

Pupils should be taught :

- 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
- 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.

Year 3	Year 3	Year 4	Year 4
<p>Emailing Pupils learn how to send emails, including attachments and how to be responsible digital citizens.</p>	<ul style="list-style-type: none"> • Learn about cyberbullying and fake emails. • Understanding the purpose of emails. <p><i>Cross-curricular links – English</i></p>	<p>Collaborative Learning Pupils learn about the importance of using collaborative learning tools and combine this with their digital literacy skills to create online safety content.</p>	<ul style="list-style-type: none"> • Selecting using and combining a variety of software to design and create a range of programs, systems and content that accomplish given goals. • Understanding opportunities offered by the World Wide Web for communication and collaboration.
<p>Journey Inside a Computer Children learn about the different parts of a computer through role-play and develop their understanding of how they follow instructions.</p>	<ul style="list-style-type: none"> • Understanding what different components of a computer do. • Understanding that programs execute by following precise and unambiguous instructions. 	<p>How the Internet Works We use the internet every single day, but 30 years ago, it did not exist. In this topic, pupils learn how data is transferred around the world using the world wide web.</p>	<ul style="list-style-type: none"> • Understanding 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. • Identify components of a network and understand how they used to connect to the Internet.
<p>Top Trumps Databases To develop their knowledge of data and databases, children play with and create their own Top Trumps cards, learning how to interpret information by ordering and filtering.</p>	<ul style="list-style-type: none"> • Using technology purposefully to create, organise, store, manipulate and retrieve data. <p><i>Cross-curricular links – Maths</i></p>	<p>Website Design Pupils design and create their own websites, considering content and style, as well as understanding the importance of working collaboratively.</p>	<ul style="list-style-type: none"> • Selecting using and combining a variety of software to design and create a range of programs, systems and content that accomplish given goals. • Understanding opportunities offered by the World Wide Web for communication and collaboration.
<p>Digital Literacy Using their knowledge of video editing, children create book trailers about their favourite stories.</p>	<ul style="list-style-type: none"> • Using technology purposefully to create, organise, store, manipulate and retrieve digital content, including searching for relevant information <p><i>Cross-curricular links – English</i></p>	<p>HTML Pupils explore the language behind well-known websites, while developing their understanding of how to change the core characteristics of a website using HTML and CSS.</p>	<ul style="list-style-type: none"> • Recognising that information on the Internet might not be true or correct. • Using technology safely, by recognising acceptable/unacceptable behaviour and knowing what to do when they have concerns about content or contact online. • Understanding that websites can be altered by exploring the code beneath the site.

			<ul style="list-style-type: none"> • Designing, writing and debugging programs that accomplish specific goals. • Solving problems by decomposing them into smaller parts.
<p>Programming: Scratch</p> <p>Using Scratch, with its block-based approach to coding, pupils learn to tell stories and create simple games.</p>	<ul style="list-style-type: none"> • Using logical reasoning to explain how simple algorithms work. • Designing, writing and debugging programs that accomplish specific goals, including controlling or simulating physical systems. • Solving problems by decomposing them into smaller parts. • Using sequence, selection, and repetition in programs. • Working with variables and various forms of input and output. 	<p>Investigating Weather</p> <p>Children investigate the role of computers in forecasting and recording weather as well as how technology is used to present forecasts.</p>	<ul style="list-style-type: none"> • Understanding why some sources are more trustworthy than others • Understanding the role of inputs and outputs in computerised devices. <p><i>Cross-curricular links – Science & Geography</i></p>
<p>Networks</p> <p>To understand how computers communicate, children learn about networks and how they are used to share information.</p>	<ul style="list-style-type: none"> • Identifying network components and how data is transferred. 	<p>Computational Thinking</p> <p>Through developing their understanding of the four pillars of computational thinking, children learn to identify them in different contexts.</p>	<ul style="list-style-type: none"> • Understand what decomposition is and how it facilitates problem solving. • Designing, writing and debugging programs that accomplish specific goals • Understand abstraction and patterns recognition.

Bold statements: Sticky Knowledge that must be secured to ensure progression to next year group