

Autumn Term 1 – Getting To Know Our Systems

	Knowledge	Skills
Strong	- Clearly and accurately communicates the differences between desktop applications and websites, using appropriate terminology and examples. - Clearly and accurately communicates the advantages and limitations of cloud storage and local storage. - Clearly communicates the importance of maintaining an organised directory structure and how it supports effective digital working. - Clearly communicates why OneNote and other classwork documents should be organised and professionally formatted. - Clearly communicates how cloud technologies support collaboration, accessibility and flexible working. - Clearly communicates the purpose and functionality of a wide range of tools and features within Teams and Outlook. - Clearly communicates the importance of appropriate etiquette in electronic communication and its impact on professional and effective interactions.	- Can independently select and use the most appropriate digital tools for different tasks. - Can efficiently manage, organise and retrieve files using both local and cloud storage systems. - Can maintain a logical and well-structured directory system that supports efficient working. - Can produce consistently well-organised, clearly structured and professionally formatted digital work. - Can use cloud technologies effectively to collaborate, share information and work across multiple devices and locations. - Can make effective use of a wide range of Teams and Outlook features to support communication, organisation and productivity. - Can adapt their communication style appropriately for different audiences and purposes while consistently demonstrating excellent digital etiquette.
Confident	- Clearly explains the difference between desktop applications and websites and gives relevant examples. - Clearly explains the difference between cloud storage and local storage and describes when each may be used. - Communicates the importance of maintaining an organised directory structure. - Communicates why OneNote and other classwork documents should be well organised and properly formatted.	- Can select the appropriate desktop application or website for a given task. - Can effectively manage files using both local and cloud storage. - Can maintain an organised directory structure independently. - Can consistently organise and format OneNote pages and digital documents to a good standard. - Can use cloud technologies to collaborate, share resources and work flexibly. - Can confidently use a range of Teams and Outlook tools to communicate and manage work.

	- Communicates how cloud technologies enable flexible and efficient working habits. - Communicates the purpose and use of key tools and features in both Teams and Outlook. - Understands and communicates the need for etiquette in all forms of electronic communication.	Can consistently communicate respectfully and professionally using digital platforms.
Developing	- Describes basic differences between desktop applications and websites. - Explains the difference between cloud storage and local storage. - Explains why files and folders should be organised. - Explains why OneNote and classwork documents should be organised and formatted. - Explains basic ways cloud technologies support working practices. - Describes common tools and features within Teams and Outlook. - Demonstrates an awareness of etiquette in electronic communications.	- Can distinguish between desktop applications and websites in familiar contexts. - Can save and retrieve files from both local and cloud storage. - Can create and use a simple folder structure to organise work. - Can organise OneNote notebooks and format documents using basic features. - Can use cloud technologies to access and submit work across different devices. - Can use common Teams and Outlook features such as messaging, email, calendar and file sharing. - Can demonstrate appropriate etiquette in most electronic communications.
Emerging	- Identifies some differences between desktop applications and websites with support. - Recognises that files can be stored in different locations. - Recognises that organising files and folders is important. - Recognises that classwork should be organised and formatted appropriately. - Recognises that cloud technologies can be used to access work from multiple devices. - Identifies some basic features of Teams and Outlook. - Shows limited awareness of appropriate electronic communication.	- Can identify whether a program is a desktop application or a website with support. - Can save files but requires guidance to choose appropriate storage locations. - Can create and use folders with significant support. - Can organise basic notes and documents in OneNote with assistance. - Can access cloud-based services when directed. - Can use basic features of Teams and Outlook with support. - Can communicate electronically but may not always follow appropriate etiquette.

Autumn Term 2 – Devices and Systems

	Knowledge	Skills
Strong	- Clearly and accurately communicates the characteristics and purposes of different types of computer systems. - Clearly and accurately communicates the function of input and output devices and their role within a computer system. - Clearly communicates how instructions are processed by the CPU, including the roles of the Control Unit, buses, primary memory and ALU within the fetch-decode-execute cycle. - Clearly communicates how multi-core processors improve a computer's ability to perform multiple tasks. - Clearly communicates how magnetic, optical and solid-state storage technologies store and retrieve data. - Clearly communicates the relationship between operating systems and applications and their role in enabling a computer to function effectively.	- Can accurately select and classify computer hardware according to its role within a computer system. - Can apply knowledge of computer architecture to interpret and explain unfamiliar scenarios. - Can accurately use technical vocabulary when describing CPU operation, memory and storage technologies. - Can make justified comparisons between different storage technologies based on their characteristics. - Can independently maintain comprehensive, organised and well-presented notes throughout the unit.
Confident	- Clearly explains the characteristics and uses of a range of computer devices. - Clearly explains the difference between input and output devices using relevant examples. - Communicates how the CPU processes instructions using the fetch-decode-execute cycle, including the role of the Control Unit, buses, memory and ALU. - Communicates how CPU cores enable computers to perform multiple tasks simultaneously. - Communicates the differences between magnetic, optical and solid-state storage and how each stores data.	- Can accurately classify a wide range of computer hardware and devices. - Can distinguish between different components of a computer system and describe their function during activities and assessments. - Can apply knowledge of the fetch-decode-execute cycle to explain how instructions are processed. - Can identify appropriate examples of magnetic, optical and solid-state storage for different situations. - Can maintain organised and well-structured notes within OneNote.

	Communicates the purpose of an operating system and how applications interact with it.	
Developing	- Describes different types of computers and their common uses. - Explains the difference between input and output devices and provides examples of each. - Describes the role of the CPU and outlines the main stages of the fetch-decode-execute cycle. - Identifies different types of storage, including magnetic, optical and solid-state storage. - Explains the purpose of an operating system and recognises the difference between an operating system and an application.	- Can classify different types of computers according to their purpose and use. - Can categorise hardware as input, output, processing or storage devices. - Can sequence the main stages of the fetch-decode-execute cycle. - Can identify different storage technologies from descriptions or examples. - Can organise notes and complete activities in OneNote using an appropriate structure.
Emerging	- Identifies some types of computers, such as smartphones, tablets and desktop PCs. - Recognises that computers use input and output devices. - Recognises that the CPU is an important component within a computer. - Recognises that computers use memory and storage devices. - Identifies that computers use operating systems and applications.	- Can identify common types of computers from images or descriptions. - Can identify basic input and output devices with support. - Can label simple CPU and storage components when provided with guidance. - Can use OneNote to complete simple lesson activities. - Can access and complete online assessments with support.

Spring Term 1 – Communication to an Audience

	Knowledge	Skills
Strong	- Clearly and accurately communicates how presentations can be designed to meet the needs of different audiences and purposes. - Clearly communicates the purpose and appropriate use of a range of PowerPoint features. - Clearly communicates how effective structure, layout and design contribute to successful communication. - Clearly communicates how visual and written elements work together to engage an audience. - Clearly communicates the characteristics of a professional and effective presentation.	- Can independently create a professional and engaging presentation for a specified audience. - Can select and apply a wide range of PowerPoint features appropriately and effectively. - Can structure information to support audience understanding and retention. - Can combine text, images and other media to communicate information clearly and accurately. - Can produce a polished presentation that effectively communicates knowledge of computer systems, hardware, storage and software concepts.
Confident	- Communicates how presentation software can be used to share information effectively. - Communicates the purpose of common PowerPoint tools and features, including themes, transitions, animations, images and slide layouts. - Communicates the importance of organising information logically across a presentation. - Communicates how design choices such as font size, colour and image selection can improve communication with an audience. - Communicates the importance of selecting relevant content for a presentation.	- Can create a well-structured presentation suitable for its intended audience. - Can effectively use a range of PowerPoint tools, including themes, images, transitions and animations. - Can select and organise relevant information from learning materials. - Can present information clearly using appropriate formatting and design choices. - Can produce an informative presentation about computer systems and hardware topics studied previously.
Developing	- Describes the purpose of a presentation and identifies its intended audience. - Explains the use of common presentation features such as text boxes, images and themes.	- Can create a presentation with a title slide and multiple content slides. - Can add and format text and images appropriately. - Can use simple PowerPoint features such as themes and slide layouts.

	• Explains why presentations should be structured logically. • Explains that presentations should be clear, readable and suitable for their audience.	• Can organise information into a logical order. • Can produce a presentation that communicates basic information about computing topics.
Emerging	• Recognises that presentations are used to communicate information to an audience. • Recognises some common features of presentation software. • Recognises that slides can contain text and images. • Recognises that presentations should be organised into slides.	• Can open, save and edit a PowerPoint presentation with support. • Can add text to slides. • Can insert simple images when guided. • Can create a short presentation using a basic slide sequence.

Spring Term 2 – Programming With Turtle

	Knowledge	Skills
Strong	- Clearly and accurately communicates how algorithms can be designed to create increasingly complex shapes and images. - Clearly communicates how coordinates and movement commands work together to control a Turtle's position. - Clearly communicates how loops can be used to improve efficiency, readability and maintainability in a program. - Clearly communicates the importance of planning, testing and refining algorithms before and during development. - Clearly communicates how coding conventions support readability and debugging.	- Can independently design, develop and refine Turtle programs that create complex shapes, patterns and images. - Can select the most efficient sequence of commands and loops to achieve a desired outcome. - Can apply coordinates accurately to control the positioning and appearance of drawings. - Can consistently write well-structured, readable and appropriately commented code. - Can test, debug and improve programs systematically. - Can produce comprehensive notes that demonstrate understanding, record solutions and explain programming decisions.
Confident	- Communicates how sequences of instructions are used to create shapes and images with Python Turtle. - Communicates how coordinates determine the position of a Turtle on the screen. - Communicates how loops improve the efficiency of programs by reducing repetition. - Communicates the importance of planning algorithms before coding. - Communicates the purpose of coding conventions such as indentation, whitespace and comments.	- Can independently create programs that use sequences, coordinates and loops to produce a range of shapes and images. - Can plan simple algorithms before coding. - Can write code that follows expected conventions for formatting and commenting. - Can test and debug programs to correct errors. - Can maintain clear, detailed notes that explain what they have learned and created. - Can successfully complete programming challenges by applying learned techniques.
Developing	- Describes how instructions are used to control a Turtle. - Explains how coordinates can be used to move a Turtle to different positions. - Explains that loops can make programs shorter by repeating code. - Explains the purpose of comments in a program.	- Can use Turtle commands to create simple geometric shapes. - Can use coordinates to position a Turtle on the screen. - Can create simple programs that use loops. - Can add basic comments to explain code. - Can organise notes and examples of their work clearly.

	Explains the importance of organising code clearly.	Can complete structured programming challenges with some support.
Emerging	- Recognises that programs are made up of instructions. - Recognises that Python Turtle can be used to create shapes and drawings. - Recognises that coordinates can be used to position objects on the screen. - Recognises that loops can repeat instructions. - Recognises that comments can be added to code.	- Can open and use the Python IDLE editor with support. - Can enter and run simple Turtle commands. - Can follow step-by-step instructions to create basic shapes. - Can record notes about learning activities. - Can identify simple errors with guidance.

Summer Term - Web Development

	Knowledge	Skills
Strong	- Clearly and accurately communicates how HTML and CSS work together to create effective webpages. - Clearly communicates the role of structural HTML elements in organising webpage content. - Clearly communicates how stylesheets improve consistency, efficiency and maintainability across a website. - Clearly communicates how classes and divs can be used to control the appearance and organisation of webpage elements. - Clearly communicates how flexbox layouts support responsive and organised webpage design. - Clearly communicates how navigation structures and hyperlinks support website usability. - Clearly communicates the importance of directory structures, file organisation and asset management in web development. - Clearly communicates how design choices influence user experience, accessibility and the overall effectiveness of a website.	- Can independently design and develop a complete website that meets the needs of its intended audience. - Can apply HTML and CSS accurately to create well-structured and visually effective webpages. - Can use classes, divs and stylesheets effectively to create reusable and consistent designs. - Can create and implement flexbox layouts to organise complex webpage content. - Can create intuitive navigation systems that improve website usability. - Can create and optimise digital assets such as banners and images for use within a website. - Can maintain a logical and well-organised directory structure throughout the development process. - Can evaluate and refine website design choices to improve appearance, consistency and user experience.
Confident	- Communicates how HTML structures the content of a webpage and CSS controls its presentation. - Communicates the purpose and use of headings, paragraphs, images, hyperlinks and unordered lists. - Communicates how a stylesheet can apply styles to multiple elements throughout a website. - Communicates the purpose of classes and divs within webpage design.	- Can independently create webpages using a range of HTML elements. - Can develop and apply stylesheets to create a consistent appearance across multiple webpages. - Can create and apply classes to sections of a webpage. - Can use divs to organise webpage content logically. - Can create flexbox layouts to position webpage elements effectively. - Can create navigation menus using hyperlinks and anchor tags.

	- Communicates how flexboxes can be used to organise and position content on a webpage. - Communicates the purpose of navigation menus and hyperlinks, including the use of target="_blank". - Communicates the importance of maintaining a suitable directory structure when developing a website. - Communicates how consistency of design contributes to a positive user experience.	- Can create, organise and manage website assets using an appropriate directory structure. - Can combine content, images and styling to create an effective website for a specified purpose.
Developing	- Describes the purpose of HTML and CSS in web development. - Explains the purpose of common HTML elements including headings, paragraphs, images, hyperlinks and unordered lists. - Explains what a stylesheet is and how it can control the appearance of a webpage. - Explains that classes can be used to apply styles to groups of elements. - Explains the importance of organising website files into folders. - Explains why websites should have a consistent design.	- Can create webpages using common HTML elements including headings, paragraphs, images, hyperlinks and unordered lists. - Can create and link a stylesheet to a webpage. - Can apply basic CSS rules to change colours, fonts and layout. - Can create and use simple classes. - Can organise website files using a basic folder structure. - Can create a simple multi-page website with support.
Emerging	- Recognises that websites are created using HTML and CSS. - Recognises that HTML is used to create content on a webpage. - Recognises that CSS is used to change the appearance of a webpage. - Recognises common HTML elements such as headings, paragraphs, images and hyperlinks. - Recognises that websites contain files and folders.	- Can create and save basic HTML webpages with support. - Can add simple text and headings to a webpage. - Can insert images and hyperlinks when guided. - Can make basic changes to a webpage using CSS. - Can store website files in appropriate locations with support.