



At St Peter's we believe that a broad and balanced curriculum with a strong academic core is a right for all pupils. We seek to encourage pupils to explore subjects of interest around their in-school learning and to enhance their curriculum experience through enrichment.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit of Work/Big Question	Unit of Work/Big Question	Unit of Work/Big Question	Unit of Work/Big Question	Unit of Work/Big Question	Unit of Work/Big Question
E-safety & Ethics	User Interface Design	Data Manipulation	Networks & Cyber Security	Understanding Binary	Web Development
Knowledge	Knowledge	Knowledge	Knowledge	Knowledge	Knowledge
<ul style="list-style-type: none"> Distinguish between real and fake news. Be able to identify online scams Understand the advantages and disadvantages of social media and the impact they have on your life. Name the major computer legislations around esafety. Understand the impact computer science has on the environment. Become aware of the ethics involved in privacy issues and surveillance. 	<ul style="list-style-type: none"> Understand and explain uses for use interfaces Identify the types of user interfaces Be able to analysis different user interfaces Develop a draft user interface for a given scenario Develop a user interface for a given scenario. 	<ul style="list-style-type: none"> Understand what a spreadsheet is and how it is used in various ways. Be able to format a spreadsheet appropriately. Understand how formulae work and implement the correct formula based on a given scenario Be able to create graphs and charts appropriately. 	<ul style="list-style-type: none"> Explain the difference between The Internet and the World Wide Web. Compare different elements of a web address/URL. Analyse the role of a Domain Name System (DNS). List a variety of Network Hardware. Understand the uses of different Network Hardware. Compare the differences between a Hub and a Switch. Understand what is meant by 'Cyber Security'. Explain some risks associated with 'Cyber Security'. Evaluate how to avoid 'Cyber Security' risks. 	<ul style="list-style-type: none"> Identify how to read a binary number correctly. Understand why computers use binary. Perform denary to binary conversions and binary to denary conversions. Understand how to add two binary numbers (each less than 7 binary digits Identify a binary number as being odd or even Understand what is meant by an overflow error 	<ul style="list-style-type: none"> Write HTML code to create a simple web page and display it in a browser Write CSS to define the styles used in a web page Create a simple navigation system using HTML Use a design to create a template for a web page using HTML Create their own multi-page website Insert text, images and links on their web pages Use a range of HTML tags to create well laid out web pages Write CSS code to define the styles of different parts of a web page Use HTML and CSS to create their web page template Use the template to design a multi-page website with a consistent look and feel to each page Use responsive design techniques in creating their website so that the web pages will adapt to any size of screen Create a simple web form to collect user data Add enhancements or

					<ul style="list-style-type: none"> additional features to the original basic design Construct a good-looking, well-formatted interactive website that is suitable for its intended audience
Skills & Procedural Knowledge	Skills & Procedural Knowledge	Skills & Procedural Knowledge	Skills & Procedural Knowledge	Skills & Procedural Knowledge	Skills & Procedural Knowledge
Understand <ul style="list-style-type: none"> Online Privacy Cyberbullying Awareness Critical Thinking Online Online Communication Digital Footprint Safe Browsing and Downloads Responsible Social Media Use Copyright and Fair Use Digital Discuss citizenship family and School Rules: 	Understand and apply <ul style="list-style-type: none"> Understand what a User Interface is. Explain human features of different User Interfaces. Evaluate examples of different User Interfaces. List types of User Interfaces. Explain the features of common User Interfaces. Evaluate the most common types of User Interfaces. List factors impacting interface usability. Explain these factors. Compare good and bad User Interfaces. Recall basic User Interface principles. Develop a draft User Interface. Evaluate the effectiveness of a designed User Interface. Recall basic User Interface principles. Develop a draft User Interface. Evaluate the effectiveness of a developed User Interface. 	Understand, apply & skills <ul style="list-style-type: none"> Understanding the Interface: Data Entry: Formatting: Basic Formulas and Functions: Charts and Graphs: Data Analysis: Collaboration and Sharing: Problem-Solving Skills: Practice and Review: 	Understand and apply <ul style="list-style-type: none"> Understand the differences between The Internet and the WWW. Identify the different uses of Network Hardware. Identify a range of different risks to Cyber Security and how to best safeguard against them. 	Skills <ul style="list-style-type: none"> Perform various binary conversions. Confidently perform Binary Addition. Demonstrate how the ASCII character set works. Develop simple bitmap images using binary. Perform digital processing. 	Skills Web development techniques <ul style="list-style-type: none"> HTML <ul style="list-style-type: none"> Web colours Text formatting Tables Inserting images Hyperlinks CSS <ul style="list-style-type: none"> Layouts Formatting backgrounds Formatting text Consistent themes
Tier 3 Subject Vocabulary	Tier 3 Subject Vocabulary	Tier 3 Subject Vocabulary	Tier 3 Subject Vocabulary	Tier 3 Subject Vocabulary	Tier 3 Subject Vocabulary
E-Safety Vocabulary <ul style="list-style-type: none"> Phishing Malware Encryption Firewall Two-Factor Authentication (2FA): Cyberbullying: 	<ul style="list-style-type: none"> User Interface (UI) User Experience (UX) Graphical User Interface (GUI) Interface Design Interactive Elements Navigation Wireframe 	<ul style="list-style-type: none"> Cell Formula Function Worksheet Workbook Range Pivot Table Cell Reference Absolute Reference Relative Reference 	Networks <ul style="list-style-type: none"> Bandwidth Latency Packet Switching Router Firewall Unauthorised access. Virtual Private Network Network Topology <ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Binary System Bit Byte Nibble Binary Code Binary Digit (Bit) Binary Number Binary Addition Binary Conversion Binary Representation 	<ul style="list-style-type: none"> HTML (Hypertext Markup Language) CSS (Cascading Style Sheets) Web Browser Web Accessibility Layout Typography

<ul style="list-style-type: none"> ● Spyware ● Adware. ● Keylogging ● Ransomware <p>Ethics Vocabulary</p> <ol style="list-style-type: none"> 1. Digital Footprint 2. Intellectual Property (IP). 3. Net Neutrality 4. Data Mining 5. Privacy Policy 6. Ethical Hacking 7. Digital Divide 8. Surveillance 9. Digital Citizenship 10. Algorithmic Bias 	<ul style="list-style-type: none"> ● Prototyping ● Accessibility ● Colour Theory ● Whitespace ● Visual Design ● Usability Testing 	<ul style="list-style-type: none"> ● Conditional Formatting ● Data Validation ● Chart ● Filter ● Sort ● Macro ● AutoSum ● Lookup Function ● Axis ● Header and Footer 	<p>Cybersecurity</p> <ul style="list-style-type: none"> ● Encryption ● Malware ● Phishing ● Two-Factor Authentication (2FA): Denial of Service) ● Man-in-the-Middle (MitM) Attack ● Secure Sockets Layer (SSL)/Transport Layer Security (TLS) 	<ul style="list-style-type: none"> ● Binary Arithmetic Performing mathematical operations such as addition, subtraction, multiplication, and division using binary numbers. ● Binary Logic 	<ul style="list-style-type: none"> ● Colour Scheme ● Whitespace ● Navigation ● User Interface (UI) ● User Experience (UX) ● Wireframe ● Prototype
<p style="text-align: center;">Key Assessment Task (KAT)</p>	<p style="text-align: center;">Key Assessment Task (KAT)</p>	<p style="text-align: center;">Key Assessment Task (KAT)</p>	<p style="text-align: center;">Key Assessment Task (KAT)</p>	<p style="text-align: center;">Key Assessment Task (KAT)</p>	<p style="text-align: center;">Key Assessment Task (KAT)</p>
<p style="text-align: center;">End of unit assessment</p>	<p style="text-align: center;">End of unit assessment</p>	<p style="text-align: center;">End of unit assessment</p>	<p style="text-align: center;">End of unit assessment</p>	<p style="text-align: center;">End of unit assessment</p>	<p style="text-align: center;">Website production based on a given scenario</p>



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	E-Safety & Ethics	User Interface Design	Data Manipulation	Network & Cyber Security	Understanding Binary	Web Development
Mastering	You confidently use the internet safely, protecting personal information and respecting others online. To stay at the top, keep up with the latest e-safety practices and help others learn.	You create user interfaces that are both functional and visually appealing, ensuring a smooth and intuitive user experience. To stay at the top, keep exploring new design trends and usability testing methods to further refine your skills.	You skillfully manipulate and analyse data using advanced tools and techniques. To stay at the top, keep exploring new data manipulation methods and share your knowledge by helping others understand complex data processes.	You expertly protect networks from threats and understand advanced cybersecurity techniques. To stay at the top, keep learning about the latest security technologies and share your knowledge by teaching others about best practices in network security.	You easily convert between binary and other number systems and understand binary operations. To stay at the top, keep exploring more complex binary concepts like floating-point representation and binary arithmetic to deepen your understanding.	You build dynamic, responsive websites using advanced coding techniques and frameworks. To stay at the top, continue learning new web technologies and trends, and share your knowledge by helping others improve their web development skills.
Advancing	You understand and practise good e-safety habits and show respect in online interactions. To reach the next level, stay updated on new online threats and consistently guide peers in responsible internet use.	You design interfaces that are easy to use and look good. To reach the next level, focus on advanced techniques like responsive design and user feedback analysis to make your interfaces even better.	You can clean, organise, and analyse data effectively. To reach the next level, focus on mastering advanced functions and techniques in data manipulation tools and start working with larger datasets to challenge your skills.	You can identify and respond to common network threats and use security tools effectively. To reach the next level, focus on mastering advanced security protocols and staying updated on new cyber threats and defence strategies.	You can convert numbers between binary and decimal and understand basic binary arithmetic. To reach the next level, focus on mastering binary addition and subtraction and start learning about how binary is used in computer systems.	You can create functional, attractive websites using HTML, CSS, and JavaScript. To reach the next level, focus on learning advanced JavaScript frameworks, improving your understanding of backend development, and optimising website performance.
Securing	You know how to keep your information private and behave responsibly online. To improve, make sure you regularly check privacy settings and learn more	You can design basic interfaces that work well and look clean. To improve, start paying more attention to details like colour schemes,	You can perform basic data manipulation tasks like sorting and filtering data. To improve, learn more complex functions and start practising with	You understand basic cybersecurity measures and can secure a network against common threats. To improve, learn more about different types of	You understand how to read and write basic binary numbers and can perform simple conversions. To improve, practice converting larger	You can build basic websites with HTML and CSS and add interactivity with simple JavaScript. To improve, practice creating more complex layouts,

	about preventing and responding to cyberbullying.	typography, and user feedback to enhance the overall experience.	various datasets to understand different data patterns and trends.	cyber attacks and practice using advanced security tools to strengthen your defence skills.	numbers and learn how to add and subtract in binary to strengthen your skills.	learn about responsive design, and start exploring JavaScript libraries and frameworks.
Developing	You are starting to understand the importance of online safety and respectful behaviour. To move forward, practice creating strong passwords and learn about privacy settings on social media.	You understand the basics of creating simple and functional interfaces. To move forward, practice arranging elements in a user-friendly way and learn about the importance of consistency and accessibility in design.	You understand the basics of organising and manipulating data. To move forward, practice using different tools and techniques to clean and sort data, and begin exploring simple data analysis methods to gain insights from your datasets.	You are starting to grasp the basics of network security and can perform simple protective actions. To move forward, focus on understanding different security protocols and how to recognize potential threats to improve your network protection skills.	You know the basics of binary numbers and can convert small binary numbers to decimal. To move forward, focus on understanding how binary numbers are structured and practice converting larger numbers between binary and decimal.	You understand the basics of HTML and CSS and can create simple web pages. To move forward, focus on learning more about CSS styling and layout techniques and start adding basic interactivity with JavaScript.
Emerging	You are learning the basics of staying safe online and treating others kindly. To progress, focus on recognizing unsafe websites and understanding the importance of keeping personal information private.	You are learning the fundamentals of user interface design and can create basic layouts. To progress, focus on understanding the needs of users and start experimenting with different design elements to improve usability and aesthetics.	You are starting to learn how to work with data and can perform simple tasks like entering and organising information. To progress, focus on learning basic functions for sorting and filtering data and understand the importance of data accuracy.	You are learning the fundamentals of keeping a network secure and recognizing potential threats. To progress, concentrate on practising basic security measures, like using strong passwords and regularly updating software, to build a solid foundation in cybersecurity.	You are starting to learn about binary numbers and can recognize simple binary digits. To progress, concentrate on understanding how binary numbers are used to represent data and practice converting small binary numbers to decimal.	You are beginning to learn about web development and can create very simple web pages. To progress, concentrate on understanding the structure of HTML documents, practising basic CSS styling, and exploring how to make your pages more interactive with JavaScript.