

4565: Computing Foundations for a Digital Age

Unit 1

Day 8 Lesson Plan: Software Sorting Challenge

Objective

Students will distinguish between different types of software—operating systems, application software, and utility software—by exploring real-world examples and participating in an interactive sorting activity.

Word Bytes

- **Software** – Programs and other operating information used by a computer.
- **Operating System (OS)** – Software that manages computer hardware and software resources and provides services for application programs.
- **Application Software** – Programs designed to help the user perform specific tasks (e.g., word processing, browsing).
- **Utility Software** – Tools that help manage, maintain, or optimize a computer system (e.g., antivirus, backup tools).

Materials

- Internet-connected devices for student research
- Kahoot (or other quiz/sorting platform) with software examples

Activities

Review Word Bytes: Software Categories

- Introduce or review the four key terms above with real-world examples.
- Ask students to brainstorm software they use every day and categorize it into OS, application, or utility software.
- Record responses on the board or digital tool.

Kahoot Sorting Challenge

- Play a class Kahoot or similar game where students must identify the software type given an example (e.g., Microsoft Word, Malwarebytes, iOS, Photoshop).
- Encourage discussion between rounds: "Why do you think this example is application vs. utility software?"
 - Sample question bank (customizable by teacher or [link](#) to ideas):
 - OS: Windows 11, macOS, iOS

- Application Software: Google Docs, Minecraft, Canva
- Utility Software: Disk Cleanup, Norton Antivirus, WinZip

Student Research Extension (Optional)

- Students select a piece of software they use often and research:
 - ☐ What type of software is it?
 - ☐ What problem does it solve or task does it support?
 - ☐ What are alternatives to it?
- Share findings in pairs or with the class.

Discussion Prompts

- “Why is it important to understand what kind of software you’re using?”
- “What might happen if a computer didn’t have utility software installed?”
- “How does the operating system make it easier to use application software?”
- Students add “**software**,” “**operating system**,” “**application software**,” and “**utility software**” to their Word Bytes dictionary with examples.
 - **Suggested examples:**
 - Software – Google Docs or Zoom.
 - Operating System – Windows or iOS.
 - Application Software – Canva or Minecraft.
 - Utility Software – Antivirus or disk cleanup tool.