

4565: Computing Foundations for a Digital Age

Unit 1

Day 7 Alternate Lesson Plan: Virtual Hardware Exploration

Objective

Students will identify key internal computer components and explain their functions using an interactive virtual exploration of computer hardware.

Word Bytes

- **Storage Device** – Hardware used to store digital data (e.g., hard drives, SSDs, flash drives).
- **Power Supply Unit (PSU)** – The component that converts electrical power from an outlet into usable power for the internal parts of a computer.

Materials

- Internet-connected devices
- [Inside a Computer – Interactive Website \(HowStuffWorks\)](#)
- Virtual Hardware Scavenger Hunt worksheet

Activities

Hook Discussion: What's Inside?

- Ask: “Have you ever wondered what’s *really* inside your laptop or desktop?”
- Let students brainstorm what they think is under the hood before they explore.

Virtual Hardware Tour

- Students explore this interactive breakdown:
 - [Inside a Computer – HowStuffWorks](#)
- Encourage them to click through every section (e.g., motherboard, hard drive, CPU).

Scavenger Hunt Worksheet

- Students complete the Virtual Hardware Scavenger Hunt Worksheet as they explore.
- Tasks include:
 - ☐ Describing what each part does
 - ☐ Matching each term to what they saw on the site
 - ☐ Reflecting on which parts were most surprising or essential

Wrap-Up Discussion / Exit Ticket

- Prompt 1: “Which component do you think is the most important—and why?”
- Prompt 2: “What surprised you about the inside of a computer?”
- Students add “**storage device**” and “**power supply unit (PSU)**” to their Word Bytes dictionary with examples.
 - **Suggested examples:**
 - Storage Device – Your phone’s hard drive stores your photos.
 - Power Supply Unit – Converts electricity so your computer can run.