

Y4 COMPUTING – 2 UNPACKING HARDWARE AND SOFTWARE

QUESTION: HOW CAN TECHNOLOGY HELP US IN DIFFERENT WAYS?



Computing Systems



Impact of Technology

WEEKS OF TEACHING	LINE OF ENQUIRY	THRESHOLD CONCEPT	SUBSTANTIVE KNOWLEDGE	DISCIPLINARY KNOWLEDGE	CURRICULUM ENDPOINT
1	Technology and How it Helps Us	Communicate	- Technology means using scientific knowledge to make tools that solve problems. - Manual technology is tools or machines that are powered by people (not electricity or code). - Electrical technology is technology that needs electricity to work but does not use computer code or software. - Digital technology is technology that uses electricity and computer code (software) to collect, process, store or share information. - Smart technology is digital technology that uses the internet.	Use a range of applications and devices in order to communicate ideas, work and messages.	Recognise common uses of information technology beyond school.
2	What is Hardware?	Communicate	- A computer system is all the parts of a computer working together. - Hardware means the physical parts of a computer that we can see and touch and the parts inside. - A peripheral is a piece of hardware that we can plug into or connect to a computer to help it work. - Components are the internal parts of a computer. - Input is sending information into the computer. - Output is the computer sending information back to us. - Storage is where the computer saves information so we can use it again later.	Use a range of applications and devices in order to communicate ideas, work and messages.	

<u>3</u>	What is Software?	• Communicate	• A program is a set of instructions that a computer follows. • Software is programs that tell a computer what to do to complete a task. • An application (app) is a type of software used for a specific task.	• Use a range of applications and devices in order to communicate ideas, work and messages.	
<u>4</u>	Systems Working Together	• Communicate	• A process is a set of steps that happen to complete a task.	• Use a range of applications and devices in order to communicate ideas, work and messages.	

ASSESSMENT OPPORTUNITY:

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Children confidently identify manual, electrical, digital, and smart technologies, explaining how they simplify daily life. They accurately sort hardware into input, output, and storage categories and describe the functions of devices like keyboards and printers. They recognise various software types and explain how each supports specific tasks. Children describe how hardware and software interact in systems, using clear examples and well-sequenced diagrams showing input, process, and output. They use technical vocabulary precisely and demonstrate a strong understanding of how systems rely on all parts working together.