

**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: 'Good to be me!' (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: 'What a wonderful World'**

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

## KS1 (Team 1)

### Information Technology

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

<b>Word Processing/Typing</b>	<b>Data Handling</b>	<b>Presentations</b>	<b>Photography and Digital Art</b>	<b>Multimedia (Animation, Video Creation, Sound)</b>
<p><b><u>Amazing Authors</u></b> Christmas card message. (Microsoft word)</p> <p><b><u>Farming – County Show</u></b> Posters/Signs for show. (Microsoft word)</p>	<p><b><u>Finding Fossils (Animals)</u></b> Sorting/Classifying animals (jamboard)</p>	<p><b><u>The Great Fire of...</u></b> Timeline with labels. (popplet lite)</p>	<p><b><u>Let's Grow</u></b> Photograph of Fruit Faces (Art) (iPad camera, Pic collage)</p>	<p><b><u>Global Comparisons</u></b> Weather forecasting (iPad camera, video creation)</p>
<p><b><u>Brilliant Buildings</u></b> Christmas card message. (Microsoft word)</p> <p><b><u>Healthy Eating</u></b> Type up DT Smoothie instructions (Microsoft word)</p>	<p><b><u>Local Landscapes – Our School</u></b> Local Traffic Survey (jamboard)</p>	<p><b><u>Pirates</u></b> Instructions on how to make a papier mache island- with labels. (jamboard / popplet lite)</p>	<p><b><u>Climate Heroes</u></b> Photograph and label tree structure (iPad camera, mark up)</p> <p><b><u>Pirates</u></b> Photographs for instructions on how to make a papier-mache island- with labels. (iPad camera)</p>	<p><b><u>Climate Heroes</u></b> Recycling message – junk monster (chatterpix)</p> <p><b><u>Healthy Me</u></b> Film exercise routines (iPad camera, video creation)</p>
<ul style="list-style-type: none"> <li>Save and Open files to/from a given folder.</li> <li>Become familiar with the location of letters on the keyboard.</li> <li>Type words quickly and correctly with confidence.</li> <li>Manipulate text and images within word.</li> </ul>	<ul style="list-style-type: none"> <li>modify simple charts/pictogram</li> <li>sort digital objects into a venn diagram</li> <li>explain information shown on a simple chart</li> <li>manipulate digital content – move images, touch screen and mouse</li> </ul>	<ul style="list-style-type: none"> <li>Import images to project from web or camera roll</li> <li>Sequence a series of pictures</li> <li>Add labels to an image</li> <li>Combine media to present information</li> </ul>	<ul style="list-style-type: none"> <li>Confidently take photographs</li> <li>Select and use tools to create digital imagery</li> <li>Edit photos</li> </ul>	<ul style="list-style-type: none"> <li>Record a film</li> <li>Edit and zoom in as needed</li> <li>Use tools to add effects</li> </ul>

## 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.

**Word  
Processing/Typing**

**Data Handling**

Statistics in Maths

**Presentations**

Global Comparison - France  
Information presentation

**Photography and  
Digital Art**

**Multimedia  
(Animation, Video  
Creation, Sound)**

<p><b><u>Ancient Civilisations – The Romans</u></b> Typing Timeline labels <i>(popplet lite)</i></p> <p><b><u>Amazing Authors</u></b> Type up ‘Just so’ poems <i>(Microsoft word)</i></p>	<p>Collect data and present in chart or graph. <i>(Google Sheets)</i></p>	<p><i>(powerpoint)</i></p>	<p><b><u>Amazing Authors</u></b> Digital Art linked to Rudyard Kipling <i>(iPad camera, Pic Collage)</i></p>	<p><b><u>Farming – County Show</u></b> How to...video linked to planting/gardening. <i>(iPad camera, video, green screen)</i></p>
<p><b><u>Dartmoor Landscapes</u></b> Leaflet <i>(Google Docs)</i></p>	<p><b><u>Colour and Light</u></b> Data survey for sewing <i>(jamboard, Google Sheets)</i></p>	<p><b><u>How the Greeks changed the world</u></b> Information presentation <i>(Google Slides)</i></p>	<p><b><u>Dartmoor Landscape</u></b> Photographs for leaflet <i>(iPad camera, Pic Collage)</i></p>	<p><b><u>Dare to Dream</u></b> Science link – Sound – Music. <i>(GarageBand)</i></p> <p><b><u>Stone Age</u></b> Building Stone Age house <i>(animation / google drawings)</i></p>
<ul style="list-style-type: none"> <li>• Know where to save and open files.</li> <li>• Save files with appropriate names.</li> <li>• Use a keyboard effectively to type in text.</li> <li>• Add, resize and move an image in a document.</li> <li>• Manipulate text and layout for a purpose and audience.</li> </ul>	<ul style="list-style-type: none"> <li>• Collect data.</li> <li>• Input data.</li> <li>• Choose appropriate formats to present data.</li> <li>• Manipulate digital content.</li> <li>• Draw conclusions from information presented.</li> </ul>	<ul style="list-style-type: none"> <li>• Collect, organise and present information</li> <li>• Design and create digital content for a purpose</li> <li>• Edit digital content to improve it</li> <li>• Identify good and relevant features of digital content and apply these in own design</li> </ul>	<ul style="list-style-type: none"> <li>• Confidently take and manipulate photographs</li> <li>• Select and use tools to create digital imagery</li> <li>• Edit and enhance photos using a range of tools</li> </ul>	<ul style="list-style-type: none"> <li>• Confidently create videos using a range of media</li> <li>• Collaborate with peers</li> <li>• Create and edit purposeful compositions using music software</li> </ul>

## **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**

- 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.

<b>Summer 1</b> <b>Scratch Jn</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Debug code by thinking logically and algorithmically.</li> </ul>
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**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><b>Word Processing/Typing</b></p> <p><u><b>Aztecs</b></u>        Publish information blog  <i>(Blogs, videos, microsoft powerpoint/Google slides, word/sheets)</i></p> <p><u><b>Shakespeare</b></u>        Type up Non-Chron report on Author  <i>(Microsoft word)</i></p>	<p><b>Data Handling</b></p> <p><u><b>Statistics in Maths</b></u>        Collect data and present in chart or graph.  <i>(Google Sheets)</i></p> <p><u><b>Farming – County Show</b></u>        Data survey for snacks.        Food miles present in chart/graph.  <i>(Google classroom, Google Sheets)</i></p>	<p><b>Presentations</b></p> <p><u><b>Aztecs</b></u>        Publish information blog  <i>(Blogs, videos, Microsoft powerpoint/Google Slides, word/sheets)</i></p> <p><u><b>Invaders - Vikings</b></u>        Timeline and explanation of key events.  <i>(Pic Collage, keynote)</i></p>	<p><b>Photography and Digital Art</b></p> <p><u><b>Shakespeare</b></u>        Stop motion of Macbeth  <i>(iPad camera, video, iMovie)</i></p> <p><u><b>Invaders - Vikings</b></u>        Timeline and explanation of key events.  <i>(Pic Collage, keynote)</i></p>	<p><b>Multimedia (Animation, Video Creation, Sound)</b></p> <p><u><b>Aztecs</b></u>        Publish information blog  <i>(Blogs, videos, microsoft powerpoint/Google slides, word/sheets)</i></p> <p><u><b>Shakespeare</b></u>        Stop motion of Macbeth  <i>(iPad camera, video, iMovie)</i></p>
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<p><b><u>Explorers - Space</u></b> Type up script for news report. <i>(Google docs)</i></p>	<p><b><u>Statistics in Maths</u></b> Collect data and present in chart or graph. <i>(Google Sheets)</i></p>	<p><b><u>Climate Heroes</u></b> Digital poster or video about threats as result of global warming – poster competition. <i>(iPad camera, Pic Collage)</i></p>	<p><b><u>Rivers – from source to sea</u></b> Photographs for features of a river. <i>(iPads, camera, markup)</i></p>	<p><b><u>Staying Alive</u></b> Fitness video <i>(iPads, camera, iMovie)</i></p> <p><b><u>Climate Heroes</u></b> Digital poster or video about threats as result of global warming – poster competition. <i>(iPad camera, Pic Collage)</i></p> <p><b><u>Explorers - Space</u></b> News report / script / retelling of the moon landing. <i>(iPads, camera, iMovie, Microsoft word)</i></p>
<ul style="list-style-type: none"> <li>• Use folders to organise files effectively.</li> <li>• Type efficiently using both hands.</li> <li>• Use common keyboard shortcuts.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise what a spreadsheet is and what it is used for.</li> <li>• Collect data for a purpose and plan out and present data effectively.</li> <li>• Analyse and evaluate data.</li> <li>• Produce graphs to answer a question.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and use appropriate hardware and software to fulfil a specific task.</li> <li>• Remix and edit a range of existing and their own media to create content.</li> <li>• Consider the audience when designing and creating.</li> </ul>	<ul style="list-style-type: none"> <li>• Use a range of devices to photograph confidently.</li> <li>• Edit picture to remove items, add backgrounds.</li> <li>• Manipulate pictures to create enhance.</li> </ul>	<ul style="list-style-type: none"> <li>• Use a range of devices to record video confidently.</li> <li>• Record animations and edit with different effects.</li> <li>• Further improve clips using tools in iMovie.</li> </ul>

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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)*