

Skills, Concepts, Knowledge and Understanding progression map for Computing -Plaistow Hill Infant and Nursery School

EYFS-Technology

In the new Early adopter ELG there is no longer a Technology strand. However, at Plaistow Hill we believe that this is still important so encourage the children to engage with a range of technology, such as coomers, cameras, laptops as well as toys which need switching on and off, as well as introducing them to simple programming and programs.

KSI Areas of study

The national curriculum for computing aims to ensure that all pupils:

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

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

recognise common uses of information technology beyond school

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.

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[EYFS](#)

[YEAR 1](#)

[YEAR 2](#)

TERM	AUTUMN 1 Term 1	AUTUMN 2 Term 2	SPRING 1 Term 3	SPRING 2 Term 4	SUMMER 1 Term 5	SUMMER 2 Term 6
EYFS	MARVELLOUS ME	LET'S CELEBRATE	BUILDERS YARD	DOWN AT THE BOTTOM OF THE GARDEN	HEROES AND HEROINES	ALL CREATURE'S GREAT AND SMALL
	Learning that that information and images can be retrieved from computers		Taking photos using a camera or tablet Drawing pictures and making marks using Active Primary	Exploring how to use a Beebot/Coding Caterpillar		Exploring how to use a Beebot/Coding Caterpillar
Vocabulary	Open Close Image/Picture Computer		Camera Tablet Screen App	Button Program Equipment Code		Button Program Equipment Code
<p>Ongoing: Interacting with a range of technology such as tablets, CD players, interactive whiteboard.</p> <p>Beginning to understand that the teachers have passwords to enable them to access their computers and tablets.</p>						

TERM	AUTUMN 1 Term 1	AUTUMN 2 Term 2	SPRING 1 Term 3	SPRING 2 Term 4	SUMMER 1 Term 5	SUMMER 2 Term 6
YEAR 1	SPACE	FIRE	EXHIBITION	BRAINIACS	EXPLORERS	RANGERS
	<p><u>Hector's World</u> Understand the importance of a password</p> <p>When using the internet to search for images, learning what to do if they come across something online that worries them or makes them feel uncomfortable</p> <p>Recognising uses of technology beyond school</p>	<p><u>Coding: Caterpillars</u> Programming a coding caterpillar to follow a planned route</p> <p>Learning to debug instructions when things go wrong</p> <p>Developing a how to video to explain how the caterpillar works.</p> <p>Learning how to explore and tinker with hardware to find out how it works</p>	<p><u>Bug Hunt</u> Introduction to spreadsheets</p> <p>Representing data in tables, charts and pictograms</p> <p>Sorting data and creating branching databases</p> <p>Identifying where digital content can have advantages over paper when storing and manipulating data</p> <p>Understanding that computers and devices around us</p>	<p><u>Algorithms Unplugged</u> Learning to debug an algorithm in an unplugged scenario</p> <p>Learning that decomposition means breaking a problem down into smaller parts</p> <p>Using decomposition to solve unplugged challenges</p>	<p><u>Rocket to the Moon</u> Using logical reasoning to predict the behaviour of simple programs</p> <p>Developing the skills associated with sequencing in unplugged activities</p> <p>Learning that an algorithm is a set of step by step instructions used to carry out a task, in a specific order</p> <p>Follow a basic set of instructions</p>	<p><u>Digital Imagery</u> Using a basic range of tools within graphic editing software</p> <p>Taking and editing photographs</p> <p>Understanding how to create digital art using an online paint tool</p> <p>Developing control of the mouse through dragging, clicking and resizing of images to create different effects</p>

			<p><i>use inputs and outputs, identifying some of these</i></p> <p><i>Learning, where keys are located on the keyboard</i></p>		<p><i>Assembling instructions into a simple algorithm</i></p>	<p><i>Developing understanding of different software tools</i></p> <p><i>Learning how to operate a camera</i></p> <p><i>Searching and downloading images from the internet safely</i></p>
VOCABULARY	<p><i>esafety</i></p> <p><i>personal information</i></p> <p><i>online</i></p> <p><i>password</i></p> <p><i>cyberbullying</i></p> <p><i>virus</i></p>	<p><i>algorithm</i></p> <p><i>sequence</i></p> <p><i>instruction</i></p>	<p><i>spreadsheet</i></p> <p><i>database</i></p> <p><i>data</i></p> <p><i>save</i></p> <p><i>stored</i></p> <p><i>keyboard</i></p>	<p><i>algorithm</i></p> <p><i>sequence</i></p> <p><i>instruction</i></p> <p><i>debug</i></p>	<p><i>unplugged</i></p> <p><i>algorithm</i></p> <p><i>sequence</i></p> <p><i>instruction</i></p>	<p><i>digital</i></p> <p><i>pixel</i></p> <p><i>software</i></p> <p><i>editing</i></p> <p><i>resizing</i></p> <p><i>download</i></p>

TERM	AUTUMN 1 Term 1	AUTUMN 2 Term 2	SPRING 1 Term 3	SPRING 2 Term 4	SUMMER 1 Term 5	SUMMER 2 Term 6
YEAR 2	THE LION KING	JUST KEEP SWIMMING	CROC AND BIRD	HEROES AND VILLAINS	OUR OCEAN CITY	HORRIBLE HISTORIES
	<u>Jessie and Friends</u>	<u>What is a computer?</u>	<u>ISS</u>	<u>Scratch Jnr</u>	<u>Algorithms and Debugging</u>	<u>Stop Motion</u>

	<p>Understanding how to stay safe when talking to people online. Not sharing personal information and what to do if they see or hear something online that makes them feel upset or uncomfortable</p>	<p>Understanding what a computer is and that it's made up of different components</p> <p>Recognising that buttons cause effects and that technology follows instructions</p> <p>Learning how we know that technology is doing what we want it to do via its output.</p> <p>Using greater control when taking photos with tablets or computers</p>	<p>Collecting and inputting data into a spreadsheet</p> <p>Interpreting data</p> <p>Developing confidence with the keyboard and the basics of touch typing</p> <p>Developing word processing skills, including altering text, copying and pasting and using keyboard shortcuts</p> <p>Using word processing software to type and reformat text</p>	<p>Using logical thinking to explore software, predicting, testing and explaining what it does</p> <p>Using an algorithm to write a basic computer program</p> <p>Learning what loops are</p> <p>Incorporating loops to make code more efficient</p>	<p>Articulating what decomposition is</p> <p>Decomposing a game to predict the algorithms used to create it</p> <p>Using decomposition to decompose a story into smaller parts</p> <p>Learning what abstraction is</p> <p>Learning that there are different levels of abstraction</p> <p>Explaining what an algorithm is</p> <p>Following an algorithm</p>	<p>Using software to create story animations</p> <p>Creating and labelling images</p>
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					<p>Creating a clear and precise algorithm</p> <p>Learning that computers use algorithms to make predictions</p> <p>Learning that programs execute by following precise instructions</p> <p>Incorporating loops within algorithms</p>	
VOCABULARY	<p>content</p> <p>avatar</p> <p>privacy</p> <p>permission</p> <p>fraud</p>	<p>output</p> <p>mouse/trackpad</p> <p>hardware</p>	<p>retrieve</p> <p>document</p> <p>text</p> <p>organise</p>	<p>predict</p> <p>testing</p> <p>loops</p> <p>efficient</p>	<p>abstraction</p> <p>predict</p> <p>testing</p> <p>loops</p> <p>efficient</p>	<p>stop motion</p> <p>animation</p> <p>storyboard</p>