

Year One

Moving & Clicking

Computer Science



Children will learn the programs execute by following clear instructions, understand that programs respond to inputs to do different things and learn to combine start and input events to create more advanced apps and programs using precise instructions

- Understand what algorithms are
- Create simple programmes

Real World vs Online World

Digital Literacy



Children will make a poster or video about how to stay safe and behave online.

- Use technology safely
- Identify where to go to help and supports when they have concerns about content or contact
- Recognise the common uses of technology beyond school
- Identify where go for help and support when the have concerns about contact or content on the internet or other online technologies
- Keep personal information private

Making a Story

Information Technology



Children will use publishing software to present a story

- Use technology purposefully to organise and manipulate digital content

Year Two

Different Sorts of Input

Computer Science



Children will learn that programmes respond to different sorts of inputs, and that the keyboard can be used to control objects on screen, not just by clicking them directly. They will learn that one object can be used to control another object e.g. writing code so clicking a button gives and instruction to make a lorry move

- Understand that algorithms are implemented as programs on digital devices
- Understand that programs execute by following precise and unambiguous instructions
- Debug simple programs
- Use logical reasoning to predict the behaviour of simple programs
- Use logical reasoning to predict the behaviour of simple programs

Sending an Email

Digital Literacy



Children will open, send and reply to an email safely and respectfully.

- Use technology respectfully
- Keep personal information private
- Identify where go for help and support when the have concerns about contact or content on the internet or other online technologies

Making a Book

Information Technology



Children will create a book, including photos and video, using publishing software.

- Use technology purposefully to organise and manipulate digital content

Year Three

Sequence and Animation

Computer Science



Children will learn to make things happen in a sequence, creating simple animations and simulations. They will learn to code **with “if statements”, which select different pieces of code to execute depending on what happens to other objects.**

- Write programs that accomplish specific goals
- Use sequence programs
- Work with various forms of input
- Work with various forms of output

Internet Research

Digital Literacy



Children will use the internet for research and produce a report

- To use technology responsibly
- To identify a range of ways to report concerns about content.
- To be discerning in evaluating digital content

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Making a Poster

Information Technology



Children will create a poster using publishing software.

- Use search technologies effectively
- To use a variety of software (including Internet services) to design and create content that accomplish a given goal, including collecting and presenting information

Year Four

Introduction to Variables

Computer Science



Children will learn how computers use variables to count things, create simple games which use a score variable and learn how computers use repetition and loops to do things over and over again (and again!)

- 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, 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

What Should We Share?

Digital Literacy



Children will evaluate the school website to ensure we are sharing appropriate information

- To use technology safely and responsibly
- Identify a range of ways to report concerns about content
- Recognise unacceptable behaviour

Making a Presentation




Information Technology






Children will create a PowerPoint presentation.

- Select and use a variety of software (including Internet services) to accomplish given goals including, analysing, evaluating and presenting information

Year Five

Year Five	
Object Properties, Random Numbers and Simulation	Computer Science
	<p>Children will learn how computers use numbers to represent things such as how fast things are moving, and where they are. They will learn how computers can generate random numbers and how these can be used in simulations</p>
	<ul style="list-style-type: none"> 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, 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
Working Collaboratively	Digital Literacy
	<p>Children will create a PowerPoint, working collaboratively with children in another class through Teams.</p>
	<ul style="list-style-type: none"> Understand the opportunities computer networks offer for collaboration and communication Identify a range of ways to communicate concerns
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Presenting Results	Information Technology
	<p>Children will make a presentation using software of their choice that includes the result of a survey.</p>
	<ul style="list-style-type: none"> Combine a variety of software (including internet services) on a range of digital devices to accomplish a specific goals, including collecting, analysing, evaluating and presenting data

Year Six

Year Six	
Complex Variables, Property Values and Parameters	Computer Science
	<p>Children will learn to use variables in more complex ways, and to manipulate inputs to create useful outputs. They will learn more about how computers use property values and parameters to store information about objects</p>
	<ul style="list-style-type: none"> 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, 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
Digital Citizenship	Digital Literacy
	<p>Children will record a video about how to deal with cyberbullying and how to be a good digital citizen.</p>
	<ul style="list-style-type: none"> To recognise a range of ways to report concerns. To recognise acceptable and unacceptable behaviour To use technology responsibly and respectfully
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Making a Film	Information Technology
	<p>Children will create a short film.</p>
	<ul style="list-style-type: none"> Select a variety of software (including internet services) on a range of digital devices to accomplish a specific goals

