: To compare the effects of adhering strictly to instructions to completing tasks without complete instructions. To follow and	<ul> <li>To understand that data can be represented in picture format.</li> <li>To contribute to a class pictogram.</li> <li>To use a pictogram to record the results of an experiment</li> <li>Information Technology:         <ul> <li>Use technology to purposefully create, organize, store, manipulate and retrieve digital</li> </ul> </li> </ul>	<ul> <li>School unit:         <ul> <li>To walk around the local community and find examples of where technology is used.</li> <li>To record examples of technology outside school.</li> </ul> </li> <li>Purple Mash 1.6         <ul> <li>Animated Story</li> <li>Books unit:</li> <li>To introduce e-books and the 2Createa Story tool.</li> <li>To add animation to a story.</li> <li>To add sound to a story, including</li> </ul> </li> </ul>	<ul> <li>To understand what instructions are and predict what might happen when they are followed.</li> <li>To use code to make a computer program.</li> <li>To understand what object and actions are.</li> <li>To understand what an event is.</li> <li>To use an event to control an object.</li> <li>To begin to understand how code executes when a program</li> </ul>	Use technology purposefully to create, organise, store, manipulate and retrieve digital content

**Computing Long Term Plan** 

## **Whitestone Infant School**

- To start to add pictures and text to work.
- To explore the Tools and Games section of Purple Mash.
- To learn how to open, save and print.
- To understand the importance of logging out.

# Purple Mash 1.5 Maze Explorers unit:

- To understand the functionality of the direction keys.
- To understand how to create and debug a set of instructions (algorithm).
- To use the additional direction keys as part of an algorithm.
- To understand how to change and extend the algorithm list.
- To create a longer algorithm for an activity.
- To set challenges for peers.

- instructions on the computer.
- To consider how the order of instructions affects the result.

## Information Technology:

 Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

#### **Digital Literacy:**

 Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

### **Vocabulary:**

Unit 1.1:

# *Unit 1.3:* Pictogram, Data,

Collate.

- children have composed.To work on a
- To work on a more complex story, including adding backgrounds and copying and pasting pages.
- To share e-books on a class display board.

## Information Technology:

 Use technology to purposefully create, organise, store, manipulate and retrieve digital content.

#### **Digital Literacy:**

 Recognise common uses of information technology beyond school

#### Vocabulary:

Unit 1.9: Technology

Unit 1.6:

- To understand what backgrounds and objects are
- To plan and make a computer program

#### **Vocabulary:**

Unit 1.7
Action, Code, Event,
Algorithm,
Command, Execute,
Debug/Debugging,
Input, Background

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**Computing Long Term Pla** 

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teacher as 2Dos. Wo Not Computer Science:-  • Understand what  Wo Unit	g in, Username, ssword, Avatar, My ork, Log out, Save, otification, Topics, ools nit 1.2 rt, Criteria	Animation, Font, Sound Effect, E-Book, File, Display Board.	

## YEAR 2 Computing

Online Safety - Education for a Connected World Framework 4 - 7 year olds:-Self-image and identity

• I can explain how other people may look and act differently online and offline.



• I can give examples of issues online that might make someone feel sad, worried, uncomfortable or frightened; I can give examples of how they might get help.

#### **Online relationships**

- I can give examples of how someone might use technology to communicate with others they don't also know offline and explain why this might be risky. (e.g. email, online gaming, a pen-pal in another school / country).
- I can explain who I should ask before sharing things about myself or others online.
- I can describe different ways to ask for, give, or deny my permission online and can identify who can help me if I am not sure.
- I can explain why I have a right to say 'no' or 'I will have to ask someone'. I can explain who can help me if I feel under pressure to agree to something I am unsure about or don't want to do.
- I can identify who can help me if something happens online without my consent.
- I can explain how it may make others feel if I do not ask their permission or ignore their answers before sharing something about them online.
- I can explain why I should always ask a trusted adult before clicking 'yes', 'agree' or 'accept' online.

#### **Online reputation**

- I can explain how information put online about someone can last for a long time.
- I can describe how anyone's online information could be seen by others.
- I know who to talk to if something has been put online without consent or if it is incorrect.

#### **Online bullying**

- I can explain what bullying is, how people may bully others and how bullying can make someone feel.
- I can explain why anyone who experiences bullying is not to blame.
- I can talk about how anyone experiencing bullying can get help.

#### **Managing online information**

- I can use simple keywords in search engines.
- I can demonstrate how to navigate a simple webpage to get to information I need (e.g. home, forward, back buttons; links, tabs and sections). I can explain what voice activated searching is and how it might be used, and know it is not a real person (e.g. Alexa, Google Now, Siri).
- I can explain the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real'.
- I can explain why some information I find online may not be real or true.

#### Health, well-being and lifestyle

- I can explain simple guidance for using technology in different environments and settings e.g. accessing online technologies in public places and the home environment.
- I can say how those rules / guides can help anyone accessing online technologies.

#### **Privacy and security**



- I can explain how passwords can be used to protect information, accounts and devices.
- I can explain and give examples of what is meant by 'private' and 'keeping things private'.
- I can describe and explain some rules for keeping personal information private (e.g. creating and protecting passwords).
- I can explain how some people may have devices in their homes connected to the internet and give examples (e.g. lights, fridges, toys, televisions).

#### **Copyright and ownership**

- I can recognise that content on the internet may belong to other people.
- I can describe why other people's work belongs to them.

#### Autumn

#### Purple Mash 2.2 Online Safety unit

- To know how to refine searches using the Search tool.
- 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.
- To introduce Email as a communication tool using 2Respond simulations.
- To understand how we should talk to others in an online situation.
- To open and send simple online communications in the form of email.
- To understand that information put online leaves a digital footprint or trail.
- To identify the steps that can be taken to keep personal data and hardware secure.

#### **Purple Mash 2.6 Creating pictures unit**

## Spring

#### **Purple Mash 2.5 Effective Searching Unit**

- To understand the terminology associated with searching.
- To gain a better understanding of searching on the Internet.
- To create a leaflet to help someone search for information on the Internet.

#### **Purple Mash 2.1 Coding Unit**

- To understand what an algorithm is.
- To create a computer program using an algorithm.
- To create a program using a given design.
- To understand the collision detection event.
- To understand that algorithms follow a sequence.
- To design an algorithm that follows a timed sequence.

## Summer

#### Purple Mash 2.3 Spreadsheets Unit

- To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine.
- To learn how to copy and paste in 2Calculate.
- To use the totalling tools.
- To use a spreadsheet for money calculations.
- To use the 2Calculate equals tool to check calculations.
- To use 2Calculate to collect data and produce a graph.

#### **Purple Mash 2.8 Presenting Ideas Unit**

- To explore how a story can be presented in different ways.
- To make a quiz about a story or class topic.
- To make a fact file on a non-fiction topic.
- To make a presentation to the class

## **Computing Long Term Plan**

**Whitestone Infant School** 

- To learn the functions of the 2Paint a Picture tool.
- To learn about and recreate the Impressionist style of art (Monet, Degas, Renoir).
- To recreate Pointillist art and look at the work of pointillist artists such as Seurat.
- To learn about the work of Piet Mondrian and recreate the style using the lines template.
- To learn about the work of William Morris and recreate the style using the patterns template.
- To explore surrealism and eCollage.

#### **Information Technology**

• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

#### **Digital Literacy**

 Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

#### **Vocabulary**

Search, Display Board, Internet, Sharing, Email, Attachment, Digital Footprint

- To understand that different objects have different properties.
- To understand what different events do in code.
- To understand the function of buttons in a program.
- To understand and debug simple programs.

#### **Computer Science**

- 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.

#### **Information Technology**

 Use technology purposefully to create, organise, store, manipulate and retrieve digital content

#### **Vocabulary**

#### **Unit 2.5**

Internet, Search, Search Engine.

#### **Unit 2.1**

Action, Button, Design Mode, Algorithm, Collision Detection, Event, Background, Debug/Debugging, Key Pressed, Nesting,

#### **Information Technology**

 Use technology purposefully to create, organise, store, manipulate and retrieve digital content

#### **Vocabulary**

#### **Unit 2.3**

Backspace key, Count Tool, Move cell tool, Copy and Paste, Delete key, Rows, Columns, Equals tool, Speak tool, Cells, Image Toolbox, Spreadsheet, Lock tool.

#### **Unit 2.8**

Concept Map (Mind Map), Quiz, Narrative, Node, Non-Fiction, Audience, Animated, Presentation.

Computing Long Term Plan	Wh	nitestone Infant School
	Object, Run, Test, Predict, Scale, Text, Properties, Scene, Timer, Sequence, When clicked/swiped, Sound	