

	OR							
Year	SUCKY VOCADUIALA							
group	Autumn		Spring			Summer		
	Who am I and where do I belong?		Where do I go and how do I get there?			What can I see and how does it change?		
EYFS	Cameras: a device for taking photographs Light box: a box with a light in it and a transparent lid. Tablet: small flat touch screen computer.		Torch: a small light you can hold in your hand.  Metal detectors: a device that sounds when it finds metal.  Walkie talkie: a portable radio for sending and receiving messages.  Screen time: the amount of time a person spends using a device.			Beebots: a programmable floor robot.  Remote control: controlling a machine or a vehicle from a distance by using radio or electronic signals  Switch: a button that turns something on or off.		
1	<u>Creativity</u>		<u>Text</u>	<u>Text</u>		<u>Text</u>	<u>Coding</u>	
	We are digital artists  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 pixel: one of the small, square dots that makes up a digital image transform: to change the shape of an image or part of an image zoom: to change the magnification so that only part of the overall image occupies the whole of the screen	Laptop: a type of computer trackpad: a touch sensitive interface that allows you to move the cursor. shutdown: how to turn the laptop off. Applications: is the correct word for app. windows: is the operating system. Curser: a movable marker on		Beginning to type Laptop, curser, trackpad, shutdown, application, windows.  Type: Pressing keys to write a message. Keyboard: The keys on a laptop computer. Enter: A key on a computer that executes a command.	Let's type Laptop, curser, trackpad, shutdown, application, windows, type, keyboard, enter.  Save: To store work to be retrieved later. Undo: cancel or reverse the last command. Redo: To do something again. Bold: darker writing. Underline: line under the writing.		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 debug: to find and correct mistakes in a computer program or algorithm	

Subject: Computing

Computer Science Information Technology 2 Coding Media Online Safety Text Text We are astronauts We are safe researchers All about me We are animators London PowerPoint Laptop, curser, trackpad, shutdown, algorithm: bug: debug: Laptop, curser, trackpad, application, windows, type, animation: motion picture Google: dominant shutdown, application, keyboard, enter, save, undo, redo, provider of Internet input: data supplied to a made by creating each frame windows, type, keyboard, hold computer, in this case, separately, then playing these search, and additional enter, save, undo, redo, pressing buttons on the back in quick succession to services such as Google bold Backspace: removing writing from robot create the illusion of Docs and Gmail work by pressing the arrow. output: information mind map: visual movement Backspace: removing **Delete**: removing writing from work produced by a computer – in background: scenery and representation of ideas, writing from work by by pressing the delete key. this case, movements of the other unchanging elements in showing how these ideas pressing the arrow. Arrow keys: moving the curser in robot an animation can be connected to one Delete: removing writing code: instructions (or onion-skinning: animation tool different directions. another from work by pressing the Edit text: change what you have sometimes rules) that can be in which the previous frame is presentation: typically a delete kev. understood by a computer overlaid on the current sequence of slides written. Arrow keys: moving the Format font: change the size, shape, parallel processing: when camera image to facilitate showing text and images curser in different programs run (or appear to small adjustments from one accompanied by a style of your writing. directions. run) simultaneously frame to the next spoken commentary Edit text: change what you program: sequence of search engine: web**prop:** inanimate object have written. instructions (or sometimes a needed in an animation based service that Format font: change the set of rules) that can be stop-motion: approach to maintains an index of size, shape, style of your followed by a computer animation in which each Internet pages, allowing writing. sprite: a graphical character frame is photographed users to identify which in a program that can be individually, with these frames pages include particular given its own sequence of then played back in quick terms or meet particular instructions succession criteria, ranking the resulting list in a way that storyboard: planning tool in is helpful to its user which each scene of an Wikipedia: online animation is drawn out encyclopaedia edited by its users

insert images: add pictures or

photographs to a document

# Coding

### We are game testers

Algorithm: Bug: Code: Debug: sprite: parallel processing: program: input: output

computational thinking: a

way of looking at problems so that the solution can be automated using a computer recognition: computational thinking approach in which common aspects of how a system behaves are used to simplify implementing solutions remix: to take a project and make changes to its source code

source code: the code that a particular program follows; the instructions or rules that determine whathappens in a game or other application

#### Media

### We are presenters

Camera roll: Pixel

Colour value: the combination of red, green and blue values, each on a 0-255 scale, which represents the colour of any given pixel

Green screen: video technique in which the bright green pixels of each frame in video footage are replaced by corresponding pixels from background video or images, effectively making these areas of the frames transparent 'Ken Burns': video effect in which the video frame moves across and perhaps zooms into or out from a static image, such as a photograph; named after a US cinematographer who made extensive use of this technique in historical documentaries

**Resolution:** the number of pixels that make up an image or frame of video – the higher the value, the more detail is visible

Rushes: unedited footage from a video recording

### Online Safety

### We are who we are

Comments: a tool in word processors (and other software) to allow one user to provide feedback and suggestions on part of a document

**Creative Commons:** copyright licensing scheme in which content can be re-used without additional permission, subject to certain specified conditions Data centre: warehouse of computer storage and processing connected to the internet Outline: overview of a document. showing the structure of headings and subheadings

without body text Personal information: information relating to an identified or identifiable individual

### Coding

### We are programmers

Algorithm: Bug: Code: Debug: sprite: parallel processing: program: input: output: computational thinking: recognition: remix: source code

**Event:** something that happens within a computer program to cause some particular code to be run, such as an internal message being received or a sprite being tapped by the user

Abstraction: a computational thinking approach to managing complexity by simplifying things, through identifying what is important and what detail can be hidden or ignored

**Decomposition:** breaking a problem down into smaller parts



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# <u>Text</u>

### <u>Victorians</u>

Laptop, curser, trackpad, shutdown, application, windows, type, keyboard, enter, save, undo, redo, bold, backspace, delete, arrow keys, edit text, format font.

**Highlight**: text to be seen in a different colour

align text: move where writing sits on a

page

copy and paste text: move writing from

one place to another

**insert images**: add pictures or photographs to a document

# Computational Thinking We are bug fixers

Algorithm: Bug: Code: Debug: sprite: parallel processing: program: input: output: computational thinking: recognition: remix: source code Algorithm: Bug: Code: Debug: sprite: parallel processing: program: input: output: computational thinking: recognition: remix: source code

Logical reasoning: to be able to give a reason for something which others would have to accept as correct

Parallel processing: when programs run (or appear to run) simultaneously

**Program:** a sequence of instructions (or sometimes a set of rules) that can be followed by a computer

Repetition: programming construct which allows a group of instructions to be repeated a number of times, or until a certain condition is met

Variable: named storage location in a computer's

memory

## Media We are musicians

Beat sequencer: interface for creating a repeating percussion pattern, showing at which beat in a set of bars individual instruments are hit Live loops: GarageBand tool for creating and performing electronic, typically dance music, in which multiple samples are played with synchronisation managed by the software

MIDI: 'Musical Instrument Digital Interface', originally a standard for connecting electronic instruments, now used for the associated file format in which note pitch, duration and velocity are specified, allowing subsequent playback using different instrument voices or samples Piano roll: interface for controlling the pitch and duration of individual notes, a digital equivalent of stave notation, derived from the punched-hole piano rolls used for player-pianos in the 19th century. The velocity (volume) of individual notes can also be specified

# Online Safety We are bloggers

Creative Commons: Hyperlinks:

# Hypertext mark-up language

(HTML): the predominant language for web pages Internet: global network connecting computers and local networks using automated switches, routers and fibre optic, copper wire and radio connections

Uniform Resource Locator (URL): a standard for specifying the location on the Internet of certain data files. The URL includes the protocol used to transmit the data, the computer on which it is stored, the file path and the file name of the data Web server: a service running on a computer (or sometimes the computer itself) that returns HTML data for a web page when it receives a request via the local network or the Internet

# <u>Coding</u> <u>We are software developers</u>

Algorithm: Bug: Code: Debug: sprite: parallel processing: program: input: output: computational thinking: recognition: remix: source code Algorithm: Bug: Code: Debug: sprite: parallel processing: program: input: output: computational thinking: recognition: remix: source code: logical reasoning, repeat loop.

**Repeat loop:** a sequence of instructions executed a fixed number of times or until some condition is met. or possibly forever **Repetition:** programming construct which allows a group of instructions to be repeated a number of times, or until a certain condition is met Variable: lets computer programs store, retrieve or change simple data. Typically thought of as a particular location in the computer's memory that holds a specific item of data

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Text

### Me and my life

Laptop, curser, trackpad, shutdown, application, windows, type, keyboard, enter, save, undo, redo, bold, backspace, delete, arrow keys, edit text, format font, highlight, align text, copy and paste text, insert image.

**format an image**: change the way an image looks. **formatting tools**: tools used to change the way something looks.

Spellcheck: a tool to correct ones spelling.

Table: a grid.

column tool: a way to change the layout of the page.

### Online Safety

### We are web developers

Creative Commons: Hyperlinks:

Hypertext mark-up language (HTML): Hypertext transfer protocol (HTTP): Internet:

**Internet Protocol (IP) addresses:** numeric addresses uniquely specifying computers directly connected to the Internet

**Network switch:** dedicated computer hardware that routes data packets to particular connections according to their IP address header

**Tag:** component of HTML to show the purpose of the following text, such as a link, paragraph text or image **Uniform Resource Locator (URL):** a standard for specifying the location on the Internet of certain data files

**Web browser:** program running on a user's computer which requests and displays web pages using HTTP **Web server:** computer connected to the Internet that stores web pages, transmitting these to web browsers as HTTP requests are received

**World Wide Web:** the HTML and other documents stored on individual web servers connected via the Internet and accessible via HTTP

### Coding

### We are makers

Algorithm: Bug: Code: Debug: sprite: parallel processing: program: input: output: computational thinking: recognition: remix: source code: Algorithm: Bug: Code: Debug: sprite: parallel processing: program: input: output: computational thinking: recognition: remix: source code: logical reasoning, repeat loop.

Accelerometer: hardware component providing data on changes in motion, typically in three directions

LED: light emitting diode, an electronic component that lights up when current flows in one direction

MakeCode: block- and text-based editor from Microsoft, supporting a variety of hardware platforms including the micro:bit

**micro:bit:** simple, single board programmable computer with integrated input, output and network capabilities **Object code:** a version of the program converted (compiled) into the detailed instructions to be followed by the computer's processor

**Runtime:** the complete software environment (operating system, drivers, interpreter) needed for a program to run on particular hardware

**Simulator:** software allowing one computer system to behave as another; in this case the MakeCode editor include an on-screen simulator of a micro:bit so that programs can be tested

**Source code:** the program as written, in a language that can be understood by both the programmer and the computer

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Text

My story so far

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Online Safety

We are connected

Hyperlink: Creative Commons: Web server

**Anchor tag bias:** disproportionate weight given to one perspective, typically because it accords with the author's own

**Blog:** a website consisting of short articles, presented in reverse date order, typically inviting responses

**Fake news:** a fictional, or partly fictional, story presented as news

Neutral point of view: a balanced perspective where all

sides of an argument are presented fairly

Online bullying (cyberbullying): deliberate, typically repeated or extreme harassment conducted via the Internet or other network technologies

Plausible: an argument or story that is likely or probable,

one that many might believe

**Reliable:** a source that can be trusted, based on

authority, expertise or experience

**Social media:** websites and apps that allow users to create and share content or to participate in conversations with one or more other users

Coding

Lego Prime

Statements not created yet! Trial year.