



Curriculum for: Computing and IT

Year 1

<p>Autumn 1</p> <p>Online Safety</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I follow certain rules to stay safe online? ✓ Can I begin to search for things online? ✓ Can I recognise that some information needs to be kept private? ✓ Can I begin to recognise creative ownership? ✓ Can I recognise how to watch videos safely?
<p>Autumn 2</p> <p>Coding: Beebots</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I follow and give instructions? ✓ Can I recognise that computer programs follow precise instructions? ✓ Can I recognise that an algorithm is a set of instructions? ✓ Can I program a device accurately? ✓ Can I debug simple programs? ✓ Can I predict what a simple program will do?
<p>Spring 1</p> <p>Coding: J2Code</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I follow and give a simple set of instructions? ✓ Can I recognise that computer programs follow precise instructions? ✓ Can I recognise that an algorithm is a set of instructions? ✓ Can program a device accurately? ✓ Can I debug simple programs? ✓ Can I predict what a simple program will do?
<p>Spring 2</p> <p>Computer Skills: Word Processing (2Publish)</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can use the shift key? ✓ Can I use the Caps Lock key? ✓ Can I use the backspace key? ✓ Can I click on text to move the cursor in order to edit text? ✓ Can I click and drag for highlighting? ✓ Can I change the font? ✓ Can I save my learning?
<p>Summer 1</p> <p>Animation: Puppet Pals</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I plan and create a short scene? ✓ Can I choose a location? ✓ Can I choose a character? ✓ Can I resize my characters? ✓ Can I record my voice?
<p>Summer 2</p> <p>Film and Photography</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I compare and talk about different perspectives? ✓ Can I compare and talk about changes in colour? ✓ Can I compare and talk about the effect of light and darkness? ✓ Can I compare and talk about the effect of sound with video? ✓ Can I compare and talk about framing?

Autumn 1
<p>Online Safety</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I choose safe websites? ✓ Can I recognise what my digital footprint is? ✓ Can I recognise cyberbullying and know what to do if I encounter it? ✓ Can I begin to recognise that websites are not all equally good sources of information? ✓ Can I recognise consent when sharing pictures online?
Autumn 2
<p>Coding: 2Code (Purple Mash)</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I improve or change an algorithm? ✓ Can I recognise that computer programs follow precise and unambiguous instructions? ✓ Can I recognise that an algorithm is a set of instructions? ✓ Can I recognise that a program is a collection of instructions? ✓ Can I recognise that steps can be repeated? ✓ Can I write a program on a digital device using blocks? ✓ Can I debug simple programs?
Spring 1
<p>Coding: Scratch Jr</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I recognise that computer programs follow precise and unambiguous instructions? ✓ Can I give instructions in a sequence? ✓ Can I improve or change an algorithm? ✓ Can I recognise that an algorithm is a set of instructions? ✓ Can I recognise that a program a collection of instructions? ✓ Can I recognise that steps can be repeated? ✓ Can I write a program on a digital device using blocks? ✓ Can I debug simple programs? ✓ Can I predict what a simple program will do?
Spring 2
<p>Game Design: 2DIY 3D</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I research computer games? ✓ Can I design a computer game? ✓ Can I make a computer game? ✓ Can add instructions to my game? ✓ Can I evaluate my own game and those of others?
Summer 1
<p>Computer Skills: Research and Word Processing</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I begin to touch type? ✓ Can I create and save a document? ✓ Can I open and edit a document? ✓ Can I copy and paste text? ✓ Can I use search engines safely? ✓ Can I begin to recognise that computer networks, including the internet, are made up of computers connected together?
Summer 2
<p>Animation: 2Create</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I use different drawing tools to create a picture on the page? ✓ Can I add text to a page and change the colour, font and size of the text? ✓ Can I add sound to a story? ✓ Can I save my learning? ✓ Can I open the learning I saved in my last lesson? ✓ Can I add animation to a previously saved story? ✓ Can I save my changes and overwrite the file?

Autumn 1
<p>Online Safety</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I recognise the importance of strong passwords? ✓ Can I recognise how to play games safely? ✓ Can I recognise some of the positive aspects of being online? ✓ Can I recognise how products are promoted on websites? ✓ Can I communicate effectively using emails?
Autumn 2
<p>Computer Skills: Google Drive</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I develop my touch typing skills? ✓ Can I create and save a document using Google Drive? ✓ Can I open and edit a document using Google Drive? ✓ Can I create folder and organise my learning? ✓ Can I copy and paste text? ✓ Can I use search engines safely? ✓ Can I recognise that computer networks, including the internet, are made up of computers connected together?
Spring 1
<p>Coding: Scratch</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I recognise that an algorithm is a set of instructions? ✓ Can I recognise that a program a collection of instructions? ✓ Can I write simple programs with specific goals? ✓ Can I correctly sequence instructions in a program? ✓ Can I write my own simple program and explain in words what it does? ✓ Can I debug programs with some support?
Spring 2
<p>Coding: Microbits</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I recognise that an algorithm is a set of instructions? ✓ Can I recognise that a program a collection of instructions? ✓ Can I write simple programs with specific goals? ✓ Can I correctly sequence instructions in a program? ✓ Can I write my own simple program and explain in words what it does? ✓ Can I debug programs with some support? ✓ Can I program an external piece of equipment?
Summer 1
<p>Animation: 2Animate</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I plan, create and edit an animation? ✓ Can I add backgrounds to my animation? ✓ Can I add sound to my animation? ✓ Can I share my animation? ✓ Can I evaluate my own animations as well as those of others?
Summer 2
<p>3D Design: Blockify</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I design, make and evaluate a toy using Blockify? ✓ Can I zoom in/out and rotate? ✓ Can I add and remove blocks? ✓ Can I change the colour of my block? ✓ Can I save my project?

Autumn 1
<p>Online Safety</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I be responsible and respectful online and offline? ✓ Can I protect myself against identity theft? ✓ Can I recognise the importance of being an Upstander online? ✓ Can I use effective strategies for searching online? ✓ Can I recognise creative ownership?
Autumn 2
<p>Computer Skills: Research and Evaluation</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I evaluate whether information found is useful, true, and relevant? ✓ Can I use keywords effectively on search engines? ✓ Can I search with key phrases as well as keywords? ✓ Can I recognise the difference between the main results and sponsored results? ✓ Can I record which websites I have used to collect information from? ✓ Can I recognise that digital content is owned and if I need to get permission to use content?
Spring 1
<p>Coding: Microbits</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I recognise that an algorithm is a set of instructions? ✓ Can I recognise that a program a collection of instructions? ✓ Can I add further code to an existing program to modify it? ✓ Can predict the outcome of a given program? ✓ Can I program an external piece of equipment? ✓ Can I explain how a programme works in my own words? ✓ Can I independently debug programs?
Spring 2
<p>Coding: Scratch</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I add further code to an existing program to modify it? ✓ Can I write programs/code that use the repeat function? ✓ Can I write programs/code that uses a selection function (i?e? if???else???)? ✓ Can I predict the outcome of a given program? ✓ Can I independently debug programs?
Summer 1
<p>Animation: I Can Animate</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I plan, film and edit a short animation? ✓ Can I make decisions about different shots when creating an animation? ✓ Can I evaluate my film as well as those of others?
Summer 2
<p>Storytelling: Google Book Creator</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I plan, create and edit an e-book? ✓ Can I insert links to websites and videos? ✓ Can I insert pictures and photos? ✓ Can I record and insert audio? ✓ Can I evaluate my book as well as those of others?

<p>Autumn 1</p> <p>Online Safety</p> <p>As digital citizens we will explore:</p> <ul style="list-style-type: none"> ✓ Can I recognise the importance of strong passwords? ✓ Can I recognise what spam is and how to deal with it? ✓ Can I recognise how to write bibliographical citations for online sources? ✓ Can I recognise the impact that altering photos digitally can have? ✓ Can identify manipulative behaviour online? ✓ Can I share safely online?
<p>Autumn 2</p> <p>Coding: Scratch</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I use diagrams to help design and explain algorithms and programs? ✓ Can I create a program that accomplishes a specific goal? ✓ Can I add further code to an existing program to modify it? ✓ Can I use the repeat function? ✓ Can I use selection functions? ✓ Can I create code that uses a variable? ✓ Can I revise and improve programs to increase efficiency? ✓ Can I independently debug? ✓ Can I predict the outcome of a given program?
<p>Spring 1</p> <p>Coding: Python</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I use diagrams to help design and explain algorithms and programs? ✓ Can I create a program that accomplishes a specific goal? ✓ Can I add further code to an existing program to modify it? ✓ Can create code that uses a variable? ✓ Can I revise and improve programs to increase efficiency? ✓ Can I independently find what is wrong with a program and to fix it? ✓ Can I predict the outcome of a given program?
<p>Spring 2</p> <p>3D Design: SketchUp</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I design, make and evaluate a sustainable school using SketchUp? ✓ Can I recognise the different operating plains of SketchUp? ✓ Can I use repeated copy/paste to build a wall? ✓ Can I use the basic functions of sketch up? ✓ Can I zoom in/out, expand, push-pull? ✓ Can I consider accurate measurements for structural dimensions?
<p>Summer 1</p> <p>Animation: Adobe Spark</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I plan, film and edit a short persuasive video for a target audience? ✓ Can I record audio? ✓ Can I record short videos? ✓ Can I insert images, text and video? ✓ Can I recognise that digital content is owned and if I need to get permission to use content? ✓ Can I add music tracks to support visuals?
<p>Summer 2</p> <p>Storytelling: iMovie and Do Ink (Green Screen)</p> <ul style="list-style-type: none"> ✓ Can I plan, film and edit a short news report for a target audience? ✓ Can I explore camera shots and angles? ✓ Can I record separate videos and edit these together in a sequence? ✓ Can I add music tracks to support visuals? ✓ Can I use green screen? ✓ Can I evaluate my news report and those of others?

<p>Autumn 1</p> <p>Online safety:</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I identify secure websites? ✓ Can I recognise how the media can reinforce gender stereotypes? ✓ Can I take appropriate action if I feel pressurised or manipulated online? ✓ Can I explore positive and negative attention in the context of live streaming? ✓ Can I explore building self-esteem and confidence in the context of live streaming? ✓ Can I critically evaluate what I read online? ✓ Can I understand how balancing time online with other activities helps to maintain my health and wellbeing? ✓ Can I identify strategies to manage time spent online and foster positive habits e.g. switching phone off at night?
<p>Autumn 2</p> <p>3D Design: SketchUp</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I design, make and evaluate a graphical representation of a wartime shelter using SketchUp? ✓ Can I recognise the different operating plains of SketchUp? ✓ Can I use repeated copy/paste to build a wall? ✓ Can I use the basic functions of sketch up? ✓ Can I zoom in/out, expand, push-pull? ✓ Can I consider accurate measurements for structural dimensions?
<p>Spring 1</p> <p>Coding: Python</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I use diagrams to help design and explain algorithms and programs? ✓ Can I create a program that accomplishes a specific goal? ✓ Can I reuse and adapt existing code to develop new programs? ✓ Can create code that uses multiple variables that interact with each other? ✓ Can I revise and improve programs to increase efficiency? ✓ Can I independently find what is wrong with a program and to fix it? ✓ Can I predict the outcome of a given program?
<p>Spring 2</p> <p>Animation: I Can Animate</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I plan a short persuasive animation for a target audience? ✓ Can I film and edit an animation? ✓ Can I make decisions about different shots when creating an animation? ✓ Can I evaluate my film and those of others?
<p>Summer 1</p> <p>Storytelling: iMovie</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I plan, film and edit a short trailer for a horror film? ✓ Can I explore camera shots and angles? ✓ Can I add music tracks to support visuals? ✓ Can I experiment with lighting?
<p>Summer 2</p> <p>Computer Skills: PowerPoint/Google Slides</p> <p>As digital citizens...</p> <ul style="list-style-type: none"> ✓ Can I select appropriate software for the task/audience? ✓ Can I plan a presentation for a target audience? ✓ Can I imbed pictures and videos? ✓ Can I create an effective and well-polished presentation considering intended audience? ✓ Can I evaluate my presentation and give reasons for the chosen styles and techniques?