

# L10: What is Hardware

## Learning Objectives

### Lesson Overview:

In this lesson, students will learn what hardware is and how it helps computers work. They will identify parts of a computer they can touch and explore the role those parts play in helping us use technology. Students will engage in activities to recognize and name hardware used in everyday computing.

### Learning Objectives:

- Students will be able to tell what hardware is.
- Students will be able to name parts of a computer that I can touch.

### CSTA Standards (1)

1A-CS-02: Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).

### Materials Needed

- Skill Struck Platform
- Computing Device
- Paper and Pencil
- Crayons and Markers (optional)
- Supplemental Materials

### Supplemental Materials

- [Hardware Images](#)
- [Porcupine Image](#)
- [Computer Hardware Examples](#)
- [Hardware Hunt and Match Game](#)
- [Hardware Cards](#)
- [Hardware Slideshow](#)

### Professional Development

View resources in Community Plus 

## Activities

Time Estimate: 40 min

Warm-up/Wrap-up

## Demo

Platform

## Class Activity

### Extra Activity

| Name                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| Warm-Up<br>5 min                                    | <p><b>Hardware Quick Sort</b></p> <ul style="list-style-type: none"><li>• Show students pictures or hold up items (e.g., keyboard, mouse, headphones, pencil).</li><li>• Ask: “Can you touch this part of a computer?”</li><li>• Students give a thumbs up if yes, hands on head if no.</li><li>• After each, briefly explain: “If we can touch it and it helps the computer work, it’s called <b>hardware</b>. Hardware is all the parts of a computer we can see and use.”</li><li>• Briefly explain that hardware is all the parts we can touch and use.</li></ul> <p><b>Show a picture of a porcupine.</b></p> <p>Ask: “What do you see on this animal?” Guide students to name:</p> <ul style="list-style-type: none"><li>• Quills – “What are those for?” (To stay safe)</li><li>• Feet – “Why do they need those?” (To move)</li><li>• Eyes – “What do eyes help with?” (To see)</li></ul> <p>Say: “Animals have different parts that help them live and do what they need to do.”</p> <p><b>Now connect it to computers:</b></p> <p>“Computers are just like that! They have parts too—like the keyboard, screen, and mouse. These parts help the computer do its job. We call them <b>hardware</b>. Hardware is what we can touch. It helps the computer work and also keeps it safe—just like the porcupine’s parts help it survive.”</p> |
| Class Activity:<br>Hardware Walk and Talk<br>15 min | <p><b>Hardware Walk and Talk</b></p> <ul style="list-style-type: none"><li>• Set up images or stations with hardware parts labeled.</li><li>• Walk around the room with students identifying each piece (e.g., mouse, keyboard, monitor).</li><li>• Discuss: What do we use it for? Can you find it on your computer?</li></ul> <p><b>Teacher Prompt:</b></p> <p>"Hardware is everything we can touch that helps the computer work. Just like our hands and feet help us do things, hardware helps the computer do its job."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



| Name                                                     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <div>Platform: What is Hardware?</div> <div>15 min</div> | <p>Students complete this lesson on the Skill Struck platform.</p> <p><b>If your students are ready for more content, or you need to cover this topic in greater depth, consider using this extended lesson:</b></p> <p><b>What is Hardware?</b></p> <p>Hi! Did you know computers have parts, just like you do? The parts we can touch are called hardware. Let's look at what each part does!</p> <ul style="list-style-type: none"><li>• <b>Keyboard:</b> a keyboard has lots of buttons called keys. When you press the keys, you can type letters, numbers, and words. A keyboard helps you write stories, search for things, and play games.</li><li>• <b>Mouse (or Touchpad):</b> a mouse moves with your hand, and it moves the arrow on the screen. You click the buttons to open things or pick something. Some computers have a touchpad instead, where you use your finger to move and click.</li><li>• <b>Monitor (or Screen):</b> the screen, also called a monitor, shows you pictures, videos, games, and words. It's like the computer's face. You look at it to see what's happening!</li><li>• <b>Computer Tower (or CPU):</b> The computer tower or CPU. It's like the computer's brain. It helps the computer think and follow directions. You don't use it with your hands much, but it's very important!</li><li>• <b>Headphones:</b> You wear them on your ears to listen to music, stories, or your teacher. They help you hear without noise bothering anyone else.</li><li>• <b>Webcam:</b> a webcam is like an eye for your computer. It lets people see you if you're talking to them on a video call.</li><li>• <b>Microphone:</b> a microphone lets your computer hear you. You might use it when you talk to your teacher or record your voice!</li></ul> <p>Hardware are parts of the computer.</p> <p>Great job! Now you know what computer parts are and how each one helps you learn and play. These parts are called hardware, and they all work together to help the computer follow your instructions!</p> |
| <div>Wrap-Up</div> <div>5 min</div>                      | <p><b>Hardware Hunt &amp; Match</b></p> <p><b>Instructions:</b> Place printed cards or real objects representing different computer hardware (e.g., keyboard, mouse, monitor, headphones) around the room or at student tables. Give each student or pair a matching card with the hardware name or description (use icons for non-readers).</p> <p>Call out clues one at a time:</p> <ul style="list-style-type: none"><li>• "I help you type words and numbers."</li><li>• "I show you pictures and videos."</li><li>• "I move the arrow when you move me."</li></ul> <p>Students must move to or hold up the correct hardware card/object that matches the clue.</p> <p><b>Optional:</b> End with a quick class review: "Raise your hand if you can tell me one thing you can do with the keyboard!", "Who remembers what the monitor shows us?"</p> <p><b>Here are critical thinking questions for students:</b></p> <ol style="list-style-type: none"><li>1. What is hardware?</li><li>2. What are some parts of the computer that are hardware?</li><li>3. Why do we need computer parts like a mouse or keyboard?</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



| Name                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| Life and Culture Connections | <p>Here are some examples of how computer science impacts daily life, both in the United States and internationally:</p> <p><b>Life Connection:</b></p> <p>In a home in Arizona, Mia uses a desktop computer at home. She presses the keys on the keyboard and moves the mouse to click on different icons. Her mom tells her those are parts of the computer she can touch—those are hardware!</p> <p><b>Cultural Connection:</b></p> <p>In Mexico, schools are part of a vibrant culture known for colorful holidays like <b>Día de los Muertos</b>, traditional crafts, and strong family traditions. Many classrooms celebrate both Spanish and Indigenous heritage, and students often learn songs, stories, and dances from different regions. Technology is becoming more common in Mexican schools, where students use computer labs equipped with headphones, keyboards, and monitors to explore learning activities. They take turns using each tool and notice how every part they can touch helps the computer work. This connects to our lesson: just like students in Mexico, we learn that computer hardware—what we can see and touch—helps us play games, learn new skills, and use the computer the right way.</p> |

## Activities for Further Learning

| Name                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| Extension and Remedial Ideas | <p><b>Extension Opportunity:</b> Teachers can extend the lesson with a "Hardware Hunt," allowing students to walk around the classroom to find and point out real examples of computer hardware. Additionally, the "Build-a-Computer Craft" lets students color, cut out, and glue together their own paper computer using various hardware pieces like a monitor, keyboard, and mouse.</p> <p><b>Remedial Resources:</b> For students needing extra support, teachers can reinforce the definition of hardware by focusing heavily on the physical "Can you touch it?" thumbs-up game using familiar classroom objects. Teachers can also pair students up during the "Hardware Hunt &amp; Match" so they can collaborate on matching the spoken clues to the correct physical hardware object.</p> |
| Extra Activity               | <p>If you have additional time, below are some additional ideas for activities you can do with the class.</p> <p><i>Note: These additional activities do not currently have supplemental materials or resources available in the educator portal.</i></p> <ol style="list-style-type: none"><li><b>Hardware Hunt:</b> Walk around the classroom and point out real examples of hardware.</li><li><b>Build-a-Computer Craft:</b> Use cutout parts (screen, mouse, keyboard, CPU) for students to glue together and label their own computer.</li></ol>                                                                                                                                                                                                                                                |

Print Lesson Plan

