

Key Vocabulary Progression for Computing

National Curriculum:

<i>Computer Science</i>	<i>Understand what <b>algorithms</b> are; how they are implemented as programs on <b>digital devices</b>; and that programs execute by following <b>precise</b> and <b>unambiguous instructions</b> <b>Create</b> and <b>debug</b> simple <b>programs</b> Use logical reasoning to predict the behaviour of simple programs</i>
<i>Information Technology</i>	<i>Use technology purposefully to <b>create, organise, store, manipulate and retrieve digital content</b></i>
<i>Digital Literacy</i>	<i>Recognise common uses of information technology beyond school. Use technology <b>safely and respectfully, keeping personal information private</b>; identify where to go for <b>help</b> and support when they have concerns about content or contact on the internet or other online technologies</i>

	CS	IT	DL
1	Understand what algorithms are. Create simple programs. Begin to debug with support.	Use technology purposefully to create digital content. Use technology purposefully to store digital content. Use technology purposefully to retrieve digital content.	Use technology safely. Keep personal information private. Recognise common uses of information technology beyond school.
2	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	Use technology purposefully to organise digital content. Use technology purposefully to manipulate digital content.	Use technology respectfully. Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

	behaviour of simple programs.		
--	-------------------------------	--	--

<p>Nursery – Technology</p> <p><i>22-36 months</i></p> <ul style="list-style-type: none"> <li>Seeks to acquire basic skills in turning on and operating some ICT equipment.</li> <li>Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car.</li> </ul> <p><i>30-50 months</i></p> <ul style="list-style-type: none"> <li>Knows how to operate simple equipment.</li> <li>Shows an interest in technological toys with knobs or pulleys, or real objects.</li> <li>Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images.</li> <li>Knows that information can be retrieved from computers.</li> </ul>	<p>iPad, swipe, log on, password, computer, camera, phone, screen, monitor, sound, switch, button, go, forward, backwards, turn, stop, push, pull, press, wind, lift, up, down, move, bee-bot, audio book, CD Player, volume, keyboard, batteries, mouse, game, turn on, turn off.</p> <p><u>E-Safety</u> help, safe</p>
<p>Reception – Technology</p> <p><i>40-60 months</i></p> <ul style="list-style-type: none"> <li>Knows how to operate simple equipment.</li> <li>Shows an interest in technological toys with knobs or pulleys, or real objects.</li> <li>Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images.</li> <li>Knows that information can be retrieved from computers.</li> </ul> <p><i>Early Learning Goals</i></p> <ul style="list-style-type: none"> <li>Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.</li> </ul>	<p>iPad, swipe, log on, password, computer, camera, phone, screen, monitor, sound, switch, button, go, forward, backwards, turn, stop, push, pull, press, wind, lift, up, down, move, bee-bot, audio book, CD Player, volume, keyboard, batteries, mouse, game, turn on, turn off.</p> <p><u>E-Safety</u> help, safe</p> <p>App, icon, program, ipod, interactive whiteboard (IWB), memory, access, video, internet, google, picture, typing, keyboard, keys, graph, tools, remote control.</p> <p><u>E-Safety</u> worried feelings strangers</p>

*Beyond the ELG's- exceeding (EYFSP Handbook)*

- Children find out about and use a range of everyday technology. They select appropriate applications that support an identified need.

Discovering Programming (Autumn)

**Year 1 National Curriculum**

- *Understand what algorithms are.*
- *Create simple programs.*
- *Begin to debug with support.*
- *Use technology purposefully to create digital content.*
- *Use technology purposefully to store digital content.*
- *Use technology purposefully to retrieve digital content.*
- *Use technology safely.*
- *Keep personal information private.*  
*Recognise common uses of information technology beyond school.*

IPad, swipe, log on, password, computer, camera, phone, screen, monitor, sound, switch, button, go, forward, backwards, turn, stop, push, pull, press, wind, lift, up, down, move, bee-bot, audio book, CD Player, volume, keyboard, batteries, mouse, game, turn on, turn off.

E-Safety help, safe

App, icon, program, ipod, interactive whiteboard (IWB), memory, access, video, internet, google, picture, typing, keyboard, keys, graph, tools, remote control.

E-Safety worried, feelinas, strangers

**Continue to learn and consolidate**

- hardware: visualiser, webcam, microscope, smartphone,
- computer parts: keyboard, monitor, base unit, speakers, printer, mouse mat, mouse, caps lock, space bar, enter/return, delete, backspace, cursor.

- algorithm
- Instruction
- device
- programmable device
- program
- debug
- predict
- repeat (repetition,)
- sequence
- directional vocabulary – forwards, backwards, left, right, turn,
- username
- server

**E-Safety**

- eSafety
- Helping hand
- trusted grown up
- personal information
- butterfly feeling (worried)

--	--

Visual Information (Spring)	
<p><b>Year 1 National Curriculum</b></p> <ul style="list-style-type: none"> <li>• <i>Understand what algorithms are.</i></li> <li>• <i>Create simple programs.</i></li> <li>• <i>Begin to debug with support.</i></li> <li>• <i>Use technology purposefully to create digital content.</i></li> <li>• <i>Use technology purposefully to store digital content.</i></li> <li>• <i>Use technology purposefully to retrieve digital content.</i></li> <li>• <i>Use technology safely.</i></li> <li>• <i>Keep personal information private.</i></li> </ul> <p><i>Recognise common uses of information technology beyond school.</i></p>	<p>Pad, swipe, log on, password, computer, camera, phone, screen, monitor, sound, switch, button, go, forward, backwards, turn, stop, push, pull, press, wind, lift, up, down, move, bee-bot, audio book, CD Player, volume, keyboard, batteries, mouse, game, turn on, turn off</p> <p>E-Safety help, safe</p> <p>App, icon, program, ipod, interactive whiteboard (IWB), memory, access, video, internet, google, picture, typing, keyboard, keys, graph, tools, remote control</p> <p>E-Safety worried, feelings, strangers</p> <ul style="list-style-type: none"> <li>• pictogram</li> <li>• bar chart</li> <li>• graph</li> <li>• data</li> <li>• information</li> <li>• repetition</li> <li>• branching database</li> <li>• data-logger</li> <li>• signs</li> <li>• symbols</li> <li>• logo</li> </ul> <p>E-Safety</p> <ul style="list-style-type: none"> <li>• online</li> <li>• unsure</li> <li>• uncomfortable</li> <li>• private</li> <li>• password</li> <li>• address</li> </ul> <p>Programs – TextEase Starting Graph TextEase Branching Software</p>

## Let's Create (Summer Term)

### Year 1 National Curriculum

- *Understand what algorithms are.*
- *Create simple programs.*
- *Begin to debug with support.*
- *Use technology purposefully to create digital content.*
- *Use technology purposefully to store digital content.*
- *Use technology purposefully to retrieve digital content.*
- *Use technology safely.*
- *Keep personal information private.*  
*Recognise common uses of information technology beyond school.*

ipad, swipe, log on, password, computer, camera, phone, screen, monitor, sound, switch, button, go, forward, backwards, turn, stop, push, pull, press, wind, lift, up, down, move, bee-bot, audio book, CD Player, volume, keyboard, batteries, mouse, game, turn on, turn off  
 E-Safety help, safe  
 App, icon, program, ipod, interactive whiteboard (IWB), memory access, video, internet, google, picture, typing, keyboard, keys, graph, tools, remote control  
 E-Safety worried, feelings, strangers

- Digital, Non digital
- hardware and software,
- file
- save
- edit
- open
- folder
- print
- still image
- moving image
- digital picture
- tools
- text
- type
- paint
- size

	<ul style="list-style-type: none"> <li>• colour</li> <li>• sound</li> <li>• audio</li> </ul> <p><u>E-Safety</u></p> <ul style="list-style-type: none"> <li>• digital footprint</li> <li>• safely</li> <li>• respectfully</li> <li>• trusted</li> </ul> <p>Topic related examples: Names of hardware: computer, visualiser, webcam, microscope, smartphone etc.</p> <p>Names of software: word, textease turtle, starting graph, bee-bot app, colour magic, clicker</p>
--	--

Getting Creative (Autumn)	
<p><b>Year 2: National Curriculum</b></p> <ul style="list-style-type: none"> <li>• <i>Understand that algorithms are implemented as programs on digital devices.</i></li> <li>• <i>Understand that programs execute by following precise and unambiguous instructions.</i></li> <li>• <i>Debug simple programs.</i></li> <li>• <i>Use logical reasoning to predict the behaviour of simple programs</i></li> <li>• <i>Use technology purposefully to organise digital content.</i></li> <li>• <i>Use technology purposefully to manipulate digital content.</i></li> <li>• <i>Use technology respectfully.</i></li> <li>• <i>Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i></li> </ul>	<p>Pad, swipe, log on, password, computer, camera, phone, screen, monitor, sound, switch, button, go, forward, backwards, turn, stop, push, pull, press, wind, lift, up, down, move, bee-bot, audio book, CD Player, volume, keyboard, batteries, mouse, game, turn on, turn off</p> <p><u>E-Safety</u> help, safe</p> <p>App, icon, program, ipod, interactive whiteboard (IWB), memory, access, video, internet, google, picture, typing, keyboard, keys, graph, tools, remote control</p> <p><u>E-Safety</u> worried, feelings, strangers</p> <p>Digital, Non digital, hardware and software, file, save, edit, open, folder, print, still image, moving image, digital picture, tools, text, type, paint, size, colour, sound, audio</p> <p><u>E-Safety</u> digital footprint, safely, respectfully, trusted</p> <ul style="list-style-type: none"> <li>• input</li> <li>• devices</li> <li>• storage of digital content</li> <li>• locate</li> <li>• school network</li> <li>• paint</li> <li>• program</li> <li>• animation</li> <li>• Import</li> <li>• export</li> <li>• digital imagine</li> </ul> <ul style="list-style-type: none"> <li>• Word processing terms: font, bold, italic, highlight, text size, copy, paste, shift key,</li> </ul>

	<p>E-Safety</p> <ul style="list-style-type: none"> <li>• responsibility</li> <li>• online safety</li> <li>• suitable</li> </ul> <p>Topic related examples – Kaleidopaint Pivot Animator</p>
--	---

**Messages and Virtual Worlds (Spring)**

<p><b>Year 2: National Curriculum</b></p> <ul style="list-style-type: none"> <li>• <i>Understand that algorithms are implemented as programs on digital devices.</i></li> <li>• <i>Understand that programs execute by following precise and unambiguous instructions.</i></li> <li>• <i>Debug simple programs.</i></li> <li>• <i>Use logical reasoning to predict the behaviour of simple programs</i></li> <li>• <i>Use technology purposefully to organise digital content.</i></li> <li>• <i>Use technology purposefully to manipulate digital content.</i></li> <li>• <i>Use technology respectfully.</i></li> <li>• <i>Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i></li> </ul>	<p>Pad, swipe, log on, password, computer, camera, phone, screen, monitor, sound, switch, button, go, forward, backwards, turn, stop, push, pull, press, wind, lift, up, down, move, bee-bot, audio book, CD Player, volume, keyboard, batteries, mouse, game, turn on, turn off</p> <p>E-Safety help, safe</p> <p>App, icon, program, ipod, interactive whiteboard (IWB), memory, access, video, internet, google, picture, typing</p> <p>keyboard, keys, graph, tools, remote control</p> <p>E-Safety worried, feelings, strangers</p> <p>Digital, Non digital, hardware and software, file, save, edit, open, folder, print, still image, moving image, digital picture, tools, text, type, paint, size, colour, sound, audio</p> <p>E-Safety digital footprint, safely, respectfully, trusted</p> <p>Pictogram, bar chart, graph, data, information, repetition, branching database, data-logger, signs</p> <p>Symbols, logo</p> <p>E-Safety online, unsure, uncomfortable, private, password, address</p> <ul style="list-style-type: none"> <li>• Messages</li> <li>• Formal</li> <li>• Informal</li> <li>• Email</li> <li>• Inbox</li> <li>• Attach</li> <li>• Text message</li> <li>• Receive</li> <li>• Reply</li> <li>• draft</li> <li>• Send</li> <li>• Online</li> <li>• Website</li> <li>• Newsletter</li> <li>• Blogs</li> <li>• Avatar</li> <li>• Simulation</li> <li>• Control</li> <li>• Commands</li> <li>• Outcome</li> <li>• Programming</li> </ul> <p>ESafety</p>
--	--

	<ul style="list-style-type: none"> <li>• permission</li> <li>• social media</li> <li>• agreement</li> </ul>
--	---

**Starting Research (Summer)**

<p><b>Year 2: National Curriculum</b></p> <ul style="list-style-type: none"> <li>• <i>Understand that algorithms are implemented as programs on digital devices.</i></li> <li>• <i>Understand that programs execute by following precise and unambiguous instructions.</i></li> <li>• <i>Debug simple programs.</i></li> <li>• <i>Use logical reasoning to predict the behaviour of simple programs</i></li> <li>• <i>Use technology purposefully to organise digital content.</i></li> <li>• <i>Use technology purposefully to manipulate digital content.</i></li> <li>• <i>Use technology respectfully.</i></li> <li>• <i>Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i></li> </ul>	<p>         iPad, swipe, log on, password, computer, camera, phone, screen, monitor, sound, switch, button, go, forward, backwards, turn, stop, push, pull, press, wind, lift, up, down, move, bee-bot, audio book, CD Player, volume, keyboard, batteries, mouse, game, turn on, turn off          E-Safety help, safe          App, icon, program, ipod, interactive whiteboard (IWB), memory, access, video, internet, google, picture, typing          keyboard, keys, graph, tools, remote control          E-Safety worried, feelings, strangers          Digital, Non digital, hardware and software, file, save, edit, open, Folder, print, still image, moving image, digital picture, tools, text, type, paint, size, colour, sound, audio          E-Safety digital footprint, safely, respectfully, trusted            Pictogram, bar chart, graph, data, information, repetition, branching database, data-logger, signs          Symbols, logo          E-Safety online, unsure, uncomfortable, private, password, address            Digital, Non digital, hardware and software, file, save, edit, open, folder, print, still image, moving image, digital picture, tools, text, type, paint, size, colour, sound, audio            E-Safety digital footprint, safely, respectfully, trusted    <b>World Wide Web (www)</b> <ul style="list-style-type: none"> <li>• browser</li> <li>• research</li> <li>• safe search</li> <li>• search engine</li> <li>• search boxes</li> <li>• hyperlink,</li> <li>• hotspot,</li> <li>• menu</li> <li>• copyright</li> <li>• ownership</li> </ul>   <b>E-Safety</b> <ul style="list-style-type: none"> <li>• report</li> <li>• concerns</li> <li>• content</li> </ul> </p>
--	---