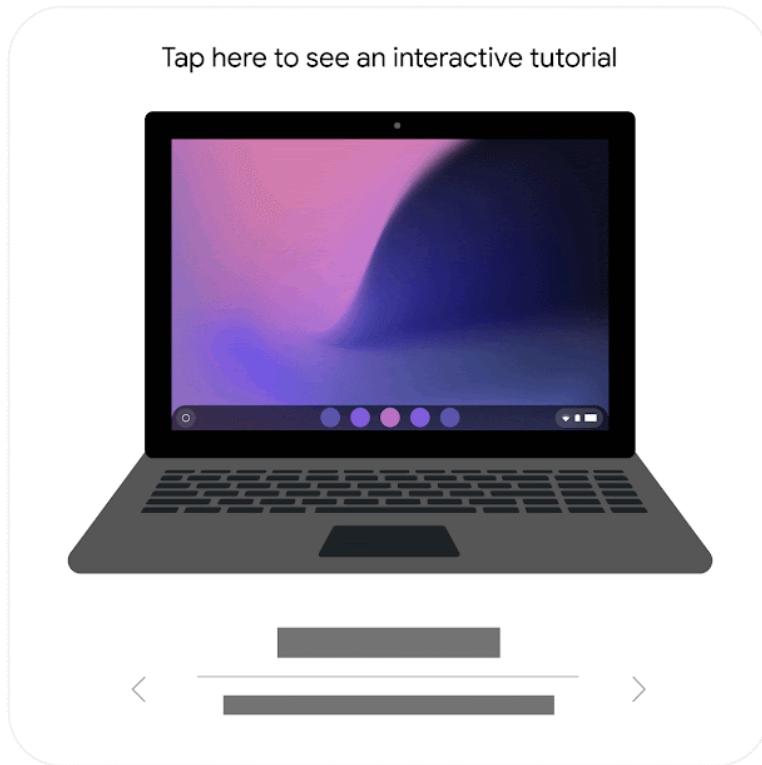



Troubleshooting

This section is dedicated towards common troubleshooting issues for Chrome-OS

- [Check for updates Chrome OS](#)
- [Chromebook is not charging or does not turn on](#)
- [How to check your Chromebook's battery health](#)

Check for updates Chrome OS



1. At the bottom right, select the time and then Settings .
2. At the bottom left, select **About ChromeOS**.
3. Under "Google ChromeOS," find which version of the Chrome operating system your Chromebook uses.
4. Select **Check for updates**.
5. If your Chromebook finds a software update, it will start to download automatically.

You might need to try to run updates a **few** times because the update may fail on the first few attempts. Press **F5** (Refresh) a few times.

Chromebook is not charging or does not turn on

Use the steps in this document to troubleshoot when the student's Chromebook does not have power or is not charging.



“ NOTE:

If the battery charging icon is missing from the status area, see [Perform a hard reset](#).

Perform a visual inspection

If the Chromebook is not charging, check for damage to the charging port or for signs of oxidation. In addition, check for a crack in the display or for other signs of physical damage to the laptop.

- The Chromebook is damaged: Contact tech@towne.org to submit a ticket for the damaged device. FTCES IT Department will check for the status of the Chromebook Insurance fee in PowerSchool before proceeding with the replacement.
- The Chromebook is not damaged: Proceed to the next step.

Verify power to the computer

Ensure that the computer is connected to working power.

1. Plug the AC adapter into a functioning wall outlet.
2. Connect the AC adapter to the computer.
3. Check whether the computer and AC adapter lights turn on.
 - No lights turn on: Try another Power adapter and another wall outlet. If the lights turn on using another AC adapter, proceed to the next step. Otherwise, contact tech@towne.org to submit a ticket for the damaged device
 - Lights turn on: Proceed to the next step.

Verify the battery charging status

The Chromebook not charging might indicate that the battery is in a deep discharge state. Although the battery indicator light is off, a smaller than normal charge current is being sent. Charge the laptop for at least 10 minutes, or for up to 24 hours.



NOTE:

When a Chromebook is used for the first time, if a white LED near the AC power connector blinks, the battery is still in shipping mode. Turn off the notebook, connect the AC adapter, allow the battery to charge for at least 30 minutes, and then start the computer.

- If the Chromebook turns on, it is performing normally. Leave the laptop connected to the AC adapter until it is fully charged. You can check if the battery is charging in the lower-right status area of the screen.

Battery charging status

- If the Chromebook won't turn on, periodically press the power button. In some cases, it can take up to 24 hours for the battery to charge.

If the device does not turn on after 24 hours of charging, contact tech@towne.org to submit a ticket for the damaged device.

- If the battery indicator light above the AC power connector turns on, you can use the color to identify the issue.

-

BATTERY INDICATOR LIGHT STATUS

Battery indicator light color	Battery indicator light status and action
Green or white	The remaining capacity is 94% or higher, or the charger is initializing (15 seconds after plugging in the AC adapter). Wait 15 seconds, then turn on the computer and allow it to charge fully.
Amber	The remaining capacity is 94% or lower. Charge for up to 24 hours, periodically attempting to turn on the computer. If the device does not turn on after 24 hours of charging, contact tech@towne.org to submit a ticket for the damaged device



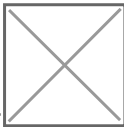


Battery indicator light color	Battery indicator light status and action
Red	<p>The computer cannot communicate with the battery.</p> <p>Contact tech@towne.org to submit a ticket for the damaged device</p>

If the issue is not resolved, proceed to the next step.

Perform a hard reset

A hard or forced reset erases all information in the computer memory. This forces the system to clear and re-establish the software connections between the BIOS and the hardware.

A hard reset does not remove any local files or settings.

1. Turn off the computer. 
2. Press and hold Refresh , and then press Power  while continuing to hold Refresh .
3. After the Chromebook turns on, release Refresh .

If a hard reset does not resolve the issue, contact [FTCES IT Department](#) to submit a ticket for the damaged device. If you landed here from a ticket, please let us know if the solution worked by replying to the ticket.

How to check your Chromebook's battery health

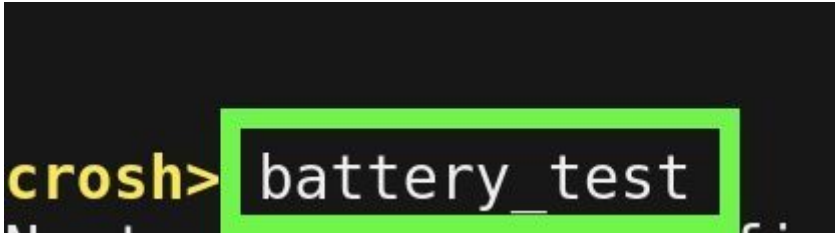
Here's how to make sure your Chromebook is in top shape



How to check your Chromebook's battery health

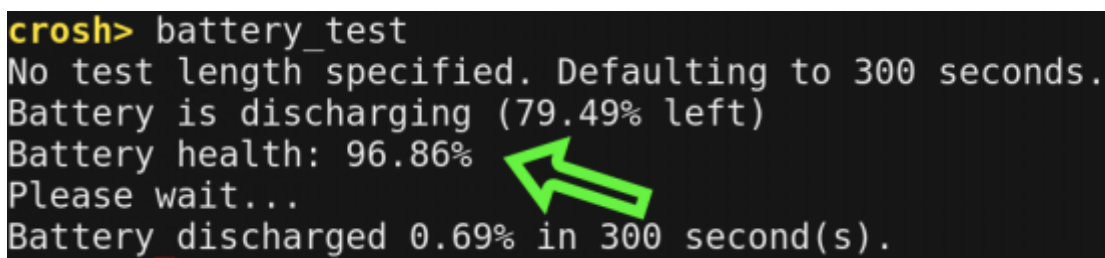
1. Hit **Ctrl + Alt + t** to open the Crosh.

2. Type 'battery test' and hit Enter.



```
crosh> battery_test
```

3. Here's your battery's health, measured in a percentage out of 100 percentage



```
crosh> battery_test
No test length specified. Defaulting to 300 seconds.
Battery is discharging (79.49% left)
Battery health: 96.86%
Please wait...
Battery discharged 0.69% in 300 second(s).
```

You can get a speculative battery life estimate (based on whatever action you're doing on the Chromebook) with that result. For example, I plugged 0.69, the result I got, into the following equation:

$$((100/0.69)*5)/60=$$

And got 12.07 hours of battery life. That being said, this test doesn't take actual system use into account.

5. Type 'battery_firmware info' into the Crosh and hit Enter.

6. Here you'll see the maximum battery capacity (Design capacity), how of that capacity your battery hit at its last full charge, and how many battery cycles you've gone through.

screenshot 2018 12 21 at 9.35.51 am

So, if my Battery Health is at 96.86 percent, that means I've used 3.14 percent of its total life in those 25 cycles. Then, $(96.86/3.14) = (X/25)$, where X = the amount of cycles it will take to deplete the rest of the battery's health. A simple bit of division and multiplication gets you the answer of approximately 771 cycles being left in your battery, with a total of 796 charges.

But I wouldn't want to rely on long life from a laptop battery once it reaches 400 or more charges. Congrats, now you're a lot more informed about your Chromebook's battery life!