



## Protecting and Caring for your student HP Chromebook



You can significantly reduce risks to your Chromebook computer by paying attention to the environment around it.

### ➤ **Use your HP Chromebook on a hard surface, such as a desk, tray, or table**

- Do not use the Chromebook on your lap or let its warm surfaces make direct contact with your skin. If you want to use it on your lap, rest it on a hard, flat surface, such as a lap tray specifically designed for Chromebooks.
- Do not use the Chromebook on soft surfaces, such as bed comforters, cushions and pillows, clothing, or carpet. Such surfaces can block the air flow through the vents, which can cause heat to build up within the Chromebook's enclosure.

### ➤ **Use or store your Chromebook in environments that conform to temperature and humidity specifications**

- Excessive heat or cold can damage your Chromebook computer and prevent it from operating properly.
- Excessive heat can damage key components in the Chromebook system
- Do not leave the Chromebook in a hot enclosure, such as a parked car, or in direct sunlight. Either of these can cause heat damage and warping.
- Keep the LCD display out of direct sunlight for extended periods of time.

The Chromebook is designed to automatically throttle its activity when its internal temperature exceeds predefined levels. If its temperature rises too high, the Chromebook is designed to shut itself down to protect its internal components.

*For detailed information about heat-related performance, refer to [Fan is Noisy and Spins Constantly, PC is Warmer than Normal](#).*

*For detailed information about heat and how it can affect the Chromebook battery, refer to [Battery Charging Delayed When Operating Chromebook in High Ambient Temperatures](#).*

- Excessive cold can prevent a battery from charging and operating properly

### ➤ **Use or store the Chromebook in a clean environment**

- Do not use or store the computer in an environment characterized by high humidity, dust, grit, or smoky conditions.

Chromebook computers have vents on the bottom and sides to allow air to flow through the inside and cool the internal parts. If these vents become clogged or the heat generating parts get covered in dust, the fan cannot cool the internal components properly. Blow compressed air into the outlet vents to remove the dust that has accumulated and keep the air circulating through the device.

*For detailed information about keeping the vents clear, refer to [Reducing Heat Inside the PC](#).*

### ➤ **Use clean hands while using the Chromebook**

- Do not use the keyboard with sticky, dirty, or greasy fingers. This can leave debris behind, which can easily contaminate the computer's internal components. Debris on the keyboard can also scratch and stain the Chromebook display when the lid is closed.

### ➤ **Keep all liquids away from the keyboard**

- Keep all liquids, such as coffee, cola, water, or cleaning solvents away from the keyboard.
- Do not eat or drink while using a Chromebook.
- Do not use the computer in any wet environment, such as a swimming pool or shower, and protect the components from liquid sources, including rain and lawn sprinklers.

### ➤ **Store the Chromebook on a hard flat surface**

- Do not store a Chromebook at the bottom of a locker, in a bag full of books, or under anything that can exert enough stress to crack the case or the display.
- Do not stack items on top of the Chromebook computer.

## Electrical tips for HP Chromebooks

Proper maintenance of the Chromebook's electrical components, such as the power adapter and power cord, can keep both you and your Chromebook safe from potential harm. Do not do anything with the Chromebook or its components that you would not do with other kinds of electrical devices.

### ➤ **Use only the power adapter that came with your HP Chromebook**

- For best performance, use only the power adapter that came with your HP Chromebook and configure your power management settings for optimal performance based on your usage habits.

*For instructions on how to improve battery performance, see [Improving Battery Performance \(Windows\)](#).*



*For detailed information about battery safety, refer to [AC Adapter Makes Hissing and/or Crackling Noise, and May Feel Warm to Touch](#).*

*For detailed information about verifying whether the power adapter is working correctly, refer to [Testing and Using the AC Power Adapter](#).*

### ➤ **Always plug your Chromebook power supply into a grounded outlet**

- If you do not use a grounded outlet, you might notice an electrical tingling sensation where the palms of your hands touch the Chromebook during use.
- All power adapter certification tests for HP Chromebook computers are performed using a grounded power adapter. Damage can occur if an ungrounded power adapter is subjected to power surges or electrostatic discharge.

➤ **Always store your Chromebook power cord loosely in a bundle**

- Gather the power cord loosely in a bundle when packing it away for storage or transport.
- Use a "figure 8" pattern when bundling the cord. This allows for easy storage of the cord, prevents unintentional breaks in the wires, and keeps it from getting tangled.



➤ **Never wrap your Chromebook power cord around the power adapter or any other object**

- Do not wrap the power cord around the power adapter or any other object as this could inadvertently break the cord's internal copper wires.



- Broken wires can short circuit both the power adapter and your Chromebook's internal power supply. Broken wires can shock anyone who touches the cord and might also present a fire hazard.



➤ **Use the Chromebook power adapter on a hard, flat surface**

- When a high number of applications are running or when the battery is recharging, the power adapter might be warm to the touch when it reaches its power limit.
- Connect the power adapter to a good quality surge protector if your local power supply is unstable.

## Transportation tips for HP Chromebooks

Most Chromebooks are designed for easy portability, but that does not make them immune to transportation mishaps. If you exercise care with how you handle the Chromebook, you can reduce the risk of accidents.

### ➤ **Shut down your Chromebook computer before transporting**

- Carry your Chromebook responsibly
- Fully close the Chromebook lid prior to carrying it
- Carry the Chromebook securely
- Do not overload the briefcase or backpack
- Unplug all cords and peripheral devices before moving a Chromebook

## Battery tips for HP Chromebooks

It is important to be aware of ways that you can care for the battery in your Chromebook computer. Certain conditions might reduce battery run time and life span.

### ➤ **Plug the AC power supply into the Chromebook overnight**

- Keeping the AC power supply plugged in to the Chromebook overnight helps keep the battery fully charged and extends the effective battery life.
- The duration of a standard internal battery charge depends on the specific Chromebook model, usage profile, and type of external battery (if any).

### ➤ **Periodically allow the Chromebook battery to drain completely**

- Allowing the battery to drain completely and then fully charging it again, helps the battery stay calibrated.
- Do not keep a Chromebook plugged in with its batteries in place for extended periods. This could cause the battery to lose its calibration and ability to charge correctly.

### ➤ **Use the HP-recommended power management when running on battery power**

- The HP-recommended power management options can reduce drain on the battery and minimize the power load to the CPU. This conserves the battery's overall life span and reduces heat buildup inside the Chromebook.

## Cleaning tips for HP Chromebooks

Dust, dirt, ash, pet hair, and other contaminants can accumulate on or inside your Chromebook, causing scratches or overheating. You can extend the life of your Chromebook by removing potentially damaging buildup.

### ➤ **Clean your Chromebook on a regular basis**

- **HP recommends the following cleaning materials:**

- Compressed air spray, which is available from most computer retailers.
- Cleaning solution or monitor wipes intended for use on LCD screens, which are available from most computer retailers.
- A clean, soft cotton cloth; the type of cleaning towel used for eyeglasses is preferable. For cleaning parts such as the HP webcam lens, use a micro fiber screen dusting cloth.

*For detailed information about keeping your Chromebook clean, refer to [Cleaning your Chromebook PC](#).*

*For detailed information about webcam lens care, refer to [How to Clean the HP Webcam Lens](#).*