

How to take care of your Chromebook's Battery

The most important care of your device is charging

Your device should last you 5 years with proper care and charging properly. This article contains information of the proper use of charging and some terms that you may not know.

This is good reading and a sure method to make it to your next years of Middle and High School.

How the battery works (boring)

The lithium-ion battery works on ion movement between the positive and negative electrodes. In theory such a mechanism should work forever, but cycling, elevated temperature and aging decrease the performance over time. Manufacturers take a conservative approach and specify the life of Li-ion in most consumer products as being between 300 and 500 discharge/charge cycles.

So when should you charge your Chromebook? (important)

IT recommends charging it until it's about 80 or 90 percent full and unplugging it when it's closer to 20 or 10 percent. There's a lot of battery science and conflicting information out there on the internet regarding best practices. Keep it simple and unplug it if it's almost full to prevent you from overcharging it and plug it in when it's almost dead so that you don't forget and accidentally let it die. Once the battery is past the 5% - 10%, there could be no bringing it back and will require a new battery.

Completely Shut Down Chromebooks

When you typically use a Chromebook you probably don't shut it down between uses. Either you log off and close the lid, or you lock the Chromebook by closing the lid, or let the Chromebook sit. In all of these cases (with default settings) the screen will turn off eventually.

It doesn't shut down though. Instead it goes into standby. Standby only uses a little about of power, but it does still use it. Remember, we are trying to make the current charge last through the summer.

Instead of using standby, we want to completely shutdown the Chromebook. You can do this by hold down the power button on the Chromebook until the screen goes blank. This should take less than 5-7 seconds. When you release the power button the screen should remain blank.

Occasionally logging off or shutting down your Chromebook is also important for keeping your Chrome OS update to date.

Most all Chromebook issues are battery related because of not charging it properly.

AHHHH Summer

This is the worse time for Chromebooks. If you will be storing or not using the Chromebook over the summer, remember to charge it to at least 80%. This ensures that even when the battery discharges while unplugged over the summer, it won't fully run out of power. Here is Dell's recommendation for all the units that we have purchased – 3100 2n1 and this will also apply to HP as well. <https://www.dell.com/support/kbdoc/en-us/000134075/preparing-chromebooks-for-storage>