

Progression of skills: Computing

Programme of study: E-Safety

Key Components	Year R	Year 1	Year 2
<ol style="list-style-type: none"> 1. Use technology safely 2. Privacy 3. Respond to worries 4. Understand risks and take precautions 5. Know about false information 6. Know that the internet can connect to others. 	<ul style="list-style-type: none"> • To be able to speak to an adult about anything that worries them on a device eg. On an app, a website. • To know what information should not be given out (privacy) 	<ul style="list-style-type: none"> • To know not to feel guilty if something comes on the screen that makes me feel bad. • Be able to speak to an adult about what I have seen. • Talk about what I am doing on a computer. • To say if something I find on the internet makes me feel bad. • To be able to inform others about how to be safe on the internet. • To know what devices connect to the internet and to others around the world. • Use a laptop or Ipad to access information online safely. 	<ul style="list-style-type: none"> • To understand that one should only talk to people they know online in real life • To know to tell a trusted adult if anything happens that makes them worried. • To understand that once messages have been sent online they cannot be taken back. • To know that if personal information is posted online it could be seen by others and that it should be kept private. • To know about emails and what emails can trusted and opened • Recognise when an email (and other information) isn't safe to open. • Inform others about how to keep safe and what to look out for. • Follow rules in order to keep safe online. • To know how to act if they see something inappropriate or unsafe online.
	<p>Vocabulary E-safety, Personal information, Safe, Unsafe, App/application, Website, Internet</p>	<p>Vocabulary E-safety, Responsible, Personal information, App/application, Website, Internet, Advert, Details, Internet, Ipad, Laptop, Console, Xbox, Playstation, PC -</p>	<p>Vocabulary Online, E-safety, Internet, Personal information, Pictures, Email, Reply, Messages, Reply, Delete, Type, Keyboard, Mouse, stranger, Private</p>

		Personal Computer (any device that they use at home), Navigate, Video, Privacy	
Awareness of EYFS links			
Development Matters Area		Development Matters Statement	
Understanding the world: Technology		<p>Early Learning Goal</p> <p>Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.</p>	

Programme of study: Information Technology			
Key Components	Year R	Year 1	Year 2
<ol style="list-style-type: none"> 1. Use a laptop or tablet to type and navigate programs/the internet 2. To use different apps or programs for specific purposes 3. To load, save and name files. 	<ul style="list-style-type: none"> • To explore and use a tablet or laptop • To know that to move the cursor you should use a trackpad or mouse • To know how to click on a laptop • To know that to type you need to press keys on a laptop • To understand how to use a touchscreen • To load up an app on a tablet with support 	<ul style="list-style-type: none"> • Load and log into purple mash by either using a browser or a QR code application. • To create a picture using purple mash. • Be able to use the camera function and take a picture of themselves or a partner. • To save their work after it has been completed, including naming the file. • Log into the laptops using a username and password • To be able to load, type onto and save a word document, including naming the file. 	<ul style="list-style-type: none"> • Load and log into purple mash by either using a browser or a QR code application. • To be able to use the camera function to take a picture of themselves or a partner • Type onto purple mash to go with their work – using a tablet, laptop • To save their work after it has been completed, including naming the file. • Load a browser and use a search engine to navigate to a designated website and then webpage, eg. A maths game, Great fire of London game • Log into the laptops using a username and password • To be able to load, type onto and save a word document, including naming the file.

	Vocabulary Tablet, laptop, mouse, trackpad, keyboard, keys, touchscreen, app/application	Vocabulary Click, Load, Application, Software, Word Document, Type, Keyboard, Save, Name, Delete, Size, Font, backspace, key, mouse, return, enter, print, Rotate, Size, Stretch, Move	Vocabulary Click, Load, Application, Software, Word Document, Type, Keyboard, Save, Name, Delete, Size, Font, backspace, key,
Awareness of EYFS links			
Development Matters Area		Development Matters Statement	
Understanding the world: Technology		Early Learning Goal Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	

Programme of study: Research			
Key Components	Year R	Year 1	Year 2
1. To talk about, use and navigate the internet using a safe search engine 2. To find out information for a given topic 3. To use the new information they	<ul style="list-style-type: none"> To be able to talk about the internet and what can be found on it – how they use it. To explore a website or webpage using the skills they have previously learnt last half term. To be able to watch a video on a given topic, eg maths numbers 	<ul style="list-style-type: none"> To understand what the internet is and does To learn about different components if the internet – see key words. To Come up with questions about what they want to find out about a key person or event, such as Mary Anning. To remember how to stay safe on the internet To research information about a key person or event 	<ul style="list-style-type: none"> To understand what the internet is and does To learn about different components if the internet – see key words. To Come up with questions about what they want to research To remember how to stay safe on the internet Research a topic in pairs using laptops or tablets and independently use a child friendly search engine to do so
	Vocabulary Internet, website, webpage, video	Vocabulary	Vocabulary

found out to complete work		Browser, website, webpage, document, internet, search engine, computer, tablet, WIFI, e-safety, online	Browser, website, webpage, document, internet, search engine, WIFI, e-safety, online
Awareness of EYFS links			
Development Matters Area		Development Matters Statement	
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Programme of study: Data Handling			
Key Components	Year R	Year 1	Year 2
<ol style="list-style-type: none"> 1. Gather data 2. Record data 3. Graphing 4. Interpret Data 5. Use data to answer questions 	<ul style="list-style-type: none"> • Gather information (data) about things from their own experience • Record data using a pictogram • Talk about a pictogram, eg. The most, the least, their favourite... etc. 	<ul style="list-style-type: none"> • Gather data using a lesson from school eg. Geography – the number of buildings on their road. • Classify and sort data they have gathered practically – eg. Sorting animals by their features. • Graph data: plotting data they have gathered from a lesson into a pictogram, bar graph or line graph. • Place objects into a table to categorise information. 	<ul style="list-style-type: none"> • Independently gather information using their own experiences from lessons eg from a science experiment. • Record data in a logical sense – chronologically, by size, by colour, by age etc. • Graph information appropriately, selecting which graph is fit for purpose. • Interpret what data is used for, why has it been recorded in a certain way, has it been recorded efficiently • Find answers to specific questions using data eg. What is the largest, tallest, smallest, most, least etc. • Use search tools within a given database to find information to

			support learning and find answers to questions.
	Vocabulary Information, data, pictogram	Vocabulary Pictogram, data, computer, interrogate, classify/sort, graph, plot,	Vocabulary Graph, data, tree diagram, interrogate, interpret, research, efficient, pictogram, organize, plot, pie chart
Awareness of EYFS links			
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Programme of study: Computer Science			
Key Components	Year R	Year 1	Year 2
<p>1. To understand how to program and explore the uses of programming</p> <p>2. To create algorithms that can be inputted</p>	<ul style="list-style-type: none"> To explore and use a programmable toy/bee bot To understand the outcome of inputs into a bee bot/programmable toy To understand what a sequence of instructions are i.e multiple steps To be able to give simple instructions i.e make the bee bot go forward then left. 	<ul style="list-style-type: none"> To know about and understand algorithms, being able to follow a verbal algorithm. To be able to create their own simple algorithm and record it. To program and debug a bee bot To create an algorithm for a partner to follow Follow instructions to complete task on an app Input a simple block code to complete levels in an app (game) 	<ul style="list-style-type: none"> To use, understand and create algorithms. To know what algorithms and code can be used for To program using a bee bot or an app. To complete simple block coding to give instructions to an app To debug where necessary so that bee bots and applications function efficiently. To understand what code is and that is used by computers as a language.

into a device or piece of software. 3. To debug their algorithm/program to ensure it fits the purpose intended			<ul style="list-style-type: none"> To create more complex algorithms, code or instructions via the use of a game (hour of code)
	Vocabulary Instructions, sequence, program	Vocabulary Algorithm, program, bug, debug, instructions, code, Navigate	Vocabulary Algorithm, program, bug, debug, instructions, code, application, block coding, efficiently
Awareness of EYFS links			
Development Matters Area		Development Matters Statement	
Understanding the world: Technology		Early Learning Goal Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	