Active vocabulary: 25, **Grammar structures: 4**, **Linkers: 10**, **Total: 693 words.**

Monologue on *COMPUTER ESSENTIALS (UNIT 2)*

Step 1. Introduction 1. Start with a hook sentence that will attract the listener's attention, a quote, a proverb, etc. 2. Lead your speech steadily to the main part of your talk. 3. The introduction may consist of 3-6 sentences.	*"The computer was born to solve problems that did not exist before."* This famous quote by Bill Gates perfectly captures how technology has reshaped our world. From simple calculation devices to powerful supercomputers, computers have evolved dramatically, revolutionizing every aspect of modern life. Today, I will explore how computers function, trace their remarkable history, examine the incredible capabilities of supercomputers, and propose an innovative advertising concept that could transform digital marketing.
Step 2. How do computers work? 2.1. Hardware, software, input. What are they? 2.2. How do hardware and software work together?	At their core, computers are sophisticated systems where hardware and software work together to accomplish tasks. The physical computer components include input devices like the keyboard and mouse, output devices such as the monitor and speakers, and internal components housed in the case unit. The motherboard serves as the central hub, connecting essential parts like the CPU (Central Processing Unit), which performs calculations, and the GPU (Graphics Processing Unit), responsible for rendering visuals. When you turn on a hardware device, the booting up process begins. The CPU receives commands from computer software, while the RAM (Random Access Memory) temporarily stores active data for quick access. Storage devices like the hard drive preserve information long-term. This complex interaction between components allows computers to process input, such as when you click on an icon or enter a command, and generate output, like when you print out a page.
Step 3. History of computing 3.1. Speak about the main milestones in the history of computing. 3.2. Describe the PC you have.	The evolution of computers has been extraordinary. Early calculation devices like the slide ruler and mechanical adding machine could only handle basic arithmetic. The first electronic computers, using vacuum tubes, were massive machines that took up entire rooms and were primarily used for ballistics calculations during World War II. The invention of the transistor in 1947 revolutionized computing, making machines smaller and more reliable. By the 1960s, integrated circuits combined multiple transistors on a single silicon plate, leading to more compact designs. The 1970s saw the development of microprocessors, which enabled the creation of personal computers (Pcs) that could fit on one's desktop. Today, we have an array of computing devices, from powerful desktop computers to portable laptops, tablets, and smartphones. My own PC features a modern microprocessor, ample RAM, and a dedicated GPU, allowing me to handle complex tasks with ease. This progression from cumbersome computers to sleek, powerful devices demonstrates how far computing technology has advanced.

Step 4. Supercomputers 4.1. What is a supercomputer? 4.2. How does a supercomputer work? Give examples of supercomputers. Суперкомпьютерный центр СПбПУ.	While personal computers are versatile, supercomputers represent the pinnacle of computing power. These machines use parallel processing to tackle massive calculations by dividing problems into smaller chunks processed simultaneously. This approach gives them incredible processing power, enabling breakthroughs in fields like weather forecasting, medical research, and aerospace engineering. Notable examples include the Supercomputer Center SPbPU in Russia, which contributes to scientific advancements. Unlike standard PCs that use serial processing, supercomputers push technology to the limit, often incorporating thousands of processors working in unison. Their ability to perform large calculations at unprecedented speeds makes them indispensable for solving humanity's most complex challenges.
Step 5. CREATIVE THINKING Introduce your own extra idea(s) on advertising that hasn't/haven't been mentioned before. Substantiate your choice.	Looking to the future, imagine advertising that adapts in real-time to users' emotions. Using headphones and a microphone, AI could analyze vocal tone and speech patterns to gauge emotional states. Combined with facial recognition via webcams, the system could instantly modify ads to match the viewer's mood - showing uplifting content to someone feeling down or exciting offers to an engaged viewer. This technology would leverage existing computer components like microphones and cameras while employing advanced software to process emotional cues. By creating more personalized and responsive advertising, businesses could significantly improve engagement rates and customer satisfaction.
Step 6. Conclusion Summarise the ideas of steps 2,3,4,5.	From humble beginnings as basic calculation devices to today's astonishing supercomputers, computers have transformed how we live and work. The perfect synergy between hardware and software enables these machines to process information, perform calculations, and generate output with remarkable efficiency. As we've seen through their evolution - from vacuum tubes to microprocessors - computers continue to become more powerful and accessible. Supercomputers push the boundaries of what's possible, tackling challenges that were once unimaginable. Meanwhile, innovative applications like emotion-based advertising demonstrate how computer technology can create more personalized and engaging experiences. As we move forward, one thing is certain: computers will continue to evolve, opening up new possibilities that will shape our future in ways we can only begin to imagine.