

EYFS

Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

Autumn: 'Altogether' (Family and belonging)

Take a photograph of a friend in your class for class display.

(iPad, camera)

Use 'paint' to write own name.

Autumn 2: Let's Celebrate (Christianity and other religions)

Record a video of each other performing Christmas songs.

(iPad, camera)

Explore 'Google Maps' to look at Crediton.

Spring : 'Take good care of the Bear!' (Panda Bears, Brown Bears and Polar Bears)

Read an ebook on Phonics Bug club and turn pages.

(iPad, chromebook, tablet)

Summer 1: 'Spring into Summer'

Create a repeating pattern or picture in 'Paint'

(chromebook, Google Canvas / Paint online)

Explore 'Google Maps' looking at the world

Take photographs of our environment.

(iPad, camera)

Summer 2: 'Out and About'

Watch dance performance videos.

Play NumBots or similar Maths games

Use Beebots

(touchscreen – iPads, Lenovo Chromebooks, Beebots)

Ongoing

Use talk tins to record voice.

Bug club games – touchscreen

- explore, observe and find out about technology
- play on a touchscreen games and use computers / keyboards / mouse in role play
- know the difference between a photography and video
- take a simple photo
- move and resize images with my fingers or mouse
- record a short film using the camera
- watch films back
- paint using a computer program
- use a Beebot
- help teacher or adult to search for information on the internet
- listen to music

More details -

<..\Knowledge Progression\Detailed Knowledge Progression.pdf>

KS1 (Team 1)

Information Technology

Co2/1.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content.

<p>Word Processing/Typing</p> <p><u>Amazing Authors</u> Christmas card message. (Microsoft word)</p> <p><u>Habitats</u> Type up a Trip recount writing (Microsoft word)</p>	<p>Data Handling</p> <p><u>Finding Fossils (Animals)</u> Sorting/Classifying animals (jamboard)</p>	<p>Presentations</p> <p><u>The Great Fire of...</u> Timeline with labels. (popplet lite)</p>	<p>Photography and Digital Art</p> <p><u>Let's Grow</u> Photograph of Fruit Faces (Art) (iPad camera, Pic collage)</p>	<p>Multimedia (Animation, Video Creation, Sound)</p> <p><u>What a Wonderful World</u> Weather forecasting (iPad camera, video creation)</p>
<p><u>Brilliant Buildings</u> Christmas card message. (Microsoft word)</p> <p><u>Healthy Me</u> Type up DT instructions (Microsoft word)</p>	<p><u>Local Landscapes – Our School</u> Local Traffic Survey (jamboard)</p>	<p><u>Pirates</u> Instructions on how to make a papier mache island- with labels. (jamboard / popplet lite)</p>	<p><u>Climate Heroes</u> Photograph and label tree structure (iPad camera, mark up)</p> <p><u>Pirates</u> Photographs for instructions on how to make a papier-mache island- with labels. (iPad camera)</p>	<p><u>Climate Heroes</u> Recycling message – junk monster (chatterpix)</p> <p><u>Healthy Me</u> Film exercise routines (iPad camera, video creation)</p>
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Computer Science

Co2/1.1 understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.

Co2/1.2 create and debug simple programs.

Co2/1.3 use logical reasoning to predict the behaviour of simple programs.

Block Coding

Autumn 1

Discovery Coding

Level 1

Spring 2

Discovery Coding

Level 2

Summer 2

Scratch Junior

- Understand that algorithms are precisely defined procedures – a sequence of instructions, or a set of rules, for performing a specific task.
- Understand that the sequence of algorithms is important.
- Understand that programs execute by following precise and unambiguous instructions.
- Debug through practical application, by identifying that there is a fault, working out which bit of the program (or underlying algorithm) has caused the problem, and then thinking logically about how to fix it.
- Predict the behaviour of simple programs through repeated experience or by developing an internal model of how a piece of software works.

Digital Citizenship

Co2/1.5 recognise common uses of information technology beyond school

Co2/1.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies.

- Use a simple password when logging on. (*Lessons when using Chromebooks*)
- Recognise what personal information is and the need to keep it private.
- Know who to tell if concerned about content or contact online.
- Recognise that digital content belongs to the person who created it.
- Recognise that some information found online may not be true.
(*Computer Safety Autumn 1*)

Lower KS2 (Team 2)

Information Technology

Co2/1.6 select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

<p>Word Processing/Typing</p> <p><u>Ancient Civilisations – The Romans</u> Typing Timeline labels <i>(popplet lite)</i></p> <p><u>Amazing Authors</u> Type up 'Just so' poems <i>(Microsoft word)</i></p>	<p>Data Handling</p> <p><u>Statistics in Maths</u> Collect data and present in chart or graph. <i>(Google Sheets)</i></p>	<p>Presentations</p> <p><u>Global Comparison - France</u> Information presentation <i>(powerpoint)</i></p>	<p>Photography and Digital Art</p> <p><u>Amazing Authors</u> Digital Art linked to Rudyard Kipling <i>(iPad camera, Pic Collage)</i></p>	<p>Multimedia (Animation, Video Creation, Sound)</p> <p><u>Crediton in WW1</u> How to...video <i>(iPad camera, video, green screen)</i></p>
<p><u>Dartmoor Landscapes</u> Leaflet <i>(Google Docs, Canva)</i></p>	<p><u>Colour and Light</u> Data survey for sewing <i>(jamboard, Google Sheets)</i></p>	<p><u>How the Greeks changed the world</u> Information presentation <i>(Google Slides)</i></p>	<p><u>Dartmoor Landscape</u> Photographs for leaflet <i>(iPad camera, Pic Collage)</i></p>	<p><u>Dare to Dream</u> Science link – Sound – Music. <i>(GarageBand)</i></p> <p><u>Stone Age</u> Building Stone Age house <i>(animation / google drawings)</i></p>
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Computer Science

Co2/1.1 design, write and debug programs that accomplish specific goals including controlling or simulation physical systems; solve problems by decomposing them into smaller parts.

Co2/1.2 use sequence, selection and repetition in programs; work with variables and various forms of input and output.

Co2/1.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Co2/1.4 understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration.

Co2/1.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Block Coding

Autumn 1

Discovery Coding

Level 3/4

Summer 1

Scratch Jn

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.
- Solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain the thinking behind algorithms, talking through the steps and explain why they've solved a problem the way they have.
- Debug code by thinking logically and algorithmically.

Digital Citizenship

Co2/1.7 use technology safely, respectfully and responsibly; recognize acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact.

- Remember and use an individual password.
 - Recognise when to share personal information and when not to.
 - Recognise that some people lie about who they are online.
 - Recognise what kinds of websites are trustworthy sources of information.
 - Show awareness that games and films have age ratings.
 - Recognise the benefits and risks of different apps and websites.
 - Recognise that media can portray groups of people differently.
- (Computer Safety Autumn 1)*

Upper KS2 (Team 3)

Information Technology

Co2/1.6 select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

<p>Word Processing/Typing</p> <p><u>Aztecs</u> Publish information blog (Blogs, videos, microsoft powerpoint/Google slides, word/sheets)</p> <p><u>Shakespeare</u> Type up Non-Chron report on Author (Microsoft word)</p>	<p>Data Handling</p> <p><u>Statistics in Maths</u> Collect data and present in chart or graph. (Google Sheets)</p> <p><u>Farming – County Show</u> Data survey for snacks. Food miles present in chart/graph. (Google classroom, Google Sheets)</p>	<p>Presentations</p> <p><u>Aztecs</u> Publish information blog (Blogs, videos, Microsoft powerpoint/Google Slides, word/sheets)</p> <p><u>Invaders - Vikings</u> Timeline and explanation of key events. (Pic Collage, keynote)</p>	<p>Photography and Digital Art</p> <p><u>Shakespeare</u> Stop motion of Macbeth (iPad camera, video, iMovie)</p> <p><u>Invaders - Vikings</u> Timeline and explanation of key events. (Pic Collage, keynote)</p>	<p>Multimedia (Animation, Video Creation, Sound)</p> <p><u>Aztecs</u> Publish information blog (Blogs, videos, microsoft powerpoint/Google slides, word/sheets)</p> <p><u>Shakespeare</u> Stop motion of Macbeth (iPad camera, video, iMovie)</p>
<p><u>Explorers - Space</u> Type up script for news report. (Google docs)</p>	<p><u>Statistics in Maths</u> Collect data and present in chart or graph. (Google Sheets)</p>	<p><u>Climate Heroes</u> Digital poster or video about threats as result of global warming – poster competition. (iPad camera, Pic Collage)</p>	<p><u>Rivers – from source to sea</u> Photographs for features of a river. (iPads, camera, markup)</p>	<p><u>Staying Alive</u> Fitness video (iPads, camera, iMovie)</p> <p><u>Climate Heroes</u> Digital poster or video about threats as result of global warming – poster competition. (iPad camera, Pic Collage)</p> <p><u>Explorers - Space</u> News report / script / retelling of the moon landing. (iPads, camera, iMovie, Microsoft word)</p>

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Computer Science

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Co2/1.4 understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration.

Co2/1.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Coding

Autumn 2

Discovery Coding (Block)

Level 5/6

Summer 2

Python / HTML

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.
- Solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain the thinking behind algorithms, talking through the steps and explain why they've solved a problem the way they have.
- Debug code by thinking logically and algorithmically.
- Plan out a program in detail.
- Recognise that different solutions may exist for the same problem.
- Predict what will happen in a program or algorithm.
- Create programs.
- Explain common errors.

Digital Citizenship

Co2/1.7 use technology safely, respectfully and responsibly; recognize acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact.

- Explain what makes a strong password and why this is important at school and in the wider world.
- Critically evaluate websites for reliability of information and authenticity.
- Demonstrate responsible use of online services, and know a range of ways to report concerns.
- Know that there are laws around the purchase of games; the production, sending and storage of images; what is written online, and around online gambling.
(Computer Safety Autumn 1)