

Standard: CS.HS.01 Grade: 1

Standard 1.CS.HS.01

Identify and describe functions of common **computing devices** and external **hardware** (e.g., mobile devices, desktop computer, laptop computer, mouse, keyboard, printer, wearables).

Essential Skills

Describe the function of external **hardware** components.

Describe the function of common **computing devices**.

Essential Questions

What are the names of the external and internal parts of a **computing device** and what do those parts do?

Which parts of the computer are considered **input** devices?

What parts of the computer are considered **output** devices?

Explanation

A computing system is composed of **hardware** and **software**. Hardware consists of physical components that are both internal to and external from the computer. Students should recognize and use appropriate terminology for external hardware and devices such as laptop computers, monitors, keyboards, mice, trackpads, and printers as well as for internal components such as **CPU**, **hard drive**, and **memory**. By first grade students should be able to describe the functions of some of the components. By second grade, students should describe functions of most components as well as of external storage devices such as external hard drives and **cloud storage** (such as Google Drive). This content should be made relevant to the hardware and software available to the students.

Think of this as similar to....

Eyes, ears, skin, nose are **input** devices (external hardware) and the brain is what interprets that input and decides how to react. When you speak or move that is **output**.

Implementation Examples—What would this look like in the classroom?

Title	Description	Link	Content Connection & Notes
What is a Computer?	<p>Grade K--Using visuals and class discussions, students will develop their own definition of a computer. Students will use similarities among their computers to determine what makes a device a computer. They can then be presented with other items and determine whether or not it is a computing device.</p> <p>Grade 1--Students will distinguish among different tasks that different devices can do.</p>	What is a Computer?	This lesson aligns with CS IC.C.01 and is similar to What is a Computer? from Hello Ruby .
Hardware and Software	<p>Grade 1--Students identify the difference between hardware and software and identify hardware functions. Students will also learn about different software/applications and will describe how different devices have different hardware and the ability to do perform different functions.</p>	Hardware and Software	An additional resource is Hardware or Software?
Parts of a Computer	<p>Grade 1--Students identify the different parts of a computing device. They should connect the different parts to the hardware on a variety of computing devices and should be able to name and operate the hardware on the computing devices they have access to.</p>	Parts of a Computer	

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These annotations are a collaboration between [Maryland Center for Computing Education](#) and the [Maryland State Department of Education](#).