






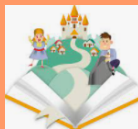


Computing at Bude Primary Academy Infant School -Progression Map - Knowledge and Skills

Intent





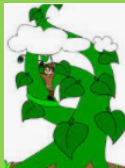


In Computing we teach the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. We will build on this knowledge and understanding so that pupils use information technology to create programs, systems and a range of content. We will focus on being safe whilst working in a digital environment and understand the digital footprint we leave. The curriculum will develop pupil's digital literacy – so that they are able to use, and express themselves at a level suitable for the future workplace and as active participants in a digital world. During their time at Bude Primary infants our children will

- Learn 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.







Although there is a specific focus on internet safety in the Spring Term, every Computing lesson starts with a reminder on how to keep safe online.

Subject – Computing - Autumn						
	EYFS		Year 1		Year 2	
Topic	Who am I? 	Where are we going? 	Marvellous Me 	Once upon a time 	Wild Explorers 	Fire and Plague 
Context	ICT in my new school		Technology I already use Digital self portraits		Technology at home, school and beyond Digital photographs of local habitats Digital photograph to illustrate class and individual stories	

Knowledge	Internet Safety Mouse control Keyboard skills	Technology Around Us Identifying technology Identifying a computer and its main parts. Creating rules for using technology responsibly Digital Painting Describing what different freehand tools do. Making careful choices when painting a digital picture To compare painting a picture on a computer and on paper	Information Technology Around Us Recognising the uses of Information Technology Identifying IT in the home and beyond school Understanding how IT helps us Understanding how to use IT safely Digital Photography Knowing what devices can be used to take photographs Describing what makes a good photograph.
	Complete a simple program on a computer. Uses ICT hardware to interact with age-appropriate computer software	Technology Around Us Using a mouse in different ways Using a keyboard to type Using a keyboard to edit text Digital Painting Using shape tools and line tools Using a computer to paint a picture	Digital Photography Using a digital device to take a photograph Using tools to change an image

Subject – Computing - Spring							
	EYFS		Year 1		Year 2		
Topic	What's in the egg? 	What's growing in the garden? 	Home sweet home 	Plants 	Islands 	Changes 	
Context	Typing simple labels for pictures of things growing in the garden for class display		Technology in the home now and then How technology has changed the way we live Moving a robot through the 3 pigs story map		Moving Beebot round the castle maze Using Pictograms as part of Field work study		
Knowledge	Microsoft Word/ Internet Safety Keyboard skills Typing		Moving a Robot Understanding what a given command will do Grouping data Labelling objects Identifying that objects can be counted		Robot Algorithms Describing a series of instructions as a sequence Understanding what happens when we change the order of instructions		

	Editing	Describing objects in different ways Comparing groups of objects Answering questions about groups of objects	Pictograms Recognising that we can count and compare objects using tally charts Recognising that objects can be represented as pictures Recognising that people can be described by attributes
Skills	Completes a simple program on a computer. Uses ICT hardware to interact with age appropriate computer software	Moving a Robot Combining forwards and backwards commands to make a sequence Combining four direction commands to make sequences Planning a simple program Finding more than one solution to a problem Grouping data Counting objects with the same properties	Robot Algorithms Using logical reasoning to predict the outcome of a program Designing an algorithm Creating and debugging a program Pictograms Creating a pictogram Selecting objects by attribute and making comparisons Presenting information using a computer

Subject – Computing – Summer						
	EYFS (Understanding of the World)		Year 1		Year 2	
Topic	What's that munching? 	What's in the sea? 	Fearsome creatures 	Coasts and Capitals 	Oh I do like to be beside the seaside! 	Plants and food 
Context	Minibeasts – making our code-a-pillar move around our class minibeast environment		Using ICT to create animal fact files Animating class stories		Creating, reviewing, refining music for Year 2 leavers performance	
Knowledge	Beebots/ Codapillar Internet Safety Programming		Digital Writing Understanding that the look of text can be changed Understanding why certain tools have been used		Making Music Saying how music can make us feel Identifying that there are patterns in music	



		<p>Comparing writing on a computer with writing on paper</p> <p>Programming animations</p> <p>Choosing a command for a given purpose</p> <p>Identifying the effect of changing a value</p>	<p>Describing how music can be used in different ways</p> <p>Showing how music is made from a series of notes</p> <p>Programming Quizzes</p> <p>Understanding that a series of commands has a start and an outcome</p> <p>Deciding how a project can be improved</p>
Skills	<p>Children recognise that a range of technology is used in places such as homes and schools.</p> <p>They select and use technology for particular purposes.</p>	<p>Digital Writing</p> <p>Using a computer to write</p> <p>Adding and removing text on a computer</p> <p>Changing text</p> <p>Programming animations</p> <p>Showing that a series of commands can be joined together</p> <p>Designing the parts of a project</p> <p>Using an algorithm to create a program</p>	<p>Making Music</p> <p>Creating music for a purpose</p> <p>Reviewing and refining computer work</p> <p>Programming quizzes</p> <p>Creating a program using a given design</p> <p>Changing a given design</p> <p>Creating a program using my own design</p>
Impact (End points)			
Impact	<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. Children can use the keyboard and mouse. Children can access an app</p>	<p>Children should be able to confidently log in and use a range of technology/programs e.g. Beebots, computer, camera. They use different technology/programs appropriately to type, locate, identify and create.</p>	<p>Children create simple pictures increasing my mouse skills</p> <p>They know how to stay safe when working online.</p> <p>Children can understand how code moves a sprite and how to write an algorithm for movement</p>