Year 4 Computing Overview

Green = Computer Science   Blue = Information technology   Orange = Digital literacy & e-safety

<table>
<tr><th></th><th></th><th>Unit of work</th><th>Software & hardware</th><th>Curriculum Skills</th></tr>
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<td>Year 4</td>
<td>Autumn 1</td>
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e-safety (1 Lesson) Think before you post
- Why do we need to keep personal information secure online?
- Know a range of ways to report concerns.

Coding
Scratch – animated scene
- to work through a range of challenges using Scratch2.
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<td>Scratch 2</td>
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- To know the internet is a great way to find information and communicate with people.
- To know who to tell and where to report hurtful or harmful online content.
- To communicate safely and respectfully online and offline.
- To understand that being unkind to someone online is bullying, and is called "cyberbullying"
- To know that some things you say, do, and publish online are public and permanent

- to follow a precise set of instructions
- to understand that an "algorithm" is a list of instructions (written in a human language).
- To understand that a "program" is a list of instructions in a computer 'language'.
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Autumn 2	**Coding** Scratch – animated scene • continue to work through a range of challenges using Scratch2. • to design their own animation.	Scratch 2		• To be able to write a program using given code to achieve a specific purpose. • To write simple programs which use the repeat function. • To write programs/code that uses a selection function i.e. if...else... • problem solving, articulating ideas, perseverance, predicting, decomposition, pattern recognition, creativity and communication.
Spring 1	**E-safety (2 Lessons) What is reliable?** • What does reliable mean? • Why might some things we see online not be reliable? (people and content) –What about sites like Wikipedia? • How could we check reliability? (check 2/3 sites, check website endings) • Children investigate various sites. **Create an animation** • To explore animation software • To design an animation based on a myth/legend	Google Chrome Kar2ouche		• To evaluate whether information found is useful, true, and relevant. • To use keywords effectively on search engines. • To search with key phrases as well as keywords. • To understand the difference between the main results and sponsored results. • To record which websites you have used to collect information from. • To make a short animated sequence. • To record audio • To add text and sound
Year 4 Spring 2	**Create an animation – continued** • To explore animation software • To design an animation based on a myth/legend	Kar2ouche		• To make a short animated sequence. • To record audio • To add text and sound

Summer 1	**E-safety (2 Lesson) Securing our information**		• To choose a safe password.
	• What is a password? What kind of sites do we use passwords for?		• To be able to make an appropriate personal profile.
	• Password guidelines – how to create 'strong' passwords. NB – a strong password is one that contains letters and numbers, upper and lower case, 8 or more characters, is hard to guess and easy to remember – and is changed frequently		• To only make friends with people you know and trust.
			• To understand the risks of communicating with strangers online and the possibility that someone may hide their true identity
			• To understand what kinds of personal information are appropriate to share online, including personal details and images.
			• To abide by the school acceptable use policy.
	Internet, networks and the web		• To understand that computer networks, including the internet, are made up of computers connected together.
	• Understand computer networks including the internet		• To understand that the internet can be used to send data around the world.
	• Understand how computer networks including the internet can provide		• To understand the internet can be used for communication such as email, video conferencing, blogs, forums, social networks and so on.
	• Understand how computer networks including the internet can provide		
	• multiple services, such as the world-wide web and the opportunities they offer for		
	• communication and collaboration		

| Summer 2 | **Create a film to answer the question: What is Barnes Primary doing to be a Sustainable School?**
 • Research the sustainable areas of the school and photograph them using ipads
 • Create a storyboard of ideas to plan a film
 • Using Moviemaker on iPads create the film with images, text, film, audio and sound. | | **Overall**
 • To make independent choices about what technology is best to use to communicate and present ideas for a specific audience.
 • To be able to review and evaluate multimedia work, listen to feedback, and make changes if necessary.
 • To create, review, improve, and deliver a presentation on a given topic using text and images and sound.
 Sound
 • To record audio and delete unwanted recordings.
 • To do some simple editing of sound files
 Film
 • To plan and make short films, made up of several 'scenes'
 • To experiment with kinds of shots when filming
 • To add titles, text, transitions and effects, where appropriate, to films
 Photography
 • To take photos by framing shots and thinking about the composition and lighting
 • To resize and crop photos
 • To add different effects to photos. |