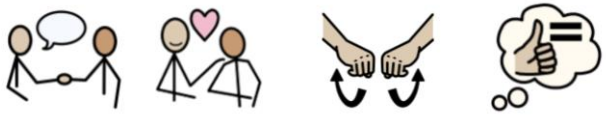
Hanley St Luke's Computing & AI Progression of Skills Overview 2026-27

"I have come that they may have life and have it to the full." (John 10:10)

Skills Builder





TST NextGen Curriculum:

Three Spires Trust's **NextGen Curriculum** is designed to prepare pupils for the rapidly changing digital world by building key skills in technology, creativity, and critical thinking. At **HSL**, we support this vision by teaching **AI and digital literacy lessons from Year 3 through to Year 6**, helping pupils understand how modern technology works and how to use it responsibly. Through these lessons, children learn about topics such as artificial intelligence, online safety, digital research, and responsible use of digital tools. This approach ensures that pupils not only develop strong computing skills but also become thoughtful, informed, and confident digital citizens ready for the future.

EYFS

Personal, Social and Emotional Development

- Remember rules without needing an adult to remind them.
- Show resilience and perseverance in the face of a challenge.
- Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'.

Physical Development

• Match their developing physical skills to tasks and activities in the setting.
- Develop their small motor skills so that they can use a range of tools competently, safely and confidently.

Understanding the World

• Explore how things work.

Expressive Arts and Design

• Explore, use and refine a variety of artistic effects to express their ideas and feelings

Year 1					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing systems and networks – Technology around us	Creating media – Digital painting	Programming A – Moving a robot	Data and information – Grouping data	Creating media – Digital writing	Programming B - Programming animations

-To identify technology -To identify a computer and its main parts -To use a mouse in different ways -To use a keyboard to type on a computer -To use the keyboard to edit text -To create rules for using technology responsibly	-To describe what different freehand tools do -To use the shape tool and the line tools -To make careful choices when painting a digital picture -To explain why I chose the tools I used -To use a computer on my own to paint a picture -To compare painting a picture on a computer and on paper Purpose - Christmas cards	-To explain what a given command will do -To act out a given word -To combine forwards and backwards commands to make a sequence -To combine four direction commands to make sequences -To plan a simple program -To find more than one solution to a problem	-To label objects -To identify that objects can be counted -To describe objects in different ways -To count objects with the same properties -To compare groups of objects -To answer questions about groups of objects	-To use a computer to write -To add and remove text on a computer -To identify that the look of text can be changed on a computer -To make careful choices when changing text -To explain why I used the tools that I chose -To compare typing on a computer to writing on paper	-To choose a command for a given purpose -To show that a series of commands can be joined together -To identify the effect of changing a value -To explain that each sprite has its own instructions -To design the parts of a project -To use my algorithm to create a program
technology, computer, mouse, trackpad, keyboard, screen, double-click, typing	paint program, tool, paintbrush, erase, fill, undo, shape tools, line tool, fill tool, undo tool, colour, brush style, brush size, pictures, painting, computers	Bee-Bot, forwards, backwards, turn, clear, go, commands, instructions, directions, left, right, route, plan, algorithm, program.	object, label, group, search, image, property, colour, size, shape, value, data set, more, less, most, fewest, least, the same	word processor, keyboard, keys, letters, type, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo, redo, format, compare, typing, writing.	ScratchJr, command, sprite, compare, programming, area, block, joining, start, run, program, background, delete, reset, algorithm, predict, effect, change, value, instructions, design.
Year 2					
Autumn 1	Autumn 2	Spring 1	Spring 2	**Summer 1**	**Summer 2**
Computing systems and networks- Information Technology around us	**Programming A- Robot algorithms**	**Programming B- Quizzes**	**Creating media- Digital photography**	**Creating media- Digital Music**	**Data and Information- Pictograms to be completed part of Maths/Science**
To recognise the uses and features of information technology To identify the uses of information technology in the school	-To describe a series of instructions as a sequence	-To explain that a sequence of commands has a start	-To use a digital device to take a photograph	To say how music can make us feel	-To recognise that we can count and compare objects using tally charts

To identify information technology beyond school To explain how information technology helps us To explain how to use information technology safely To recognise that choices are made when using information technology	-To explain what happens when we change the order of instructions To use logical reasoning to predict the outcome of a program To explain that programming projects can have code and artwork To design an algorithm To create and debug a program that I have written	-To explain that a sequence of commands has an outcome To create a program using a given design To change a given design To create a program using my own design To decide how my project can be improved	To make choices when taking a photograph To describe what makes a good photograph To decide how photographs can be improved To use tools to change an image To recognise that photos can be changed	To identify that there are patterns in music To experiment with sound using a computer To use a computer to create a musical pattern To create music for a purpose	To recognise that objects can be represented as pictures To create a pictogram To select objects by attribute and make comparisons To recognise that people can be described by attributes To explain that we can present information using a computer
Information technology (IT), computer, barcode, scanner/scan	instruction, sequence, clear, unambiguous, algorithm, program, order, prediction, artwork, design, route, mat, debugging, decomposition	sequence, command, program, run, start, outcome, predict, blocks, design, actions, sprite, project, modify, change, algorithm, build, match, compare, debug, features, evaluate, decomposition, code.	device, camera, photograph, capture, image, digital, landscape, portrait, framing, subject, compose, light sources, flash, focus, background, editing, filter, format, framing, lighting,	music, quiet, loud, feelings, emotions, pattern, rhythm, pulse, pitch, tempo, rhythm, notes, create, emotion, beat, instrument, open, edit.	more than, less than, most, least, common, popular, organise, data, object, tally chart, votes, total, pictogram, enter, data, compare, objects, count, explain, attribute, group, same, different, conclusion, block diagram, sharing

Year 3

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing systems and networks- Connecting Computers	Creating media- Stop frame animation	Programming A- Sequencing Sounds	**AI Digital Literacy**	Creating media- Desktop Publishing	Programming B- Events and Actions
To recognise the uses and features of information technology To identify the uses of information technology in the school To identify information technology beyond school To explain how information technology helps us To explain how to use information technology safely	To explain that animation is a sequence of drawings or photographs To relate animated movement with a sequence of images To plan an animation	To explore a new programming environment To identify that commands have an outcome To explain that a program has a start	Recognise that AI is a computer tool that uses patterns to make predictions and does not think or feel like a human. Understand that AI can help people learn and work, but that humans are responsible	To recognise how text and images convey information To recognise that text and layout can be edited To choose appropriate page settings	To explain how a sprite moves in an existing project To create a program to move a sprite in four directions To adapt a program to a new context

To recognise that choices are made when using information technology	To identify the need to work consistently and carefully To review and improve an animation To evaluate the impact of adding other media to an animation	To recognise that a sequence of commands can have an order To change the appearance of my project To create a project from a task description	for checking and making decisions. Recognise that computers follow rules set by people and that unfair rules can lead to unfair outcomes. Know that not everything online is true and to ask a trusted adult if unsure or worried. Begin to think carefully about when and why to use digital tools, understanding that they use energy and should be used responsibly.	To add content to a desktop publishing publication To consider how different layouts can suit different purposes To consider the benefits of desktop publishing	To develop my program by adding features To identify and fix bugs in a program To design and create a maze-based challenge
digital device, input, process, output, program, digital, non-digital, connection, network, switch, server, wireless access point, cables, sockets	animation, flip book, stop-frame, frame, sequence, image, photograph, setting, character, events, onion skinning, consistency, evaluation, delete, media, import, transition.	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, run the code, order, note, chord, algorithm, bug, debug, code.		text, images, advantages, disadvantages, communicate, font, style, landscape, portrait, orientation, placeholder, template, layout, content, desktop publishing, copy, paste, purpose, benefits.	motion, event, sprite, algorithm, logic, move, resize, extension block, pen up, set up, pen, design, action, debugging, errors, setup, code, test, debug, actions.
Year 4					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Computing systems and networks- The Internet	**Creating media- Audio Production**	**Programming A- Repetition in Shapes**	**AI Digital Literacy**	**Creating media- Photo Editing**	**Programming B- Repetition in Games**
To describe how networks physically connect to other networks To recognise how networked devices make up the internet To outline how websites can be shared via the World Wide Web (WWW) To describe how content can be added and accessed on the World Wide Web (WWW)	To identify that sound can be recorded To explain that audio recordings can be edited To recognise the different parts of creating a podcast project	To identify that accuracy in programming is important To create a program in a text-based language To explain what 'repeat' means	Explain how AI systems follow programmed instructions and why they do not truly understand meaning, emotion or context like humans. Use digital tools with guidance and question whether answers make sense.	To explain that the composition of digital images can be changed To explain that colours can be changed in digital images To explain how cloning can be used in photo editing	To develop the use of count-controlled loops in a different programming environment To explain that in programming there are infinite loops and count-controlled loops

To recognise how the content of the WWW is created by people To evaluate the consequences of unreliable content	To apply audio editing skills independently To combine audio to enhance my podcast project To evaluate the effective use of audio	To modify a count-controlled loop to produce a given outcome To decompose a task into small steps To create a program that uses count-controlled loops to produce a given outcome	Recognise that technology can be unfair and to consider how we should respond responsibly. Identify personal information and explain how to keep it safe. Understand that digital content is chosen and created for a purpose, and ask questions about who made it and why.	To explain that images can be combined To combine images for a purpose To evaluate how changes can improve an image	To develop a design that includes two or more loops which run at the same time To modify an infinite loop in a given program To design a project that includes repetition To create a project that includes repetition
internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts	audio, microphone, speaker, headphones, input device, output device, sound, podcast, edit, trim, align, layer, import, record, playback, selection, load, save, export, MP3, evaluate, feedback.	Logo (programming environment), program, turtle, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, value, trace, decompose, procedure.		image, edit, digital, crop, rotate, undo, save, adjustments, effects, colours, hue, saturation, sepia, vignette, image, retouch, clone, select, combine, made up, real, composite, cut, copy, paste, alter, background, foreground, zoom, undo, font.	Scratch, programming, sprite, blocks, code, loop, repeat, value, infinite loop, count-controlled loop, costume, repetition, forever, animate, event block, duplicate, modify, design, algorithm, debug, refine, evaluate.

Year 5

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing systems and networks- Systems and Searching	**Creating media- Video Production**	**Programming A- Selection in Physical Computing**	**AI Digital Literacy**	**Creating media- Introduction to vector Graphics**	**Programming B- Selection in Quizzes**
To explain that computers can be connected together to form systems To recognise the role of computer systems in our lives To identify how to use a search engine To describe how search engines select results To explain how search results are ranked	To explain what makes a video effective To use a digital device to record video To capture video using a range of techniques To create a storyboard	To control a simple circuit connected to a computer To write a program that includes count-controlled loops To explain that a loop can stop when a condition is met To explain that a loop can be used to repeatedly check	Recognise AI in everyday life and understand its role in technology. Explore simple AI-powered tools (e.g., voice assistants, chatbots) and their uses. Discuss fairness in AI and how technology can impact different groups.	To identify that drawing tools can be used to produce different outcomes To create a vector drawing by combining shapes To use tools to achieve a desired effect	To explain how selection is used in computer programs To relate that a conditional statement connects a condition to an outcome To explain how selection directs the flow of a program To design a program that uses selection

To recognise why the order of results is important, and to whom	To identify that video can be improved through reshooting and editing To consider the impact of the choices made when making and sharing a video	whether a condition has been met	Understand the importance of keeping personal information safe online. Differentiate between real and AI-generated images or content in a simple way.	To recognise that vector drawings consist of layers To group objects to make them easier to work with To apply what I have learned about vector drawings	To create a program that uses selection To evaluate my program
system, connection, digital, input, process, storage, output, search, search engine, refine, index, bot, ordering, links, algorithm, search engine optimisation (SEO), web crawler, content creator, selection, ranking.	video, audio, camera, talking head, panning, close up, video camera, microphone, lens, mid-range, long shot, moving subject, side by side, angle (high, low, normal), static, zoom, pan, tilt, storyboard, filming, review, import, split, trim, clip, edit, reshoot, delete, reorder, export, evaluate, share.	microcontroller, USB, components, connection, infinite loop, output component, motor, repetition, count-controlled loop, Crumble controller, switch, LED, Sparkle, crocodile clips, connect, battery box, program, condition, Input, output, selection, action, debug, circuit, power, cell, buzzer		vector, drawing tools, object, toolbar, vector drawing, move, resize, colour, rotate, duplicate/copy, zoom, select, align, modify, layers, order, copy, paste, group, ungroup, reuse, reflection	Selection, condition, true, false, count-controlled loop, outcomes, conditional statement, algorithm, program, debug, question, answer, task, design, input, implement, test, run, setup, operator

Year 6

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Creating media- Webpage Creation	**Programming A- Variables in Games**	**Data and Information- Spreadsheets**	**Computer systems- Communication and Collaboration**	**Programming B- Sensing Movement**	**AI Digital Literacy TST Next Gen Curriculum**
To review an existing website and consider its structure To plan the features of a web page To consider the ownership and use of images (copyright) To recognise the need to preview pages To outline the need for a navigation path To recognise the implications of linking to content owned by other people	To define a 'variable' as something that is changeable To explain why a variable is used in a program To choose how to improve a game by using variables To design a project that builds on a given example	To create a data set in a spreadsheet To build a data set in a spreadsheet To explain that formulas can be used to produce calculated data To apply formulas to data To create a spreadsheet to plan an event	To explain the importance of internet addresses To recognise how data is transferred across the internet To explain how sharing information online can help people to work together	To create a program to run on a controllable device To explain that selection can control the flow of a program To update a variable with a user input To use an conditional statement to compare a variable to a value	AI Digital Literacy BirdNet Curriculum Analyze how AI systems work (e.g., algorithms, large language models) and assess their societal and technological impact. Design and evaluate AI prompts across contexts (e.g., essay writing, revision, presentations), reflecting on effectiveness and limitations.

	To use my design to create a project To evaluate my project	To choose suitable ways to present data	To evaluate different ways of working together online	To design a project that uses inputs and outputs on a controllable device	Debate fairness, accountability, and bias in AI decision-making using real-world examples; propose policy or design solutions. Develop and apply strategies for digital safety, recognizing AI-enabled threats such as deepfakes, phishing, and voice cloning.
website, web page, browser, media, Hypertext Markup Language (HTML), logo, layout, header, media, purpose, copyright, fair use, home page, preview, evaluate, device, Google Sites, breadcrumb trail, navigation, hyperlink, subpage, evaluate, implication, external link, embed.	variable, change, name, value, set, design, event, algorithm, code, task, artwork, program, project, code, test, debug, improve, evaluate, share, assign, declare	data, collecting, table, structure, spreadsheet, cell, cell reference, data item, format, formula, calculation, spreadsheet, input, output, operation, range, duplicate, sigma, propose, question, data set, organised, chart, evaluate, results, sum, comparison, software, tools.	communication, protocol, data, address, Internet Protocol (IP), Domain Name Server (DNS), packet, header, data payload, chat, explore, slide deck, reuse, remix, collaboration, internet, public, private, one-way, two-way, one-to-one, one-to-many.	Micro:bit, MakeCode, input, process, output, flashing, USB, trace, selection, condition, if then else, variable, random, sensing, accelerometer, value, compass, direction, navigation, design, task, algorithm, step counter, plan, create, code, test, debug.	