

Computing Long Term Plan



Computing in the Early Years

Within the new EYFS curriculum the 'Technology' strand has been removed from 'Understanding the World' and has not been replaced with any updated guidance. However, computing and technology are still vitally important subjects to teach to Foundation children.

Teachers in the EYFS plan opportunities to ensure that children develop listening skills, problem-solving abilities and thoughtful questioning — as well as improving subject skills across the seven areas of learning. We live in a technological world and there is no escape from the reality that technology is integrated into the lives of young children teaching computing within the curriculum ensures that children enter Year One with a strong foundation of knowledge.

Computing in Key Stage One and Key Stage Two

Throughout Key Stage One and Two there are two units of work each half term developing computing skills and knowledge. On our Subject Long Term Plan, learning is presented in a consistent manner as detailed below:

Autumn One

Term Coverage

Switched On Computing Unit 1.5: We are story tellers producing a talking book using an iPad and PowerPoint

Unit One- Scheme of Work: *Switched On Computing Unit Focus and Unit Overview*

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

National Curriculum Focus

*Recognise common uses of information technology beyond school.
Use technology safely and respectfully.*

Skills Ladder: Multi – Media - Photography and Filming
Use multi- media recording devices to create and edit a film

Unit Two- *Computing Skills Ladder Discipline Focus*

Unit Overview and Aims

Computing Long Term Plan



	Autumn Term	Spring Term	Summer Term
Year One	<u>Autumn One</u>	<u>Spring One</u>	<u>Summer One</u>
	<p>Switched On Computing Unit 1.5: We are story tellers producing a talking book using an iPad and PowerPoint</p> <p><i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p><i>Recognise common uses of information technology beyond school.</i></p> <p><i>Use technology safely and respectfully.</i></p> <p>Skills Ladder: Multi – Media - Photography and Filming <i>Use multi- media recording devices to create and edit a film</i></p> <p style="text-align: center;"><u>Autumn Two:</u></p> <p>Switched On Computing Unit 1.1: We are treasure hunters programing hardware to navigate routes using a Bee- Bot</p> <p><i>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</i></p> <p><i>Create and debug simple programs.</i></p> <p><i>Use logical reasoning to predict the behaviour of simple programs.</i></p> <p><i>Recognise common uses of information technology beyond school</i></p> <p>Skills Ladder: Word Processing <i>Type simple phrases using word</i></p>	<p>Switched On Computing Unit 1.3: We are painters creating illustrations and presenting in a film</p> <p><i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p><i>Recognise common uses of information technology beyond school.</i></p> <p><i>Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i></p> <p style="text-align: center;">Skills Ladder - Data Handling <i>Present written and pictorial information in simple graphs using Busy Things</i></p> <p style="text-align: center;"><u>Spring Two</u></p> <p>Switched On Computing Unit 1.4: We are collectors of images arranging appropriately using Busy Things / Word / J2E</p> <p><i>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</i></p> <p><i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p><i>Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i></p> <p><i>Recognise common uses of information technology beyond school.</i></p> <p style="text-align: center;">Skills Ladder: Word Processing <i>Consolidate skills</i></p>	<p>Switched On Computing Unit 1.2: We are TV chefs creating an electronic recipe book using PowerPoint</p> <p><i>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</i></p> <p><i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p><i>Recognise common uses of information technology beyond school.</i></p> <p><i>Use logical reasoning to predict the behaviour of simple programs.</i></p> <p style="text-align: center;">Skills Ladder: Powerpoint <i>Present an E Book</i></p> <p style="text-align: center;"><u>Summer Two</u></p> <p>Switched On Computing Unit 1.6: We are celebrating creating a card digitally using Word</p> <p><i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p><i>Recognise common uses of information technology beyond school.</i></p> <p><i>Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</i></p> <p style="text-align: center;">Skills Ladder: Word Processing <i>To use Word to collate and organise the layout of words and images appropriately</i></p>

Computing Long Term Plan



Year Two

Autumn One

Switched On Computing Unit 2.3: We are photographers taking better photographs using an iPad

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Skills Ladder: Word Processing
To use Word to type a report

Autumn Two

Switched On Computing Unit 2.2: We are Game Testers Exploring and Evaluating a Range of Online Games

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

Use logical reasoning to predict the behaviour of simple programs. Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private.

Skills Ladder: Data Handling and Spreadsheets
Present written and pictorial information in simple graphs using Busy Things

Spring One

Switched On Computing Unit 2.4: We are researchers presenting an in-depth focus using Google and PowerPoint

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Skills Ladder: Powerpoint
Present research information to a selected audience

Spring Two

Switched On Computing Unit 2.5: We are detectives using an in-house emailing system

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Skills Ladder: Word Processing
Type a story

Summer One

Switched On Computing Unit 2.6: We are zoologists collecting data using a graph program

Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Skills Ladder: Data Handling and Spreadsheets
Present written and pictorial information in simple graphs using Busy Things

Summer Two

Switched On Computing Unit 2.1: We are pirates programming using hardware and software

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

Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.

Skills Ladder: Multi – Media - Photography and Filming
Use multi-media recording devices to create and edit a film

Computing Long Term Plan



<h2>Year Three</h2>	<p><u>Autumn One</u></p>	<p><u>Spring One</u></p>	<p><u>Summer One</u></p>
	<p>Switched On Computing Unit 3.5: We are communicators working collaboratively on online safety and emailing using Google slides and Google Meet</p> <p style="text-align: center;">Skills Ladder: Word Processing <i>Use Word to type a report</i></p> <p style="text-align: center;"><u>Autumn Two</u></p> <p>Switched On Computing Unit 3.5: We are communicators working collaboratively on online safety and emailing using Google Slides - Incorporate collaborative Video conference element into Multi-Media Unit</p> <p><i>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.</i> <i>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.</i></p> <p><i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p style="text-align: center;">Skill Ladder: Data Handling and Spreadsheets <i>To use Excel to create, analyse and present data</i></p>	<p>Switched On Computing Units 3.1 and 3.2: We are Programmers and Bug Fixers developing an animation using Scratch</p> <p><i>Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts.</i> <i>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</i> <i>Use logical reasoning to detect and correct errors in algorithms and programs.</i></p> <p><i>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.</i></p> <p style="text-align: center;">Skills Ladder: Publisher <i>Type a newsletter</i></p> <p style="text-align: center;"><u>Spring Two</u></p> <p>Switched On Computing 3.4: We are vloggers presenting a screencast using Powerpoint</p> <p><i>Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web.</i> <i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</i> <i>Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting information.</i> <i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p style="text-align: center;">Skills Ladder: Powerpoint <i>Present information to a selected audience</i></p>	<p>Switched On Computing Unit 3.3: We are presenters creating a film using an Ipad and Movie Editor</p> <p><i>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.</i> <i>Work with various forms of input and output.</i> <i>Use technology safely, respectfully and responsibly.</i></p> <p style="text-align: center;">Skills Ladder: Multi – Media - Photography and Filming <i>Use multi-media devices to create and edit a film</i></p> <p style="text-align: center;"><u>Summer Two</u></p> <p>Switched On Computing Unit 3.6: We are opinion pollsters collecting and analysing data using Excel</p> <p><i>Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting information.</i> <i>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.</i></p> <p style="text-align: center;">Skill Ladder: Data Handling and Spreadsheets <i>Use Excel to create, analyse and present data</i></p>

Computing Long Term Plan



Year Four	<p><u>Autumn One</u></p> <p>Switched On Computing Unit 4.1: We are software developers creating an educational game using Scratch</p> <p><i>Design, write and debug programs that accomplish specific goals. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p> <p style="text-align: center;">Skills Ladder: Word Processing Use Word to type a report including charts and tables</p>	<p><u>Spring One</u></p> <p>Switched On Computing Unit 4.5: We are co-authors creating a Wiki page</p> <p><i>Solve problems by decomposing them into smaller parts. 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. Use search technologies effectively. Use ... a variety of software (including internet services) ... to ... create ... content ... including ... presenting information. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p style="text-align: center;">Skills Ladder: Data Handling and Spreadsheets Use Excel to create, analyse and present data</p>	<p><u>Summer One</u></p> <p>Switched On Computing Unit 4.2: We are toy designers prototyping an interactive toy using Scratch</p> <p><i>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. Use sequence, selection, and repetition in programs; work with various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p> <p style="text-align: center;">Skills Ladder: Data Handling and Spreadsheets Use Excel to create, analyse and present data</p>
	<p><u>Autumn Two</u></p> <p>Switched On Computing Unit 4.1: We are software developers creating an educational game using Scratch</p> <p><i>Design, write and debug programs that accomplish specific goals. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p> <p style="text-align: center;">Skills Ladders: Publisher Type a news report</p>	<p><u>Spring Two</u></p> <p>Switched On Computing Units 4.3 and 4.6: We are musicians and audiologists composing digital music and analysing sound</p> <p><i>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Understand computer networks including the internet; ... and the opportunities they offer for communication and collaboration. Be discerning in evaluating digital content. 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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour. Work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</i></p> <p style="text-align: center;">Skills Ladder: Powerpoint Present information to a selected audience</p>	<p><u>Summer Two</u></p> <p>Switched On Computing Unit 4.4: We are HTML editors editing and writing HTML</p> <p><i>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. Use technology safely, respectfully and responsibly; know a range of ways to report concerns and unacceptable behaviour. Use and combine a variety of software (including internet services) to accomplish given goals, including presenting information.</i></p> <p style="text-align: center;">Skills Ladder: Multi – Media - Photography and Filming Use multi-media devices to create and edit a film</p>

Computing Long Term Plan



Year Five

Autumn One

Switched On Computing Unit 5.1: We are game developers creating an interactive space game using Scratch

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 how some simple algorithms work and to detect and correct errors in algorithms and programs.

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...

Autumn Two

Skills Ladder: Powerpoint

To use PowerPoint to present information to an audience

Skills Ladder: Publisher

Create a persuasive leaflet

Spring One

Switched On Computing Unit 5.4 and 5.5: We are web developers and bloggers creating a web page and blog about cyber safety using Google Sites

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.

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

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.

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Be discerning in evaluating digital content.

Skills Ladder: Multi – Media - Photography and Filming

Use multi-media devices to create and edit a film

Spring Two

Skills Ladder: Data Handling and Spreadsheets

To use Excel to create, analyse and present data

Skills Ladder: Word Processing

To use Word to explore format, references and review

Summer One

Switched On Computing Unit 5.3: We are artists fusing geometry and art

Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

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.

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

Skills Ladder: Google Slides

To use Google slides to collaborate on a project

Summer Two

Switched On Computing Unit 5.6: We are architects creating a virtual space

Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

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.

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

Skills Ladder: Word Processing

To use Word to explore format, references and review

Computing Long Term Plan



<h2>Year Six</h2>	<p><u>Autumn One</u></p>	<p><u>Spring One</u></p>	<p><u>Summer One</u></p>
	<p>Switched on Computing Unit 5.2: We are cryptographers cracking and creating codes</p> <p><i>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p style="text-align: center;">Skills Ladder: Word Processing Use Word to consolidate skills from Years 2 to 5</p>	<p>Switched On Computing Units 6.1 and 6.2: We are adventure gamers and computational thinkers</p> <p><i>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 how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p> <p style="text-align: center;">Skills Ladder: Data Handling and Spreadsheets Use Excel to create, analyse and present data</p>	<p>Switched On Computing Units 6.5 and 6.6: We are publishers and travel writers promoting a place using Publisher</p> <p><i>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. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p style="text-align: center;">Skills Ladder: Publisher To create a travel leaflet</p> <p style="text-align: center;">Skills Ladder: Data Handling and Word Processing Consolidate and extend skills</p>
	<p><u>Autumn Two</u></p>	<p><u>Spring Two</u></p>	<p><u>Summer Two</u></p>
	<p>Switched on Computing Unit 5.2: We are cryptographers cracking and creating codes</p> <p><i>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p style="text-align: center;">Skills Ladder: Word Processing Use Word to consolidate skills from Years 2 to 5</p>	<p>Switched On Computing Unit 6.3: We are advertisers promoting healthy living using PowerPoint</p> <p><i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p style="text-align: center;">Skills Ladder: Word Processing Use Word to teach Year Six focus</p>	<p>Switched On Computing Unit 6.4: We are network technicians exploring computer networks:</p> <p><i>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. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p style="text-align: center;">Skills Ladder: Multi – Media - Photography and Filming To use multi-media recording devices to create and edit a film</p>