# **Core Skills Analysis**

## **Technology**

- The student gained practical knowledge of computer hardware components and their functions, such as the CPU, motherboard, and RAM.
- They developed problem-solving skills by troubleshooting any issues that arose during the assembly process.
- They learned about cable management and the importance of organizing wires for better airflow and aesthetics.
- By following instructions and diagrams, the student enhanced their ability to interpret visual information.

#### **STEM**

- Through hands-on experience, the student applied principles of engineering and technology to assemble a functional PC.
- They practiced precision and attention to detail while handling delicate computer components like the CPU and GPU.
- The activity fostered an understanding of the scientific concepts behind computer hardware operation, such as electricity flow and data processing.
- The student engaged in critical thinking by troubleshooting and testing each component to ensure proper functionality.

### **Tips**

To further enhance the learning experience from 'Putting a PC together,' encourage the student to explore online resources and tutorials for advanced computer assembly techniques. Encourage them to document their process through photos or videos and share their experience with friends or online communities. Setting challenges like building a gaming PC or upgrading an existing system can provide more opportunities for learning and skill development.

#### **Book Recommendations**

- <u>Build Your Own Computer: The Complete Guide for Kids</u> by DK: This book provides step-by-step instructions and illustrations for building a computer, making it accessible for young readers.
- <u>Computer Coding Projects for Kids: A Step-by-Step Guide to Creating Your Own Scratch Games</u> by Kiki Prottsman: Explore coding and game development concepts that complement the hardware knowledge gained from putting a PC together.
- How Computers Work: The Evolution of Technology by Ron White: Learn about the history and inner workings of computers, adding a broader context to the hands-on experience of assembling a PC.