

Computing (NCCE scheme): Skills and Sticky Knowledge Year 2

Year Two	NCCE Unit Title/s	Key Skills and contents	Sticky Knowledge	Vocabulary
Autumn	IT Around Us	<ul style="list-style-type: none"> • Computing Systems, Networks and Online Safety • Recognise uses and features of information technology. • Identify technology at home and beyond school. • Explain how technology benefits us. • Show how to use technology safely. • Recognise that choices are made when using information technology. 	<ul style="list-style-type: none"> • To know that if something online is upsetting, it needs to be reported to an adult. • To name examples of how I.T helps improve our world e.g. traffic lights and how they keep us safe on the road. 	<p>IT Around Us: Information technology (IT), computer, barcode,</p>
	Digital Photography	<ul style="list-style-type: none"> • Creating Media. • Know what devices can be used to take photographs. • Use a digital device to take photographs, describe what makes a good photograph. • Decide how a photograph can be improved. • Use tools to change an image, recognise that images can be changed. 	<ul style="list-style-type: none"> • To be able to add text and an image. • To be able to save and retrieve work. • To be able to use the scroll bar on webpages. 	<p>Digital Photography: Device, capture, image, digital, landscape (horizontal), portrait (vertical), field of view, narrow, wide, format, framing, focal point, subject matter, compose, natural lighting, artificial lighting, flash, focus, background, foreground editing, tools, filter, changed, real.</p>

Spring	<p>Making Music</p> <p>Pictograms</p>	<ul style="list-style-type: none"> • Creating Media. <ul style="list-style-type: none"> • Say how music can make us feel. • Identify that there are patterns in music. • Describe how music can be used in different ways. • Show how music is made from a series of notes. • Create music for a purpose, review and refine computer work. • Data and Information. <ul style="list-style-type: none"> • Recognise that we can count and compare objects using tally charts. • Recognise that objects can be represented as pictures. • Create pictograms. • Select objects by attribute and make comparisons. • Recognise that people can be described by attributes. 	<ul style="list-style-type: none"> • Explain how we can present information using a computer. • To show how music is made from a series of notes. • To understand use/read a tally chart. • To use a program to create a pictogram. 	<p>Making Music: Music, quiet, loud, feelings, emotions, pattern, rhythm, pulse/beat, pitch, tempo, notes, instrument, create, open, edit.</p> <p>Pictograms: Organise, tally chart, votes, total, pictogram, enter, compare, count, explain, attribute, difference, most/least popular, conclusion, block diagram.</p>
Summer	Robot Algorithms	<ul style="list-style-type: none"> • Programming- AL (Algorithms), PG (Programming). <ul style="list-style-type: none"> • Describe a series of instructions as a sequence. • Explain what happens when we change the order of instructions. • Use logical reasoning to predict the outcome of a program (series of commands). • Explain that programming projects can have code and artwork. • Design an algorithm, create and debug a program. 	<ul style="list-style-type: none"> • To write a programme for the Bee-bot using the 4 commands in a sequence including forwards/backwards/left turn/right turn. • To know when and how to debug programs. • To know a series of instructions (usually on a computer) is called an Algorithm. 	<p>Robot Algorithms: Instruction, sequence, clear, order, commands, prediction, design, route, debugging.</p>

	<p>Introduction to Quizzes</p>	<ul style="list-style-type: none"> • Programming- AL (Algorithms), PG (Programming). • Explain that a sequence of commands has a start and an outcome. • Create a program using a given design, change a given design. • Create a program using my own design. • Decide how my project can be improved. 	<ul style="list-style-type: none"> • To be able to move the sprite and manipulate the controls by setting conditions e.g. jump high. • To change the background on Scratch. • To create 2 sprites and make a conversation happen between them. • To know how to save and retrieve projects. • To say 1 way a project can be improved. 	<p>Introduction to Quizzes: Start, outcome, predict, blocks, actions, change, build, match, compare, evaluate.</p>
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Computing

Computing Systems, Networks and Online Safety- CS (Computer Science), NW (Networks), SS (Safety and Security).

Creating Media- CM (Creating Media), DD (Design and Development), ET (Effective use of Tools), IT (Impact of Technology).

Data and Information- DI (Data and Information).

Programming- AL (Algorithms), PG (Programming).