Unit 1.1 – We are Treasure Hunters
algorithm: a set of step-by-step instructions to solve a problem or complete a task **bug**: an error or mistake in a program or algorithm, causing the computer or robot to behave in a manner that was not originally intended **computer**: a device that accepts input, processes it according to instructions or rules and produces output **debug**: to find and correct mistakes in a computer program or algorithm **input**: data supplied to a computer, in this case, pressing buttons on the robot **logical reasoning**: to be able to give a reason for something which others would have to accept as correct **output**: information produced by a computer – in this case, movements of the robot **program**: a sequence of instructions that can be followed by a computer **robot**: a computer that can move, or that can move part of itself
Unit 1.2 – We are TV chefs
abstraction: computational thinking approach to managing complexity by simplifying things through identifying what is important, and what detail can be hidden or ignored **algorithm**: a set of step-by-step instructions to solve a problem or complete a task **audio**: sound, such as spoken narration **decomposition**: breaking a problem down into smaller parts **edit**: change or correct a piece of work after the first go **frame**: a single static image from a video **narration**: a commentary, description or explanation of what happens in a video **pattern**: a predictable sequence generated by one or more rules **recipe**: a set of instructions to make a particular food **storyboard**: a visual representation of the key scenes or frames in a video; one way of recording an algorithm visually **video camera**: a device that can record film
Unit 1.3 – We are digital artists
analogue: real-world, such as paint on paper **bitmap**: an image represented by a large, rectangular grid of pixels, each having its own colour value, typically in the range 0 to 255 for each of red, blue and green **digital**: made using computers, such as images being made up of many dots, or pixels **effect**: change applied to an area of an image, such as increasing the brightness or changing the overall colour **layer**: one of a virtual stack of images forming a composite picture **pixel**: one of the small, square dots that makes up a digital image **stylus**: input device in the form of a pen or pencil **transform**: to change the shape of an image or part of an image **undo**: to reverse the effect of a change in a program **zoom**: to change the magnification so that only part of the overall image occupies the whole of the screen
Unit 1.4 – We are publishers
audio: sound, such as spoken narration **clip art**: simple, stock images used as illustrations **Creative Commons**: licence which allows some images to be reused without further permission **eBook**: an electronic book **filter**: blocks unsuitable material on the Internet

font: the design of letters in text
images: pictures, such as drawings or photographs
multimedia: words (written or spoken) and pictures (still or moving)
safe search: filter applied by Google or other search providers to remove sensitive or inappropriate results from searches
speech synthesis: text spoken aloud by the computer
voice dictation: speech recognition available on the iPad keyboard, allowing the user to talk to the iPad and have their spoken words transcribed as written text

Unit 1.5 – We are rhythmic

audio: sound, such as spoken narration
digital: storing, processing or transmitting information as numbers
message: a way for sub-programs such as sprites to pass information to other sub-programs, such as an instruction to start
microphone: an input device converting sound into data
MIDI: a computer audio format or standard in which the pitch, duration and volume of individual notes is specified
piano roll: a visual representation of music, showing pitch and duration
repetition: Do something again or more than once
sample: snapshot of a sound pressure value
sequencer: software for creating repeating patterns of sounds, typically drums and other percussion instruments
speaker: output device converting data into sound
sprite: a graphical character in a program that can be given instructions
track: a recording of one song or piece of music
virtual: does not exist in physical form, but made by software to appear to do so

Unit 1.6 – We are detectives

database: a collection of data organised so that groups of records can be identified
dataset: a set of data from a group related to a particular topic
field: information in a database related to a single type of information given for all the records, such as age
filter: to identify a subset of data based on one or more criteria – such as age
form: a way of entering a record
leaf: the end points of a tree data structure, where no further questions are asked
record: information in a database related to one individual or item
sort: to rearrange the order of records in a database based on the values in the fields
table: a data structure representing records as rows and fields as columns
tree: a data structure shown as a tree – questions are at branch points to separate the data into categories until one item is left at each leaf