

Year 2

1. Computing systems and networks – IT around us

2. Creating media – Digital photography

3. Programming A – Robot algorithms

4. Data and information – Pictograms

5. Creating media - Digital music

6. Programming B - programming quizzes



Year 2- IT around us



L1- To recognise the uses and features of information technology	L2- To identify the uses of information technology in the school	L3- To identify information technology beyond school	L4- To explain how information technology helps us	L5- To explain how to use information technology safely	L6- To recognise that choices are made when using information technology
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technology 	Anything people make to help us do things easier, faster, or better. This often includes devices like computers, tablets, and software that help us store, process, and share information.
computer 	An electronic machine that follows instructions to help us solve problems, play games, learn, or create things. It processes information quickly and can store data to use later.
barcode 	A pattern of lines or shapes that stores information and can be read by a scanner.
scan 	To use a device to read or capture information from something, like a barcode or document.



IT in libraries



IT in classrooms



IT in supermarkets



IT in the home



Year 2- Digital photography



L1- To use a digital device to take a photograph	L2- To make choices when taking a photograph	L3- To describe what makes a good photograph	L4- To decide how photographs can be improved	L5- To use tools to change an image	L6- To recognise that photos can be changed
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photographs 	Images captured using a camera that record a moment in time, preserving details such as people, places, or events.
digital 	Something that works on a computer, tablet, or phone.
device 	Something that has been programmed to perform a task.
background 	A background is the area behind the main subject in an image, scene, or design.
compose 	How different parts, like shapes, colours, or words, are put together to make something, like a picture.
editing 	Editing is the process of reviewing and making changes to improve a piece of work

Lighting

Composition

Before

After

Improvements

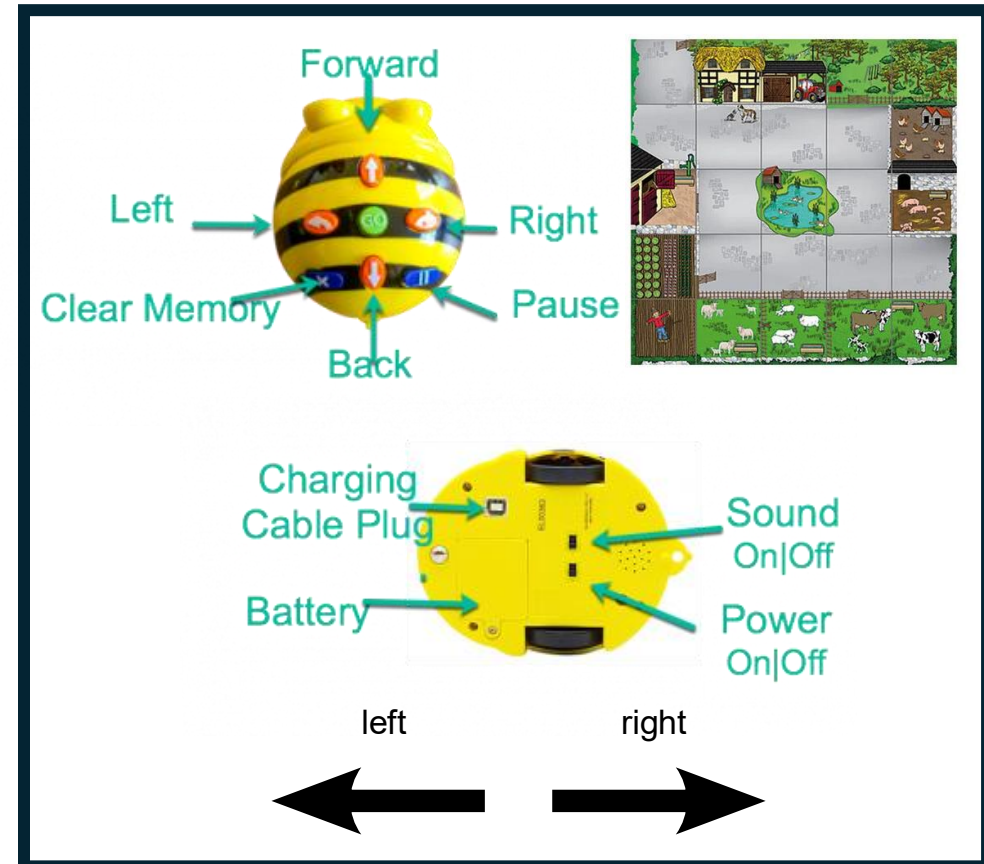


Year 2- Robot algorithms



L1- To describe a series of instructions as a sequence	L2- To explain what happens when we change the order of instructions	L3- To use logical reasoning to predict the outcome of a program	L4- To explain that programming projects can have code and artwork	L5- To design an algorithm	L6- To create and debug a program that I have written
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sequence 	A set of actions that have a particular order.
algorithm 	A precise set of ordered steps that can be followed by a human and implemented on a computer to achieve a task.
program 	A set of ordered commands that can be run by a computer to complete a task.
route 	The path you take to get from one place to another.
debugging 	The process of finding and correcting errors in a program.
prediction 	A prediction is a smart guess about what is likely to happen in the future based on patterns, evidence, or previous knowledge.





Year 2- Pictograms



L1- To recognise that we can count and compare objects using tally charts	L2- To recognise that objects can be represented as pictures	L3- To create a pictogram	L4- To select objects by attribute and make comparisons	L5- To recognise that people can be described by attributes	L6- To explain that we can present information using a computer
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data 	Information that can be collected, organised, and used to answer questions or make decisions.
pictogram 	A chart that uses pictures to show information, helping us count and compare easily.
objects 	Items we can see or describe, which can be grouped or counted in computing.
organise 	To arrange or sort data so it's easier to understand or use.
tally chart 	A way of recording and counting data using marks or lines, often grouped in fives.

Minibeast tally chart

Introduction
Use the tally chart to record how many minibeasts you can find.

Minibeast	Tally	Total
		5
		1
		2
		0
		1

How many minibeasts?

Interactive interface showing minibeast icons and buttons to add or subtract.

Use these buttons to add more or less

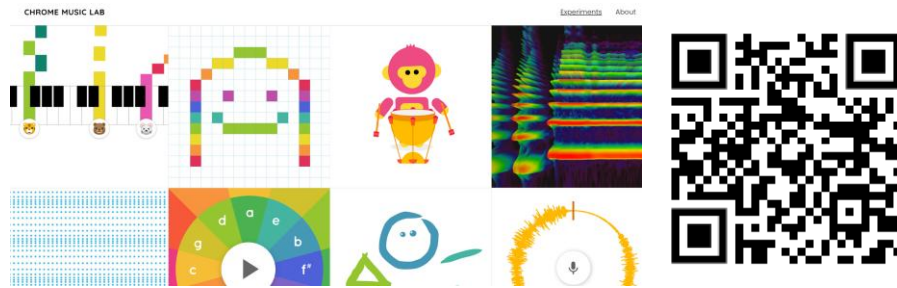


Year 2- Digital music



L1- To say how music can make us feel	L2- To identify that there are patterns in music	L3- To experiment with sound using a computer	L4- To use a computer to create a musical pattern	L5- To create music for a purpose	L6- To review and refine our computer work
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open 	To start or access a file or program so you can use it.
edit 	To make changes to something, like adjusting sounds or fixing mistakes in a music project.
pattern 	A repeated arrangement of sounds or notes that creates rhythm in music.
music 	Sounds put together in a way that people enjoy listening to. It can include singing, instruments, or digital sounds.
pulse 	The steady beat in music that you can tap or clap along to.






Create a rhythm pattern here.

Choose a rhythm instrument.

Drag the blue circle by 'Tempo' to change how fast the notes play.



Year 2- Programming quizzes



L1- To explain that a sequence of commands has a start	L2- To explain that a sequence of commands has an outcome	L3- To create a program using a given design	L4- To change a given design	L5- To create a program using my own design	L6- To decide how my project can be improved
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command 	A single instruction that can be used in a program to control a computer.
program 	A set of ordered commands that can be run by a computer to complete a task.
block 	A block in ScratchJr is a little puzzle piece that gives the computer a command, like making a character move, jump, or talk.
algorithm 	A precise set of ordered steps that can be followed by a human and implemented on a computer to achieve a task.
code 	The commands that a computer can run.
evaluate 	To carefully look at something to see if it fits its intended purpose.

ScratchJr

Blocks are used to create an algorithm

You can use ScratchJr on an iPad or tablet. It is an app.

A sprite is a character