

# **SARACENS BROADFIELDS**

## **Computing Curriculum Map 2025-26**

Key Stage 1 and 2

## Philosophy

There are six underlying attributes at the heart of Saracens Broadfields curriculum and lessons.

1. Lessons and units are knowledge and vocabulary rich so that pupils build on what they already know to develop powerful knowledge.
2. Knowledge is sequenced and mapped in a coherent format so that pupils make meaningful connections.
3. Our flexible curriculum enables teachers to tailor content to other subjects in the curriculum and the current context.
4. Our curriculum is evidence informed through rigorous application of best practice and the science of learning.
5. We prioritise creating a diverse curriculum by committing to diversity in teaching and teachers, and the language, texts and media we use, so all pupils feel positively represented.
6. Creating an accessible curriculum that addresses the needs of all pupils is achieved to accessibility guidelines and requirements.

## Overview:

Our Computing Curriculum is designed to equip our pupils with essential skills across three core pillars of progression: **Digital Literacy, Computer Science, and Information Technology**. Our curriculum map is structured around these pillars to ensure clear progression and mastery. We utilise high-quality, research-driven resources from established computing education experts, guaranteeing that our teaching is based on effective pedagogy and current industry practices.

## 2025/2026 SCHEME OF WORK OVERVIEW

Digital Literacy (including Online Safety) (DL)

Information Technology (IT)

Computer Science (CS)

	<a href="#">Year 1</a>	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Autumn 1</b> (7.5 weeks)	Unit 1: <a href="#">ICT Basics, logging on and off</a> (3 lessons)	Unit 8: <a href="#">ICT Basics. Using Google Slides</a> (3 lessons)	Unit 15: <a href="#">ICT Basics: I Am Computer Awesome</a> (2 lessons)	Unit 22: <a href="#">Basic skills, Computing Shortcuts</a> (3 lessons)	Unit 29: <a href="#">Secure Your Secrets</a> (2 lessons)	Unit 36: <a href="#">It's cool to be kind</a> (4 lessons)
	Unit 2: <a href="#">Going Places Safety (part 1)</a> (4 lessons)	Unit 9: <a href="#">Using the Internet Safely and Responsibly (Part 1)</a> (5 lessons)	Unit 16: <a href="#">Share with Care</a> (5 lessons)	Unit 23: <a href="#">Don't Fall for Fake</a> (4 lessons) DL Assessment (Arbor)	Unit 30: <a href="#">Space Junk Game</a> (5 lessons)	Unit 37: <a href="#">Responsible Use of Artificial Intelligence (AI)</a> (3 lessons) *New DL Assessment (Arbor)
<b>Autumn 2</b> (6 weeks)	Unit 3: <a href="#">Going Places Safety (part 2)</a> (5 lessons) DL Assessment (Arbor)	Unit 10: <a href="#">Using the Internet Safely and Responsibly (Part 2)</a> (5 lessons) DL Assessment (Arbor)	Unit 17: <a href="#">The Online World</a> (6 lessons) DL Assessment (Arbor)	Unit 24: <a href="#">Chatbot</a> (6 lessons)	Unit 31: <a href="#">Selection In Physical Computing</a> (6 lessons)	Unit 38: <a href="#">Variables in Games</a> (6 lessons)
<b>Spring 1</b> (6 weeks)	Unit 4: <a href="#">Coding with Beebots</a> (5 lessons)	Unit 11: <a href="#">Scratch jr. Cool Characters</a> (5 lessons)	Unit 18: <a href="#">Research and Collaboration- Where do you come from?</a> (6 lessons) IT Assessment (Arbor)	Unit 25: <a href="#">Creating Media - Audio Production (Podcasting)</a> (6 lessons) *New	Unit 32: <a href="#">Plan an Event</a> (6 lessons)	Unit 39: <a href="#">Spreadsheets</a> (6 lessons)
<b>Spring 2</b> (5 weeks)	Unit 5: <a href="#">Continents/Oceans (Geography)</a> (5 lessons)	Unit 12: <a href="#">Creating Media 1- Digital Photography</a> (5 lessons) *New	Unit 19: <a href="#">Lost in Space</a> (6 lessons)	Unit 26: <a href="#">Boat Race</a> (5 lessons)	Unit 33: <a href="#">Video Editing</a> (6 lessons)	Unit 40: <a href="#">Web Page Creation</a> (6 lessons)

<b>Summer 1</b> (6 weeks)	Unit 6: <a href="#">Creating Digital Drawings</a> (6 lessons) IT Assessment (Arbor)	Unit 13: <a href="#">Creating Media 2 - Video Making</a> (5 lessons) *New IT Assessment (Arbor)	Unit 20: <a href="#">Sound and Music -Rock Band</a> (6 lessons)	Unit 27: <a href="#">Physical Computing (Micro:bits Introduction)</a> (4 lessons) CS Assessment (Arbor)	Unit 34: <a href="#">Selection in Quizzes</a> (6 lessons) CS Assessment (Arbor)	Unit 41: <a href="#">Sensing</a> (6 lessons) CS Assessment (Arbor)
<b>Summer 2</b> (7 weeks)	Unit 7: <a href="#">Scratch Jr - Drive Across the City</a> (6 lessons) CS Assessment (Arbor)	Unit 14: <a href="#">Scratch jr. Animating a Sprite</a> (6 lessons) CS Assessment (Arbor)	Unit 21: <a href="#">Creating interative video games</a> (3 lessons) <a href="#">Introduction to Ozobots</a> (3 lessons) CS Assessment (Arbor)	Unit 28: <a href="#">Who am I? - Adobe Express</a> (3 lessons) IT Assessment (Arbor)	Unit 35: <a href="#">Vector Drawing</a> (6 lessons) IT Assessment (Arbor)	Unit 42: <a href="#">Creating Media - 3D Modelling</a> (6 lessons) *New IT Assessment (Arbor)

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## **Year 1: Digital Literacy**

### **Unit Objectives:**

- Use technology safely
- Keep personal information private
- Recognise common uses of information technology beyond school

### **Unit 1 (3 lessons)**

**Basic Skills- Logging on and off**

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcomes:</b>
0	I am internet awesome	To agree to the Broadfields Primary School Acceptable Use Policy	-	<u>Signed Class AUAs</u>
1	Switching on and logging in	To turn on a computer and add a user Keeping login details private and safe	chromebook button on and off user	-digital collage -recorded pupil voice
	Using a chromebook	Introduction to Google Drive and Google Classroom	classroom Invites Accept Digital community	Joined Google Classroom via invites
2	Using a trackpad	- To use the trackpad to move the mouse pointer and	trackpad	-digital collage

		select items - To use the trackpad to drag items and scroll up and down	Screen mouse pointer scroll drag up and down	-recorded pupil voice
3	Using our computer skills	Use technology purposefully to manipulate and retrieve digital content.	Google Classroom retrieve Kiddle	-digital collage -recorded pupil voice

## Unit 2 (4 Lessons)

### Going Places Safety (Part 1)

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes:
1	Going Places Safely	To use the internet safely To keep personal information private	safe stop think tell private username	Padlet
2	Sending and receiving emails	Using Gmail and discuss its functions on how to receive and send email To discuss how to stay safe and respectful online	Inbox Send/ Sent Receive	Email on School Accounts

			Compose	
3	A-B-C Searching	To search the internet for suitable pictures	Google Images drag and drop	Google Slides
4	My Creative Work	To describe how to take ownership of work online	Ownership Copyright	JIT5

### Unit 3 (5 Lessons)

<b>Going Places Safety (Part 2)</b>
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Lesson number	Title	Pupil will Learn	Key vocabulary	Pupils Outcomes/ Teacher Assessment mode
1	How a supermarket works	To identify computers in everyday lives	Till Scanner Signal database	Class collage
2	How a library works	To discuss how computers make our lives easier	Scanner Database Library	Class collage
3	Your digital footprint	To discuss staying safe online and offline	Digital footprint	Year Group Padlet with

			Online safety	Pupil Voice
4	I am a videographer	How to safely use a device to video	Video record	Chromebook Camera
5	I can collaborate	How to use a device and share appropriate content safely	Share Collaborate Appropriate	TBD

## Year 1: Computer Science

### Unit Objectives:

- Understand what algorithms are
- Use logical reasoning to predict the behaviour of simple programs
- Create and debug simple programs

### **Unit 4 (5 Lessons)**

## Coding with Beebots

Lesson number	Title	Pupil will Learn	Key vocabulary	Pupils Outcomes/ Teacher Assessment mode
1	Playing & Exploring	To understand that a computer follows precise commands and will respond	command	Class collage/

	Bee-Bot: Routes	to those commands consistently	algorithm	Padlet
2	Playing & Exploring Bee-Bot: How far?	To be able to predict the behaviour of simple programs	Left Right Forward backwards	Class collage/ Padlet
3	Playing & Exploring Bee-Bot: One Step More	To be able to use logical reasoning to predict the behaviour of simple programs	Instructions Programmed	Class collage/ Padlet
4	Bee-Bot Trail : Challenge	To plan, test and debug simple programs.	Debug	Class collage/ Padlet
5	Bee-Bot's Journey	To be able to plan and combine a sequence of commands to achieve a specific goal.	Instructions Sequence Command	Class collage/ Padlet

## **Year 1: Information Technology**

### **Unit Objectives:**

-Use technology purposefully to create, store and retrieve digital content

### **Unit 5 (5 Lessons)**

**Continents/Oceans (Geography)**

Lesson number	Title	Pupil will Learn	Key vocabulary	Pupils Outcomes/ Teacher Assessment mode
1	Introduction to the topic and searching for images	To use Google search to find images	Search Google Image	Class Collage
2	Create an image gallery	To save images from the internet	Save Trackpad	Google Drive
3	Organise files into folders	To create and rename folders	Folders Rename Drag and drop Trackpad	Google Drive Folders
4	Rename files to help organise them	To rename files	Rename Organise	Google Drive
5	Create a presentation of organised images	To present my image gallery	Insert Present Text box	Google Drive

## Unit 6 (6 Lessons)

Creating [Digital Drawings](#)

Lesson number	Title	Pupil will Learn	Key vocabulary	Pupils Outcomes/ Teacher Assessment
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				<b>mode</b>
1	What Is an illustration?	To describe what an illustration is	Illustration	TBD
2	Drawing an illustration (unplugged)	To plan an illustration	Illustration	Unplugged
3	Create an Illustration on Google Drawing	To create and save an illustration	Digital Drawing	Google Drawing
4	Editing digital drawings	To edit an illustration	Edit	Google Drawing
5	Making an ebook	To create an eBook To add illustrations to an eBook	Ebook	Book Creator
6	Publishing an ebook	To add illustrations and word to an eBook	Publish Text Illustration	Book Creator IT Assessment (Arbor)

## **Year 1: Computer Science**

### **Unit Objectives:**

- Understands what algorithms are
- Use logical reasoning to predict the behaviour of simple programs
- Create and debug simple programs

### **Unit 7 (6 Lessons)**

#### **Scratch Jr - Drive Across the City (Tynker)**

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcome</b>
1	Drive across the city	To write an algorithm and program a sprite	Algorithm Program	Scratch Jr. Class Collage
2	Run a race and sunset	To add sprites To make a sprite move	Sprite Move	Scratch Jr. Class Collage
3	Moonrise after sunset	To change the background	Background	Scratch Jr. Class Collage
4	Spooky forest	To make my program repeat	Repeat block	Scratch Jr. Class Collage
5	Meet and greet	To use speech in a program	Speech	Scratch Jr.

			Program	Class Collage
6	Conversation	To use sequencing in a program	Sequence Program	Scratch Jr. Class Collage  CS Assessment (Arbor)

## Year 2: Digital Literacy

### Unit Objectives:

- Use technology respectfully and safely
- Keep 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

### **Unit 8 (3 Lessons)**

<b>ICT Basics: Using Google Slides</b>
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Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
0	I am internet awesome	To agree to the Broadfields Primary School Acceptable Use Policy	-	Signed AUAs
1	I can sign in and out	To independently sign in and out of their Google account independently	Username Password	Class Collage

			safe private	
	Using Google Drive, Google Classroom and Google Docs	- Join Google Classroom (class/ groups) via teacher's invites - How to find assigned work on Google Classroom (eg. More about Me using Google Slides)	Invites Assignment Classwork	Class Collage
3	Google Slides	- How to start a new Google Slides - How to add text and images to each slide using the Insert functions.	Insert Add Image Text Copy Paste	Google Slides

### Unit 9 (5 Lessons)

<b>Using the Internet Safely and Responsibly</b>
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Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
1	Keeping Safe on the Internet cartoon	To discuss how to stay safe on the internet	Safe	Class Collage
2	Keeping Safe -Online Games	To use technology safely	Games Safety	Class Collage
3	Make an online-safety poster	To describe the rules for staying safe online	Rules	Unplugged

			Online Safety	
4	Write a story about finding the treasure safely	To use the rules to discuss a story	Rules Online Safety Trusted adult	Unplugged
5	Online Safety Treasure Chest	To describe positive behaviour on the internet	Rules Online Safety Trusted adult	Google Slides

### Unit 10 (5 Lessons)

**Using the Internet Safely and Responsibly (Part 2)**

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	Staying Safe Online	To discuss which websites are appropriate for my age	Websites Appropriate Inappropriate Permission	Class collage
2	Follow the Digital Trail	To describe my digital footprint	Digital footprint Responsible	Padlet

3	Screen Out the Mean	To treat others with respect online	Respect Mean	Padlet
4	Using Keywords	To use search engines effectively	Search Engines Kiddle	Kiddle Class collage
5	Sites I Like	To rate my favourite websites	Rate Favourite Websites	Google Slides DL Assessment (Arbor)

## Year 2: Computer Science

### Unit Objectives:

- Understand that algorithms are implemented as programs on digital devices
- Understand that programs execute by following precise and unambiguous instructions
- Debug simple programs
- Use logical reasoning to predict the behaviour of simple programs

### **Unit 11 (5 Lessons)**

#### Scratch Jr. Cool Characters

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
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1	Cool Characters	To describe and use instructions to program a character	Program Sprite	Scratch jr. Class collage
2	Grow and Shrink	To program a character to grow and shrink.	Program Sprite Grow Shrink	Scratch jr. Class collage
3	Time to Move	To use instructions to make characters move at different speeds and distances.	Scratch Sprite Move Block Green Flag	Scratch jr. Class collage
4	Repeat	To use a repeat instruction to make a sequence of instructions run more than once and predict the behaviour.	Scratch Sprite Move Repeat Block Green Flag	Scratch jr. Class collage
5	Sounds and Sequencing	To create programs that play a recorded sound. To create programs with a sequence of linked instructions.	Sound Record Play Sequence Instructions	Scratch jr. Class collage

## **Year 2: Digital Literacy/Year 2: Information Technology**

### **Unit Objectives:**

- Use technology purposefully to organise digital content
- Use technology purposefully to manipulate digital content
- Use technology respectfully and safely

### **Unit 12 (7 Lessons)**

#### **Creating Media - Digital Photography and Video-Making**

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcomes</b>
1	Taking Photographs	<p>To use a digital device to take a photograph using the camera from the chromebook</p> <ul style="list-style-type: none"> <li>● I can recognise what devices can be used to take photographs</li> <li>● I can talk about how to take a photograph</li> </ul>	<p>capture digital photograph image save</p>	<p>Padlet/ Google Classroom</p>

		<ul style="list-style-type: none"> <li>I can explain what I did to capture a digital photo</li> </ul>		
2	<p>What makes a good photograph? Landscape or Portrait?</p>	<p>To make choices when taking a photograph and describes what makes a good photograph</p> <ul style="list-style-type: none"> <li>I can explain the process of taking a good photograph</li> <li>I can take photos in both landscape and portrait format</li> <li>I can explain why a photo looks better in portrait or landscape format</li> <li>I can identify what is wrong with a photograph</li> <li>I can discuss how to take a good photograph</li> <li>I can improve a photograph by retaking it</li> </ul>	<p>image photograph choice format landscape portrait retake</p>	<p>Padlet/ Google Classroom</p>
3	<p>I can edit</p>	<p>To use tools and lighting to change/improve an image</p> <ul style="list-style-type: none"> <li>I can experiment with different light sources</li> <li>I can recognise that images can be changed</li> <li>I can use a tool to achieve a desired effect</li> </ul>	<p>tool image tone lighting lighter darker clear unclear blurry</p>	<p>Padlet/ Google Classroom</p>

		<ul style="list-style-type: none"> <li>I can explain my choices</li> </ul>		
4	Is it real?	<p>To recognise that photos can be changed/ edited</p> <ul style="list-style-type: none"> <li>I can recognise which photos have been changed</li> <li>I can identify which photos are real and which have been changed</li> <li>Using AI to create images responsibly and safely (Idea: teacher to demonstrate using <a href="#">Canva AI image generator</a>)</li> </ul>	<p>image real fake online safety</p>	<p>Padlet/ Google Classroom/ Canva</p>
5	Assessment	- Create your own digital photos using Canva AI Image		<p>Padlet/ Google Classroom/ Canva</p>
6	BBC Typing skills (Standalone independent lessons incorporated throughout the year)	<p>Keyboard layout awareness Correct finger placement Co-ordination and concentration Typing speed and accuracy</p>	- Touch typing	- Link to site posted on Google Classroom

## Year 2: Information Technology

### Unit 13 (5 Lessons)

#### Creating Media 2 - Video Making

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	What makes a good video?	- Discuss the features of a good video - To plan a short video	Video Digital Angle Lens Record Save Camera Microphone	Google Classroom/ Padlet
2	How do you make videos on a computer?	To film a short video		
3	Presentation/ Assessment	To share and evaluate video (oracy)		Peer mark/ class presentation <b>IT Assessment (Arbor)</b>

## **Year 2: Computer Science**

### **Unit Objectives:**

- Understands that algorithms are implemented as programs on digital devices
- Understands that programs execute by following precise and unambiguous instructions
- Debugs simple programs
- Uses logical reasoning to predict the behaviour of simple programs

### **Unit 14 (6 Lessons)**

#### Scratch jr. Animating a Sprite

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcomes</b>
1	Walk Along	To animate a sprite	Scratch Sprite Move Block Green Flag	Scratch Jr. Class Collage
2	Show and Hide	To make sprites appear and disappear	Reappear Disappear Sprite Wait	Scratch Jr. Class Collage

3	Gymnast Cat and Intersection	To use a repeat block To control a sprite's actions	Repeat Loop Forever block Movement Turn Intersection	Scratch Jr. Class Collage
4	Big and Small	To change the size of a sprite	Sprite Size Bigger Smaller Character	Scratch Jr. Class Collage
5	Messaging	To use messaging to control a sprite	Message Send Character	Scratch Jr. Class Collage
6	Maze	To create a game	Navigate Program Background Motion Block Speed Block Obstacle	Scratch Jr. Class Collage  CS Assessment (Arbor)

## **Year 3: Digital Literacy**

### **Unit Objectives**

- Use technology responsibly, respectfully and safely
- Identify a range of ways to report concerns about contact
- Use search technologies effectively

### **Unit 15 (2 Lessons)**

**ICT Basics: I Am Computer Awesome**

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcomes</b>
0	I am internet awesome	To read and sign AUAs	N/A	Signed AUAs
1	Google Classroom	Accept new invites and recap on the features	TBD	TBD
2	I Am Computer Awesome	Recap on what a computer is and how it is used	-computer -software -keyboard -mouse -monitor	Digital worksheet on Google Classroom

	BBC Typing skills (Standalone independent lessons incorporated throughout the year)	Keyboard layout awareness Correct finger placement Co-ordination and concentration Typing speed and accuracy	- Touch typing	- Link to site posted on Google Classroom
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### Unit 16 (5 Lessons)

Share with Care

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	When not to share	To discuss what information should be kept private	-digital footprint -privacy -private -protect	Digital Worksheet on Google Classroom
2	Whose profile is this, anyway?	To identify ways information can be found online about people	-personal information -profile	Digital Worksheet on Google Classroom
3	How do others see us?	To create a positive online presence	-digital footprint -consequences	Digital Worksheet on Google Classroom
4	Keeping it private	To discuss different levels of privacy	-internet trolls	Digital Worksheet on

			-react -respond	Google Classroom
5	Interland: Mindful Mountain	To put my learning into practice	-	-Interland Certificate of Completion ( <a href="#">LINK</a> ) -Flipgrid reflection

## Unit 17 (6 Lessons)

### The Online World

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	Powerful Passwords	To create a safe password <a href="https://neal.fun/password-game/">https://neal.fun/password-game/</a>	-strong -memorable	Digital Worksheet on Google Classroom
2	My Online Community	Pupils will explore the concept that people can connect with one another through the Internet.	-digital citizen -community	Digital Worksheet on Google Classroom
3	Show Respect Online	To describe differences between on/offline communication	-communication -respond -respect	Digital Worksheet on Google Classroom
4	Writing Good Emails	To communicate safely and effectively online - What is a phishing email?	-purpose -audience	Digital Worksheet on Google Classroom

			-tone - phishing	
5	Is Seeing Believing?	-Recognize that photos and videos can be altered digitally. -Identify different reasons why someone might alter a photo or video. -Analyse altered photos and videos to try to determine why.	-real -fake -persuade -altered	-Google Quiz -Digital Worksheet on Google Classroom
5	Using Features in Google Slides 1	- To cut, copy and paste using various ways (using a mouse, shortcuts) - How to insert shapes, textbox and pictures/images	-copy -paste -shift -Ctrl - menu - keyboard	Google Slides Pupil Learning Journal
6	Using Features in Google Slides 2	- How to screenshot a selection - How to printscreen - How to animate shapes, textbox and pictures/ images	-copy -paste -shift -Ctrl - menu - screenshot	Google Slides Pupil Learning Journal
7	Making a presentation using Google Slides	End-of-Unit Assessment		DL Assessment (Arbor)

**Unit 18 (6 Lessons)**

**Research and Collaboration- Where do you come from?**

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcomes</b>
1	Safe Search Engines	How to search safely	Safe Search Kiddle Online	Digital Poster
2	Where are the people I love from?	To use Maps and Google Earth to find locations	Information Presentation Google Earth	Digital Worksheet
3	My Heritage	To search for specific information	Information Presentation Kiddle Search Google Earth	Digital Worksheet
4	My City	To use a search engine to locate famous landmarks	Search Retrieve Record	Digital Worksheet

			Google Earth	
5	My Country	Search the internet for information and record notes	Search Retrieve Record	Fact File on Google Slide
6	Does Natural disasters affect our countries?	To use Google Docs to write an article	Search Retrieve Record Copy Paste Plagiarize	Google Docs  IT Assessment (Arbor)

### Year 3: Computer Science

#### Unit Objectives

- Understand that algorithms are implemented as programs on digital devices
- Understand that programs execute by following precise and unambiguous instructions
- Debug simple programs
- Use logical reasoning to predict the behaviour of simple programs

#### Unit 19 (6 Lessons)

Lost in Space

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcomes</b>
1	Animate a spaceship	To animate a Scratch sprite	Scratch Sprite Move Instructions	Scratch Learning Journal
2	Animating using loops	To use repetition	Scratch Sprite Move Instructions Repeat blocks	Scratch Learning Journal
3	Floating monkey	To edit a sprite	Scratch Sprite Move Instructions Costume Drawing	Scratch Learning Journal
4	Bouncing asteroid & Shining a Star	To change the size of a sprite	Sprite Grow Shrink Scale	Scratch Learning Journal
5	Challenge: make your own animation	To test and debug an algorithm	Project Stage. Sprite Background Costumes	Scratch Learning Journal

			Drawing Repeat Blocks Debug	
6	Challenge: make your own animation	To test and debug an algorithm	Project Stage. Sprite Background Costumes Drawing Repeat Blocks Debug	Scratch Learning Journal

### Unit 20 (6 lessons)

**Sound and Music -Rock Band**

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	Sprites & The stage	To change the backdrop in a Project	Scratch Sprite Stage Background	Scratch Learning Journal
2	Making a drum &	To add sound to a sprite	Blocks	Scratch

	Making a singer		Stage. Sprite Backdrop Volume Tempo	Learning Journal
3	Challenge: improving your drum	To change the sound of a sprite	Sprite Repeat Blocks Volume Tempo Debug	Scratch Learning Journal
4	Costumes	To change a sprite's costume	Scratch Sprite Costumes Drawing	Scratch Learning Journal
5	Challenge: make your own band - create animation	To create an animation with sound	Stage. Sprite Background Costumes Drawing Repeat Blocks Cloning Volume	Scratch Learning Journal

6	Improvement and Evaluation	To improve and evaluate own rock band	Stage. Sprite Background Costumes Drawing Repeat Blocks Cloning Volume improve evaluate	Scratch Learning Journal
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### Unit 21 (3 lessons)

Introduction to [Ozobots](#) - Control lessons

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	Introducing the Ozobot	What an Ozobot is and how it works	Coding Algorithm Calibrate Direction	Learning Journal or Padlet
2	Exploring our Ozobots	How an Ozobot is coded	Ozobot Coding Algorithm	Learning Journal or Padlet

			Direction	
3	Writing Instructions for our Ozobots	How to write instructions in a language the Ozobot will understand.	Ozobot Coding Algorithm Direction	Learning Journal or Padlet  CS Assessment (Arbor)

## Year 4: Digital Literacy

### Unit Objectives

- Use technology responsibly, respectfully and safely
- To use basic computing functions and shortcuts on Google Doc and Google Slides

### Unit 22 (3 lessons)

#### Basic Skills: Computing Shortcuts

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
0	I am internet awesome	To agree to the Broadfields Primary School Acceptable Use Policy	-	Signed AUAs
1	Copy and Paste, Insert and Format on Google	To learn how to copy and paste information from other sources To format text on Google Docs	Shortcuts Keyboard	Google Docs

	Docs	To insert image	Format Type Copy Paste	
2	Screenshots and Google Slides	To use the different techniques of taking a screenshot To navigate the different features of Google Slide such as animation, slide transitions	Shortcuts Keyboard Navigate Transition Theme animation	Google Slides
3	BBC Typing skills (Standalone independent lessons will be incorporated throughout the year)	Children will be given the opportunity to improve their typing skills. - Keyboard layout awareness - Correct finger placement - Co-ordination and concentration - Typing speed and accuracy	- Touch typing	- Link to site posted on Google Classroom

### Unit 23 (4 lessons)

**Don't Fall for Fake**

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	Don't bite that phishing hook!	To recognise ways people steal personal information - <a href="#">don't fall for phishing email (tr to set up one as a starter activity)</a>	Phishing	Learning Journal Exit Quiz

			<p>Spearphishing Scam Trustworthy Authentic Verifiable Fraudulent Firewall Clickbait</p>	
2	Who are you, really?	To recognise when someone is trying to steal personal info	<p>Scam Trustworthy Authentic Verifiable Fraudulent Firewall</p>	<p>Learning Journal Exit Quiz</p>
3	About those bots	<p>How computer 'bots' can impact on daily life. - Different types of bots (helpful bots, malicious bots, spam bots) - Use of bots responsibly</p>	<p>Bot Impact Real Fake Authentic</p>	<p>Learning Journal Exit Quiz</p>
4	Interland Reality River	To explore online safety using real-life scenarios	<p>Safe Secure Aware</p>	<p>-Interland Certificate of Completion (<a href="#">LINK</a>)  Learning Journal  <b>DL Assessment</b></p>

			(Arbor)
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### Unit 24 (5 lessons)

<b>Chatbot</b>
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Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	A chatbot	-To create and plan their own version of a chatbot.	Scratch Blocks Stage Scripts Sprite Background	Scratch Learning Journal
2	A talking chatbot	To create and use a variable	Scratch Blocks Sprite Algorithm Selection Variable	Scratch Learning Journal

3	Making decisions	To ask a question in Scratch	Scratch Blocks Sprite Algorithm Selection Variable Sensing	Scratch Learning Journal
4	Changing locations	To use selection	Scratch Blocks Sprite Algorithm Selection Variable Background	Scratch Learning Journal
5	Create your own chatbot	-Children will learn how to create their own chatbot from initial design and plan -To test and debug a program	Sprite Algorithm Selection Debug	Scratch Learning Journal

## Unit 25 (6 lessons)

### Unit Objectives:

- To identify the input device (microphone) and output devices (speaker or headphones) required to work with sound digitally
- To discuss the ownership of digital audio and the copyright implications of duplicating the work of others.
- To use Audacity to produce a podcast, which will include editing their work, adding multiple tracks, and opening and saving the audio files.

### Creating Media - Audio Production (Podcasting)

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	Recording sound	<ul style="list-style-type: none"> <li>- To identify the input and output devices used to record and play sound</li> <li>- To use a computer/ chromebook to record audio</li> <li>- To explain that the person who records the sound can say who is allowed to use it</li> </ul>		Learning Journal Reflection
2	Editing audio	<ul style="list-style-type: none"> <li>To explain that audio recordings can be edited</li> <li>- To inspect the soundwave view to know where to trim my recording</li> </ul>		Learning Journal Reflection/ Audacity/ Bandlab

		<ul style="list-style-type: none"> <li>- To discuss what sounds can be added to a podcast</li> <li>- To re-record my voice to improve my recording</li> </ul>		
3	Planning a podcast	<p>To recognise the different parts of creating a podcast project</p> <ul style="list-style-type: none"> <li>- To explain how sounds can be combined to make a podcast more engaging</li> <li>- To save my project so the different parts remain editable</li> <li>- To plan appropriate content for a podcast</li> </ul>		Learning Journal Reflection/ Audacity/ Bandlab
4	Creating a podcast	<p>To recognise the different parts of creating a podcast project</p> <ul style="list-style-type: none"> <li>- To explain how sounds can be combined to make a podcast more engaging</li> <li>- To save my project so the different parts remain editable</li> <li>- To plan appropriate content for a podcast</li> </ul>		Learning Journal/ Audacity Reflection/ Audacity/ Bandlab
5	Behind the scene	<p>To combine audio to enhance my podcast project</p> <ul style="list-style-type: none"> <li>- To open my project to continue working on it</li> <li>- To arrange multiple sounds to create the effect I want</li> <li>- To explain the difference between saving a project and exporting an audio file</li> </ul>		Learning Journal Reflection/ Audacity/ Bandlab
6	Evaluating podcasts	<p>To evaluate the effective use of audio</p> <ul style="list-style-type: none"> <li>- To listen to an audio recording to identify its strengths</li> <li>- To suggest improvements to an audio recording</li> </ul>		Learning Journal Reflection

		- To choose appropriate edits to improve my podcast		
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## Year 4: Computer Science

### Unit 26 (5 lessons)

#### Unit Objective

- To use Scratch to create a boat race game

### Boat Race

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
1	Getting started and introduction to game	To trace code and understand what it does	Algorithm Selection Repetition Sequences Debug	Learning Journal Scratch

2	Controlling the boat/Crashing	To use repetition and selection	Sprite Costume Algorithm Selection Repetition Sequences Debug	Learning Journal Scratch
3	Time trial	To use a variable to create a timer	Algorithm Selection Repetition Sequences Debug Variable	Learning Journal Scratch
4	Obstacles and power ups	To use repetition and selection	Algorithm Selection Repetition Sequences Debug	Learning Journal Scratch
5	Challenge more obstacles	To introduce challenge to a game To add extra functionality	Algorithm Selection Repetition Sequences Debug	Learning Journal Scratch Quizezz

## Unit 27 (4 lessons)

### Unit Objectives:

To create a program to run on a controllable device

- I can apply my knowledge of programming to a new environment
- I can test my program on an emulator
- I can transfer my program to a controllable device

### Physical Computing ([Micro:bit](#) Introduction)

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
1	What is a microbit?	-What a micro:bit is -The parts and layout of a micro:bits	block Input Output	micro:bit Learning Journal Reflection Exit Quiz

			microbit	
2	Input and output devices	In this lesson, children will learn the difference between input and output devices through making connections with how a micro:bit works.	block Input Output micro:bit Algorithm	<a href="#">Make Code</a> micro:bit Learning Journal Reflection Exit Quiz
3	Make it Code- Glowing Heart (Transferring code + If...then )	-To write an algorithm for a glowing heart. -Transferring a code to a physical system.	Debug Algorithm Selection Sequences	<a href="#">Make Code</a> Microbit Learning Journal Reflection Exit Quiz
4	LED lights loop (Transferring code + If...then )	-To write an algorithm for LED lights -Transferring a code to a physical system.	Debug Algorithm Selection Sequences Repetition	<a href="#">Make Code</a> Microbit Learning Journal Reflection Exit Quiz  CS Assessment (Arbor)

## Year 4: Digital Literacy

### Unit 28 (3 lessons)

Who am I - Adobe Express

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
1	I am unique	To plan for a short video	record trim edit transition	Adobe Express
2	Who am I?	How to record and edit videos on Adobe Express	record trim edit transition	Adobe Express
3	Presenting and Evaluating our videos		feedback evaluate	Self/Peer Evaluation

## Year 5 : Digital Literacy

### Unit 29 (2 lessons)

#### Secure Your Secrets

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
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0	I am internet awesome	To agree to the Broadfields Primary School Acceptable Use Policy To hold a class election and appoint 3 Digital Leaders	-	Signed S
1	Basic Skills	To use various shortcuts on regularly used Google Workspace applications	-	Learning Journal
2	How to build a great password	To create a strong password	Privacy Security Two-step verification	Google Quiz Learning Journal
	Keep it to yourself	To customize privacy settings	Password Encryption Complexity Hacker	Google Quiz Learning Journal
	Interland: Tower of Treasure	To put my learning into practice	Password Encryption Complexity Hacker	Learning Journal Interland

## Year 5

### Year 5: Computer Science

#### Unit 30 (5 lessons)

**Space Junk Game**

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcome</b>
1	Project introduction	How a game works	Code Scratch	Scratch Learning Journal
2	Controlling the cat	To control a sprite using input	Sprite Algorithm Selection Repetition Sequences Debug	Scratch Learning Journal
3	Space Junk	To use collision detection	Algorithm Selection Repetition Sequences Debug	Scratch Learning Journal
4	Getting back to Earth	To add a timer to a game	Algorithm Selection Repetition Sequences Debug	Scratch Learning Journal

			Variable	
5	Challenge: 2 players	To add 2 player functionality	Algorithm Selection Sequences Debug	Scratch Learning Journal

### Unit 31 (6 lessons)

**Selection In Physical Computing**

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
1	Connecting Crumbles	In this lesson, we will look at a Crumble microcontroller. We will connect it to a computer and program it to control an LED.	circuit microcontroller	Crumble Microcontroller Learning Journal Reflection Exit Quiz
2	Combining output devices	In this lesson, we will connect at least two output devices to a Crumble microcontroller. We will write programs to control those outputs. Our programs will include loops.	Connect Component Output device Control Sequence loop	Crumble Microcontroller Learning Journal Reflection Exit Quiz

3	Controlling with conditions	In this lesson, we will examine different conditions and identify when they are true or false. Then we will write statements using 'do until'. Lastly, we will connect a switch to a Crumble microcontroller and write a program using that input as a condition.	Command Conditions Loops Code inputs	Crumble Microcontroller Learning Journal Reflection Exit Quiz
4	Starting with selection	In this lesson, we will identify how selection might be used in 'real-life' examples. We will also design and build a model that we can control with a Crumble microcontroller.	condition selection program	Crumble Microcontroller Learning Journal Reflection Exit Quiz
5	Drawing Designs	In this lesson, we will identify how selection might be used in 'real-life' examples. We will also design and build a model that we can control with a Crumble microcontroller.	selection model components	Crumble Microcontroller Learning Journal Reflection Exit Quiz
6	Writing and testing algorithms	In this lesson, we will write an algorithm for controlling our models. We will then turn that algorithm into code. Lastly, we will test and debug our program.	Program Algorithm debug	Crumble Microcontroller Learning Journal Reflection Exit Quiz

## Year 5: Information Technology

### Unit 32 (6 lessons)

**Plan an Event**

<b>Lesson number</b>	<b>Title</b>	<b>Pupil will Learn</b>	<b>Key vocabulary</b>	<b>Outcome</b>
1	Planning an event	-To select and research an event -To plan task for an event -To collaborate using Google Docs -To create and edit a Google Sheet	plan event collaborate	Google Doc Google Sheet
2	Creating a Logo	-to create an event logo using a template as a baseline	Graphic design Logo collaborate	Canva
3	Creating a Flyer	-to create a flyer to promote an event	Graphic design Flyer collaborate	Canva
4	Building a simple website part 1	-Create a visually appealing and interactive website in Google Sites -Apply advanced formatting and editing to a website	Features Appealing Interactive publish	Google Sites
5	Building a simple website part 2	-Create a visually appealing and interactive website in Google Sites -Apply advanced formatting and editing to a website -Make changes to website according to feedback from partner -Re-publish the site to the web	Features Appealing Interactive publish	Google Sites
6	Wrap-up and Evaluation	-To be discerning in evaluating content	Evaluate	Google Slides

			Constructive feedback	Google Quiz Certificate of Completion
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### Unit 33 (6 lessons)

<b>Video Editing</b>
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Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	What is video?	In this lesson, we will explore a brief history of creating moving images from still images. We will also look at the role and benefits of the use of audio in a video, learning that the purpose of video is to communicate a message to an audience, or to record an event. Lastly, we will plan a video project using a storyboard.	Video Audio Storyboard	worksheet exit quiz
	Identifying devices	In this lesson, we will explore devices and computer applications that record audio and video. Learners will have the opportunity to investigate the pros and cons of	devices recording quality	Intro quiz worksheet exit quiz

		using audio devices such as dictation machines or mobile sound recorders versus fully integrated AV (audiovisual) devices.		
2	Using a device	In this lesson, we will explore devices and computer applications. We will make a short practice recording to familiarise ourselves with these devices and apps. Then we will locate the functions and practise the safe handling of the equipment. Lastly, we will encourage the use of zoom, angle, and movement (pan and tilt) in our recordings.	Safe handling Filming Fine tuning Audio Video technique	Intro quiz worksheet exit quiz
	Features of an effective video	In this lesson, we will look to investigate further the features of an effective video. We will list some of these features and record a video which employs them in context. Lastly, we will explain why lighting and angle are important in filming an effective video.	Influencer Planned Scripted Angle Framing	Intro quiz worksheet exit quiz
3	Importing and editing video	In this lesson, we will learn how to export video to a computer (or other suitable device) and to make edits to it by means such as choosing the best recording, clipping videos, and adding transition effects. We will learn how to improve our videos through reshooting and editing. Lastly, we will learn which tools to use to perform the edits that we desire.	Recorder Trim tool Import Locate edit	Intro quiz exit quiz Wevideo
4	Video evaluation	In this lesson, we will have the opportunity to review the content of edited videos and finalise them by adding special effects such as animations, transitions, text, additional audio, and other visual effects.	Impact outcome special effects title screen end credits	Intro quiz worksheet exit quiz Wevideo

			Exporting Constructive feedback	
5	What is AI?	- To define AI - To give examples of generative AIs they see or use in everyday life.	Artificial Intelligence Generative Data Chatbots	Learning Journal Reflection/Google Quiz or Flipgrid
6	AI and the Truth	- To recognise that AI-generated content might not be true. - To learn simple ways to check if something is real.	Fake Inaccurate Misleading Misinformation Disinformation Generated Scam Report abuse	Learning Journal Reflection/Google Quiz or Flipgrid

### Unit 34 (6 Lessons)

**Selection in Quizzes**

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
1	Exploring conditions	In this lesson, we will revisit our previous learning on	Modify	Digital Worksheet

		selection and identify how conditions are used to control the flow of actions in a program. We will be introduced to the command blocks for conditions in programs using the Scratch programming environment, and modify the conditions in an existing program.	Conditions Selection Programme Code snippet	Exit Quiz
2	Selecting outcomes	In this lesson, we will use the 'if... then... else...' structure in algorithms and programs. We will revisit the need for selection to ensure conditions are repeatedly checked and will use this knowledge to write our own programs.	Infinite loop Outcome Condition Repetition Conditional statement	Digital worksheet Exit Quiz
3	Asking questions	In this lesson, we will consider how the 'if... then... else...' structure can be used to identify two responses to a binary question (yes or no). We will learn how questions can be asked in Scratch and how the answer is used to control the outcomes. We will then design a program that uses selection to direct the flow of the program.	Flow programme Algorithm branching Command block Input	Digital worksheet Exit Quiz
4	Planning a quiz	In this lesson, we will use selection to control the outcomes in an interactive quiz. We will outline the requirements of the task and use an algorithm to show how we can use selection. To do this, we will design a storyboard to identify the questions asked and the outcomes for both correct and incorrect answers.	- Selection command - Tracing algorithm	Into Quiz Digital worksheet Exit Quiz
5	Testing a quiz	In this lesson, we will use Scratch to implement our designed algorithms as a program. We will run this program to test if it correctly uses selection to control the outcomes and will debug as necessary. Once we have completed our programs, we will consider the value of sharing it with	Implementing Testing selection intended audience	Into Quiz Digital worksheet Exit Quiz

		others to collect feedback.		
6	Evaluating a quiz	In this lesson, we will return to our completed programs and identify ways to improve them. We will focus on issues where answers similar to those in the condition are given as the input and identify ways to avoid these issues. We will consider how to ensure all uses are provided with the same experience and identify if we have met the requirements of the given task	User-friendly Code snippet Setup	Into Quiz Digital worksheet Exit Quiz

### Unit 35 (6 Lessons)

<b>Vector Drawing</b>
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Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
1	The drawing tools	In this lesson, we will be introduced to vector drawings and learn that they are made up of simple shapes and lines. We will then use the main drawing tools within a software package. Lastly, we will discuss how vector drawings differ from paper-based drawings.	Vector Drawing	Google Drawing Digital worksheet Exit quiz
2	Create a vector drawing	In this lesson, we will identify the shapes that are used to make vector drawings. We will be able to explain that each element of a vector drawing is called an 'object'. Then we	shapes tools rotate	Google Drawing Digital worksheet Exit quiz

		will create their own vector drawing and duplicate objects to save time.	undo	
3	Being effective	In this lesson, we will increase the complexity of our vector drawings, using the zoom tool to add detail to our work. We will then learn how grids and resize handles can improve the consistency of our drawings. Lastly, we will use tools to modify objects and create different effects.	zoom alignment line tools Line effects	Google Drawing Digital worksheet Exit quiz
4	Layers and objects	In this lesson, we will gain an understanding of layers and how they are used in vector drawings. We will learn that each object is built on a new layer and that these layers can be moved forward and backward to create effective vector drawings.	object layering	Google Drawing Digital worksheet Exit quiz
5	Manipulating objects	In this lesson, we will be taught how to duplicate multiple objects. We will learn how to group objects to make them easier to work with, how to copy and paste these images, and how to make simple alterations.	grouping ungrouping	Google Drawing Digital worksheet Intro quiz Exit quiz
6	Get designing	In this lesson, we will understand how digital images can be made from shapes or pixels. We will suggest and implement improvements to vector drawings and complete the unit by creating our own labels for the classroom using the skills we have learned.	evaluate clarity showcase	Google Drawing Digital worksheet Intro quiz Exit quiz

## Year 6

### Year 6: Digital Literacy

## Unit 36 (4 Lessons)

### Unit Objectives:

- Is discerning in evaluating digital content
- Understands the opportunities computer networks offer for collaboration
- Is discerning in evaluating digital content

**It's cool to be kind**

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome
0	I am internet awesome	-To agree to the Broadfields Primary School Acceptable Use Policy - Digital Leaders Class Election (3 per class)	N/A	Signed Google Form
1	How can I be an upstander?	To respond to bullying online	Upstander Bullying Cyberbullying Target Bystander Report abuse	Learning Journal Reflection/Google Quiz or Flipgrid
2	Upstander options	To discuss different ways to respond to bullying	Upstander Bullying Cyberbullying Target	Learning Journal Reflection/Google Quiz or Flipgrid

			Bystander Report abuse	
3	...but say it nicely!	To turn negative interactions not positive ones	Upstander Bullying Cyberbullying Target Bystander Report abuse	Learning Journal Reflection/Google Quiz or Flipgrid
4	Mind your tone	-To make good decisions when choosing how and what to communicate – and whether to communicate at all. - Identify situations when it's better to wait to communicate face-to-face with a peer than to text them right away	Upstander Bullying Cyberbullying Target Bystander Report abuse	Learning Journal Reflection/Google Quiz or Flipgrid
	Walking the walk	- Reflect on the online behaviour of adults - Consider how the way adults act can model behaviour for younger generations	Upstander Bullying Cyberbullying Target Bystander Report abuse	Learning Journal Reflection/Google Quiz or Flipgrid
	Interland Kind Kingdom	To reflect on how to make the right choices during online interactions	Upstander Bullying Cyberbullying Target Bystander Report abuse	<a href="https://beinternetawesome.withgoogle.com/en_uk/interland/kingdom">https://beinternetawesome.withgoogle.com/en_uk/interland/kingdom</a>

## Unit 37 (3 Lessons)

### Unit Objectives:

- Explain what artificial intelligence (AI) is using simple terms.
- Identify examples of AI in their everyday lives.
- Understand that AI-generated content may not always be true or real.
- Explain the importance of being a 'fact-checker' when using AI.
- Understand how to use AI safely and responsibly to help with their schoolwork and creativity.
- Recognise the importance of keeping personal information private from AI systems.

<b>Responsible Use of Artificial Intelligence (AI)</b>
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Planning resources: [BBC Bitesize](#), [Common Sense Education](#)

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcome

1	What is AI?	<ul style="list-style-type: none"> <li>- To define AI in a simple way.</li> <li>- To give examples of generative AIs that are seen or used in everyday life.</li> </ul>	Artificial Intelligence Generative Data Chatbots	Learning Journal Reflection/Google Quiz or Flipgrid
2	AI and the Truth	<ul style="list-style-type: none"> <li>- To recognise that AI-generated content might not be true.</li> <li>- To learn simple ways to check if something is real.</li> </ul>	Fake Inaccurate Misleading Misinformation Disinformation Generated Scam Report abuse	Learning Journal Reflection/Google Quiz or Flipgrid
3	The Responsible AI User	<ul style="list-style-type: none"> <li>- To explain the difference between using AI to help vs using it to cheat.</li> <li>- To identify the scope of sensitive information that must be withheld from AI systems.</li> </ul>	Responsible Private Personal Information Creative Partner Safety	Learning Journal Reflection/Google Quiz or Flipgrid
	<b>End-of-Unit Assessment</b>	- To assess pupils' understanding in Unit 36 and Unit 37		Google Quiz/ Wayground <b>DL Assessment (Arbor)</b>

## Year 6: Computer Science

## Unit 38 (6 Lessons)

### Unit Objectives:

- Solves problems by decomposing them into smaller parts
- Uses selection in programs
- Works with variables
- Uses logical reasoning to explain how some simple algorithms work
- Uses logical reasoning to detect and correct errors in algorithms

### Variables in Games

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	Introducing variables	In this lesson, we will explore using variables in computer programs. We will explore variables in Scratch as well as designing and writing our own short programs.	Scratch Blocks Stage Scripts Sprite Cloning Algorithm Selection	-Scratch Project -Learning Journal Reflection Exit quiz
2	Variables in programming	In this lesson, we will learn how variables are updated, and we will learn the importance of naming our variables carefully.	Decomposition (Debug) Algorithm Selection Repetition	-Scratch Project -Learning Journal Reflection Into/ Exit quiz

			Sequences	
3	Improving a game	In this lesson, we will experiment with changing variables by different amounts and in different places. We will also learn how to display a variable in a different way.	Decomposition (Debug) Algorithm Selection Repetition Sequences	-Scratch Project -Learning Journal Reflection Into/ Exit quiz
4	Designing a game	In this lesson, we will work on the design of a computer game. We will choose artwork and design algorithms.	Decomposition (Debug) Algorithm Selection Repetition Sequences	-Scratch Project -Learning Journal Reflection Into/ Exit quiz
5	Design to code	In this lesson, we will turn our project designs into code to create our games.	Decomposition (Debug) Algorithm Selection Repetition Sequences	-Scratch Project -Learning Journal Reflection Into/ Exit quiz
6	Improving and refining	In this lesson, we will add more variables to improve our games.	Decomposition (Debug) Algorithm Selection Repetition	-Scratch Project -Learning Journal Reflection Exit quiz

## Year 6: Digital Literacy

## Unit 39 (6 Lessons)

### Unit Objectives:

- Is discerning in evaluating digital content
- Understands the opportunities computer networks offer for collaboration
- Is discerning in evaluating digital content

### Spreadsheets

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	What is a spreadsheet?	In this lesson, we will learn that a spreadsheet is a computer application which allows users to organise, analyse, and store data in a table. We will be introduced to the importance of data headings.	data headings spreadsheet	Exit quiz Google Sheet
2	Modifying spreadsheets	In this lesson, we will be taught that objects can be described using data. We will build a data set (a collection of related data that can be manipulated using a computer) within a spreadsheet application and apply appropriate number formats to cells.	format cell data set modified	Intro and Exit Quiz Google Sheet
3	What's the formula?	In this lesson, we will begin to use formulas to produce calculated data. We will learn that the type of data in a	cell reference operator	Intro and Exit Quiz Google Sheet

		cell is important (e.g. numbers can be used in calculations whereas words cannot). Then we will create formulas to use in our spreadsheets using cell references	Input output	
4	Calculate and duplicate	In this lesson, we will recognise that data can be calculated using different operations: multiplication, subtraction, division and addition. We will create formulas in a spreadsheet. We will then understand the importance of creating formulas that include a range of cells.	Range Calculate duplicate sigma functions	Intro and Exit Quiz Google Sheet
5	Event planning	In this lesson, we will plan and calculate the cost of an event using a spreadsheet. We will use a list to choose what we would like to include in our event, and use our spreadsheet to answer questions on the data we have selected.	event budget planning final figures	Intro and Exit Quiz Google Sheet
6	Presenting data	In this lesson, we will acquire the skills to create charts in Google Sheets. We will evaluate results based on questions asked using the chart that we have created. Finally, we will appreciate there are different software tools available within spreadsheet applications to present data.	graphs chart data table present	Intro and Exit Quiz Google Sheet

## Year 6: Information Technology

### Unit 40 (6 Lessons)

#### Unit Objectives:

- Is discerning in evaluating digital content
- Understands the opportunities computer networks offer for collaboration
- Is discerning in evaluating digital content

#### Web Page Creation

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
1	What makes a good website?	In this lesson, we will explore and review existing websites and evaluate their content. We will have some understanding that websites are created using HTML code.	access browser search bar Media explore navigate	Worksheet and Exit Quiz
2	How would you lay out your web page?	In this lesson, we will look at the different layout features available in Google Sites and plan our own web page on paper.	audience Header features media web page	Intro and Exit Quiz Google Site

3	Copyright or CopyWRONG?	In this lesson, we will become familiar with the terms 'fair use' and 'copyright'. We will gain an understanding of why we should only use copyright-free images and we will find appropriate images to use in our work from suggested sources.	copyright fair use ownership	Intro and Exit Quiz Google Site
4	How does it look?	In this lesson, we will revise web page creation in Google Sites. We will create a page and we will preview our web page as it appears on different devices and suggest or make edits to improve the appearance of the page across those devices.	layout preview	Intro and Exit Quiz Google Site
5	Follow the breadcrumbs	In this lesson, we will appreciate the need to plan the structure of a website carefully. We will plan our website, paying attention to the navigation paths (the way that pages are linked together). We will then create multiple web pages and use hyperlinks.	navigation path hyperlink	Intro and Exit Quiz Google Site
6	Think before you link!	In this lesson, we will consider the implications of linking to content owned by other people and create hyperlinks on our own websites to link to other people's work. We will then evaluate the user experience when using our websites and the website of another student.	Implications Content owned	Intro and Exit Quiz Google Site

## Unit 41 (6 Lessons)

### Unit Objectives:

- Solves problems by decomposing them into smaller parts
- Uses selection in programs
- Works with variables
- Uses logical reasoning to explain how some simple algorithms work
- Uses logical reasoning to detect and correct errors in algorithms

### Sensing

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes:
1	The micro:bit	In this lesson, we will be reintroduced to the micro:bit and its block based programming environment, MakeCode.	Decomposition Algorithm Selection Repetition Sequences	-Learning Journal Reflection -Google Quiz
2	Go with the flow	In this lesson, we will explore how 'if... then... else...' statements are used to direct the flow of a program. We will then use this learning to create a fortune teller project to run on a micro:bit.	Decomposition Algorithm Selection Repetition Sequences	<a href="#">Make Code</a> Microbit Learning Journal Reflection
3	Sensing inputs	In this lesson, we will use the buttons to change the value of a variable using selection. We will then develop	Decomposition Algorithm	<a href="#">Make Code</a> Microbit

		our programs to update the variable by using the micro:bit's accelerometer which senses motion. Finally, we will learn that a variable can be displayed after it is updated or in response to an input.	Selection Repetition Sequences	Learning Journal Reflection
4	Finding your way	In this lesson, we will use the compass on the micro:bit as an input device. We will initially design and create a program to display the direction in which the micro:bit is pointing before turning it into a navigational device.	Decomposition Algorithm Selection Repetition Sequences	<a href="#">Make Code</a> Microbit Learning Journal Reflection
5	Designing a step counter	In this lesson, we will design a project to make a micro:bit step counter. We will use a familiar design template to design the algorithm, appearance and to program flow of the project.	Decomposition Algorithm Selection Repetition Sequences	<a href="#">Make Code</a> Microbit Learning Journal Reflection
6	Making a step counter	In this lesson, we will make a micro:bit based step counter following a design. We will test and debug our code and look for ways to improve the sensitivity of our counter.	Decomposition Algorithm Selection Repetition Sequences	<a href="#">Make Code</a> Microbit Learning Journal Reflection

## **Year 6: Information Technology**

### **Unit 42 (6 Lessons)**

#### **Unit Objectives:**

- To develop knowledge and understanding of using a computer to produce 3D models.
- To work in a 3D space, moving, resizing, and duplicating objects.
- To create hollow objects using placeholders and combine multiple objects to create a model of a desk tidy.
- To examine the benefits of grouping and ungrouping 3D objects.
- To plan, develop, and evaluate their own 3D model of a building.

#### [Creating media - 3D Modelling](#)

Lesson number	Title	Pupil will Learn	Key vocabulary	Outcomes
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1	Introduction to 3D modelling	To recognise that you can work in three dimensions on a computer - I can add 3D shapes to a project - I can view 3D shapes from different perspectives - I can move 3D shapes relative to one another	2-dimensional (2D) 3-dimensional (3D) Object Zoom View Perspective	Tinkercad Learning Journal
2	Modifying 3D objects	To identify that digital 3D objects can be modified <ul style="list-style-type: none"> <li>● I can resize an object in three dimensions</li> <li>● I can lift/lower 3D objects</li> <li>● I can recolour a 3D object</li> </ul>	3-dimensional (3D) Modify Resize Lifting Lowering 3D Printing	Tinkercad Learning Journal
3	Make your own name badge	To recognise that objects can be combined in a 3D model <ul style="list-style-type: none"> <li>● I can rotate objects in three dimensions</li> <li>● I can duplicate 3D objects</li> <li>● I can group 3D objects</li> </ul>	Rotate Duplicate Group 3D Printing	Tinkercad <b>3D Printer</b> Learning Journal
4	Make a desk tidy	To create a 3D model for a given purpose <ul style="list-style-type: none"> <li>● I can accurately size 3D objects</li> <li>● I can show that placeholders can create holes in 3D objects</li> <li>● I can combine a number of 3D objects</li> </ul>	Hollow Accurate Sizing Placeholder Duplicate Resize Original Combine	Tinkercad Learning Journal
5	Planning a 3D model	To plan my own 3D model <ul style="list-style-type: none"> <li>● I can analyse a 3D model</li> <li>● I can choose objects to use in a 3D model</li> </ul>	Architect Design 3D model	Tinkercad Learning Journal

		<ul style="list-style-type: none"> <li>• I can combine objects in a design</li> </ul>		
6	Make your own 3D model	<p>To create my own digital 3D model</p> <ul style="list-style-type: none"> <li>• I can construct a 3D model based on a design</li> <li>• I can explain how my 3D model could be improved</li> <li>• I can modify my 3D model to improve it</li> </ul>	<p>Construct Improve Modify 3D model</p>	<p>Tinkercad Learning Journal</p> <p><b>IT Assessment (Arbor)</b></p>