

# Early Years Computing Skills

Linkage to KS1 Units of Work

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# Introduction

This document aims to support teachers in identifying where EYFS General Computing Skills are developed once children start the Key Stage 1 National Curriculum. This document can also be used for schools and localities that don't adopt the English National Curriculum.

Each page is broken down into the 11 areas of General Computing for Early Years with exemplification of where these skills and knowledge are further developed in years 1 and 2 of the scheme of work.

It's important to note that a lot of the General Computing Skills for EYFS span across most units of work. Listed in this document are the most explicit examples of where they are further developed.

# Quick Links to related documentation

<u>Prior and Future Learning Links</u> – These documents show how all units in the scheme from years 1 to 6 interlink. Perfect for schools when they are designing curriculum sequences.

<u>General Computing Skills EYFS</u> – A document containing 11 areas of suggested focus for EYFS practitioners in regards to computing. Provides key objectives and suggested activities.

<u>Progression EYFS I Can Statements</u> – A document with child speak statements for each of the 11 areas of focus for General Computing Skills.

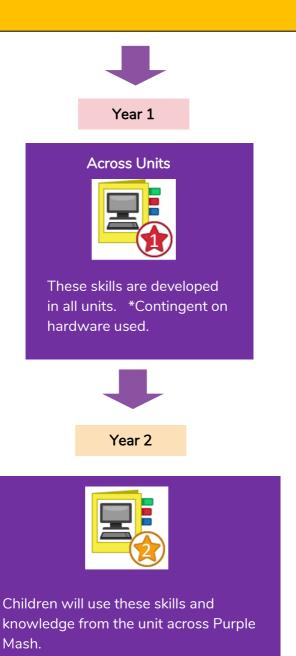
<u>Seven Areas of Learning for Reception</u> – Documents containing information on how to incorporate technology into the seven areas of learning.



# **Mouse and Trackpad Skills**



- -To know how to 'hold' a mouse.
- -To be able to move the mouse purposefully.
- -To be able to click the left-hand mouse button to perform an action.
- -To be able to use click and drag to move objects purposefully.
- -To be able to use the scroll roller on a mouse.
- -To know how to use a laptop touchpad.





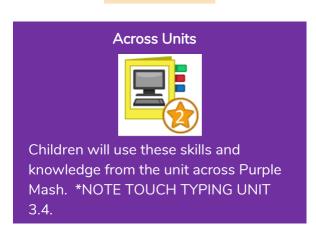
# **Keyboard Skills**



- -To be able to find individual letters on the keyboard.
- -To use the spacebar.
- -To be able to delete using the backspace key and the DELETE key.
- -To be able to type both uppercase and lowercase letters using CAPS LOCK and shift.
- -To be able to type numbers.
- -To be able to use the ENTER key.
- -To be able to use the arrow keys.
- -To be able to use the keyboard with all the above skills.











# **Drawing Skills**



- -To be able to select colours.
- -To be able to mark make purposefully on a screen.
- -To be able to control the pencil width.
- -To be able to control tools to experiment with.
- -To be able to use the undo function.
- -To be able to erase parts of pictures.
- -To be able to draw using a touch screen.
- -To be able to draw using mouse control.



#### Year 1



#### **Exploring Purple Mash**

- General use of Purple Mash.
- Design: avatar creation.
- Paint Projects: use of simple paint tools.

# Animated Story Books

- Use different drawing tools to create a picture on a page.
- Develop skill of using additional drawing tools for a desired effect.



Year 2



#### **Creating Pictures**

 2Paint a picture: art effects, collage effects.



#### Presenting Ideas

 Exploring how stories can be presented in different ways.
 Children will build on drawing skills by creating multimodal content.



## **Robots**



- -To be able to describe a route that is in progress and a route taken by another person while it is being enacted.
- -To be able to follow a route taken by another person after it has been enacted.
- -To plan routes for toy vehicles and follow plans for toy vehicles.
- -To use the buttons on a floor robot to make it move developing to using buttons with greater purpose e.g., program several buttons to make it move.
- -To be able to interpret simple instructions to predict an outcome.
- -To be able to plan and input instructions for a floor robot building up to several steps.



Year 1



#### Coding

- Concept of computers following given instructions.
- Planning using an algorithm design.



#### Lego Builders

- Algorithms.
- Logical decision making.
- Sequencing instructions.
- Following instructions.



#### Maze Explorers

- Concept of computers following given instructions.
- Program logic and structure.



Year 2



#### Coding

- Algorithms.
- Collision detection
- Timers
- Object types
- Buttons
- Debugging



#### Questioning

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



# Sounds



- -To experiment in the music area of Mini Mash to combine sounds.
- -To use the built-in sound effects in Purple Mash.
- -To be able to record spoken words and play these back.



Year 1



#### **Animated Story Books**

- Use of adding sounds to multimedia pages.
- •Adding voice recordings to multimedia pages.
- •Creating suitable music for multimedia pages.



#### Coding

 Use of sounds in context when making simple programs in order to enhance user experience.
 E.g. bubble makes a pop sound when clicked.



Year 2



#### Making Music

• Digitally creating music and sound effects.



#### Coding

 Developing how sounds are used in programs including switching between appropriate (apt) sounds.



# **Photography**



- -To be able to look at photos and identify features.
- -To be able to take photos using a device.
- -To be able to use the webcam in Mini Mash.
- -To be able to open photos in Purple Mash.
- -To be able to use own photos in work on a digital device.



Year 1



# Exploring Purple Mash

- Exploration of Purple Mash including the skill of opening files such as images.
- Adding pictures to and text to own work.



#### **Animated Story Books**

 Exploring image media functionality in 2Create a story e.g. changing backgrounds and importing pictures.



#### Tech Outside School

 Using digital technology such as cameras and tablets to capture images with purpose to upload onto a software platform.



Year 2



#### **Online Safety**

- Exploring how things are shared electronically including images and appropriate behaviours when doing so.
- Using digital technology to share content including images.



#### Presenting Ideas

 Exploring how ideas and content can be presented, including the use of images/photos within quizzes, fact file (publishing projects) and presentations.



# **Technology Around Us**



- -To know the technology used in the home.
- -To be able to identify how technology is used outdoors.
- -To be able to identify technology used in the wider world.



Year 1



#### **Tech Outside School**

- Exploring types of technology in and outside of school.
- Exploring what 'common' technology is used for.



Year 2



#### Effective Searching

- Developing understanding of the Internet.
- Identifying parts of a web search engine.







Children will explore use of technology in the everyday world through most units in the SOW. They will also be able to make links with technology outdoors and use of it in the home.





## **Hardware**



- -To be able to take appropriate actions before using technology.
- -To be able to understand why food should be kept away from devices.
- -To be able to identify electrical safety as important.
- -To know safe ways to transport portable devices.
- -To be able to relate being gentle and sharing to the use of devices.
- -To be able to understand what technology is.
- -To be able to identify the main parts of a computer.



Year 1



# Exploring Purple Mash

- General use of Purple Mash including the use of hardware (devices) to access Purple Mash.
- Username and password importance.



#### Tech Outside School

- Exploring types of technology in and outside of school.
- Exploring what 'common' technology is used for.



#### Maze Explorers

- Concept of computers following given instructions.
- Program logic and structure.



Year 2



Children will explore parts of a computer further up the scheme of work. Additionally, there are lots of opportunities for children to develop their skill and knowledge of using technology to achieve specific goals.



#### Need more support? Contact us:

# **Safety and Privacy**



- -To be able to explain what it means to own digital content.
- -To be able to explain what 'private' means when using technology.
- -To be able to express how it feels to be uncomfortable with something.
- -To be able to name 5 people who can help with negative feelings.
- -To be able to think about how to show kindness to others.
- -To begin to be aware of the impact of a lot of screen time.



# Unit 2.2

#### **Online Safety**

- Exploring how things are shared electronically including images and appropriate behaviours when doing so.
- Using digital technology to share content including images.



#### Effective Searching

- Developing understanding of the Internet.
- Identifying parts of a web search engine.

#### Across Units





Although there are specific units in each year group of the main scheme that build on safety and privacy, online safety should be referred to and actively acted out in each learning session. E.g. through good habits/behaviours and reporting protocols.





# Using Purple Mash with an Individual Login



- -To navigate to PM login page.
- -Using login shortcuts.
- -Login in picture password.
- -Login in numbers.
- -Login in words.
- -My work area.
- -2Dos.







# Exploring Purple Mash

- General use of Purple Mash including the use of login using own credentials.
- Username and password importance.
- Saving work and accessing work using My Work Area.



Year 2



#### **Online Safety**

- Exploring how things are shared electronically including images and appropriate behaviours when doing so.
- Using digital technology to share and access content.



- Developing understanding of the Internet.
- Identifying parts of a web search engine.

Across Units





Although there are specific units in each year group of the main scheme, this reception unit is built upon across the scheme of work. For example, everyday use such as file management, retrieval and submission of work.





## Quizzes



- -To know what a quiz is.
- -To be able to participate in a multiple-choice quiz using pictures.
- -To be able to participate in a sequencing quiz using pictures.
- -To be able to answer quiz questions by typing.
- -To be able to participate in a cloze quiz.
- -To be able to participate in a sorting and sequencing quiz.
- -To be able to complete a quiz with mixed questions.
- -To be able to play a quiz game.



Year 1



#### **Grouping and Sorting**

- Use of quizzes and applications to group and sort items.
- Building up on features of software to customise simple quizzes for an audience.



Year 2



#### Questioning

 Exploring different software to help with the understanding that data-handling resources have different limitation in the answers they provide.
 E.g. binary trees, databases, pictograms.



#### **Presenting Ideas**

 Use of quizzing software to present different ideas.
 Developing feedback skills to aid improvements to outcomes.

#### Across Units





Although there are specific units in each year group of the main scheme, the use of quizzes is present throughout the scheme to support understanding of prior and post learning of units.



