

Progression of Skills: Years 1 and 2

In Years 1 and 2, the children can...

Areas of Study & Key Vocabulary

Communicating & Key Skills – Laptop skills / iPad Skills / Word processing

Key Vocabulary: Documents, Index finger typing, Enter/return, Caps lock, Backspace, delete, Home button, App, open close, Save, Retrieve

Coding & Programming - Lego Builders & Maze Explorers

Key Vocabulary: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.

Online Safety - Personal Information / Effect Searching / SMART rules / email

Key Vocabulary: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.

Data Handling – Pictograms, Grouping & Sorting

Key Vocabulary: chart, pictures, data, group, sort

Multimedia - Creating Pictures / Making Music / Presenting Ideas & Animated Stories

Key Vocabulary: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present, commands, add sound.

Coding & Programming - ALEX, BeeBot, Daisy, Code.org

Key Vocabulary: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.

Technology in our Lives – Technology Outside: Key Vocabulary: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.

Online Safety

- Identify what things count as personal information;
- Identify what is appropriate and inappropriate behaviour on the internet;
- Agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords;
- Seek help from an adult when they see something that is unexpected or worrying;
- Demonstrate how to safely open and close applications and log on and log off from websites;

Multimedia (text, images, sound & motion)

- add text strings, text boxes and show and hide objects and images, manipulating the features;
- use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape;
- use applications and devices in order to communicate ideas, work, messages and demonstrate control;
- save, retrieve and organise work;
- use software to record sounds;
- change sounds recorded;
- save, retrieve and organise work

Data Handling

- begin to talk about the different ways data can be organised;
- sort and organise information to use in other ways;
- search a ready-made database to answer questions;

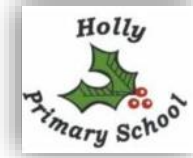
Holly Primary School
Computing Skills progression map

Technology in our Lives

- recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping;
- use links to websites to find information;
- recognise age-appropriate websites;
- use safe search filters;

Coding & Programming

- give commands one at a time to control direction and movement, including straight, forwards, backwards, turn;
- control the nature of events: repeat, loops, single events and add and delete features;
- give a set of instructions to follow and predict what will happen;
- improve/change their sequence of commands by debugging;



Progression of Skills: Years 3 and 4

In Years 3 and 4, the children can...

Areas of Study

Technology in our Lives – Searching / Office365 / Teams

Key Vocabulary: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media

Multimedia – PowerPoint / Sway / Book Creator / Stop Frame Animation & Making Movies

Key Vocabulary: draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck, audio, sound, video, movie, embed, link, file format, animate, animation, still image, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.

Online Safety – Digital Charter / Acceptable Use / Social Media

Key Vocabulary: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.

Computing Development – Computer hardware & Recent Developments

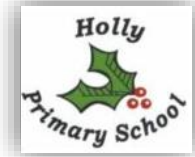
Key Vocabulary: Computer, Personal Computer (PC), laptop, tablet, key, keyboard, monitor, screen, hard drive (HDD), flash drive, USB drive, pen drive, memory, speakers, chip, cable, motherboard, printer, joystick, microphone, headphones, webcam, computer case, graphics card, modem, CD-ROM drive, virtual reality headset, card reader, device, hardware, 3D glasses, Charles Babbage, Bill Gates, Lady Aida Lovelace.

Coding & Programming – Gaming / Code.org / Scratch3 / Lego Wedo2

Key Vocabulary: decompose, decomposing, logical sequence, flowchart, sprite, block, command, algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable.

Data Handling – Databases: Key Vocabulary: insert, table, collecting, analyse, evaluate.

<p><u>Online Safety</u></p> <ul style="list-style-type: none"> • reflect on their own digital footprint and behaviour online; • identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying; • agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords; • seek help from an adult when they see something that is unexpected or worrying; • demonstrate understanding of age-appropriate websites and adverts; 	
<p><u>Multimedia (text, images, sound & motion)</u></p> <ul style="list-style-type: none"> • create different effects with different technological tools, demonstrating control; • use appropriate keyboard commands to amend text on a device; • use applications and devices in order to communicate ideas, work, and messages; • save, retrieve and evaluate work, making amendments; • insert a picture/text/graph/hyperlink from the internet or a personal file; 	<p><u>Handling Data</u></p> <ul style="list-style-type: none"> • talk about the different ways data can be organised; • sort and organise information to use in other ways; • search a ready-made database to answer questions;
<p><u>Technology in our Lives</u></p> <ul style="list-style-type: none"> • explain ways to communicate with others online; • describe the world wide web as the part of the internet that contains websites; • add websites to a favourites' list; • use search tools to find and use an appropriate website and content; • use strategies to improve results when searching online; 	<p><u>Coding & Programming</u></p> <ul style="list-style-type: none"> • use logical thinking to solve an open-ended problem by breaking it up into smaller parts; • write a program, putting commands into a sequence to achieve a specific outcome; • give a set of instructions to follow and predict what will happen; • keep testing a program and recognise when it needs to be debugged; • use variables to create an effect;



Progression of Skills: Years 5 and 6

In Year 5 and 6, the children can...`12

Areas of Study

Internet, Communicating and Finding Out – Searching / Website evaluation / Office365 / Teams / Class Notebook

Key Vocabulary: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar.

Multimedia – PowerPoint / Sway / Book Creator / Stop Frame Animation & Making Movies

Key Vocabulary: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide, audio, record, edit, play stop, skip, waveform, input, output, record, edit, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload.

Online Safety – Social Media Use & Privacy / Data Protection / Encryption / Fake News

Key Vocabulary; spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.

Computing Development – Famous People Study / Historical Development

Key Vocabulary: Charles Babbage, Lady Aida Lovelace, Tommy Flowers, Bletchley Park, Enigma, Bill Gates, Steve Jobs, Amazon, Google, Facebook, YouTube,

Coding & Programming – Gaming / Code.org / Scratch3 / Lego Wedo2

Key Vocabulary: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise.

Data Handling – Spreadsheets

Key Vocabulary: insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending.

Online Safety

- protect their password and other personal information;
- be a good online citizen and friend;
- judge what sort of privacy settings might be relevant to reducing different risks;
- seek help from an adult when they see something that is unexpected or worrying;
- discuss scenarios involving online risk;

Multimedia (text, images, sound & motion)

- use the skills already developed to create content using unfamiliar technology;
- select, use and combine the appropriate technology tools to create effect;
- review and improve their own work and support others to improve their work;
- save, retrieve and evaluate their work, making amendments;
- insert a picture/text/graph/hyperlink from the internet or personal file;
- use software to record sounds;
- change sounds recorded;
- save, retrieve and organise work;
- collect audio from a variety of resources including own recordings and internet clips;
- use a digital device to record sounds and present audio;
- trim, arrange and edit audio levels to improve quality;
- publish their animation and use a movie editing package to edit/refine and add titles;

Handling Data

- construct data on the most appropriate application;
- know how to interpret data, including spotting inaccurate data and comparing data;
- use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets;
- add data to an existing database;

Technology in our Lives

- search for information using appropriate websites and advanced search functions within Google;
- use strategies to check the reliability of information (cross-check with another source such as books);
- talk about the way search results are selected and ranked;
- check the reliability of a website, including the photos on site;
- tell you about copyright and acknowledge the sources of information;

Coding & Programming

- use external triggers and infinite loops to demonstrate control;
- follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols;
- use conditional statements and edit variables;
- decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program;
- keep testing a program and recognise when it needs to be debugged;