

Electronics Online Challenge

We are team 3725D. Our team is made up of two face-to-face students and one remote student. We are all in third grade. For this project we met at least once a week on Google Meet to work on our challenge together. We selected the HP Probook because our district's technology department was going to throw them away. They donated a laptop for each of our team members. We each disassembled our own device since we were not able to share materials due to the pandemic.

When we took apart the laptop we found the following parts: keyboard, keyboard buttons, CD/DVD drive, laptop battery, memory, laptop screen, laptop cover, cooling fan, WiFi card, CPU microprocessor, memory, motherboard/mainboard, video cables, hard drive, speakers, and a lot of screws. We did not find any parts labeled Texas Instruments in the laptop.

To learn more about the laptop components, we interviewed our robotics coach's dad, Mr. Steven Gift. He used to build computers for fun. He helped us to identify the names of the different parts and also told us their role. We also researched the parts using the internet. There were a few parts of the laptop that we could not figure out the name or role of the pieces.

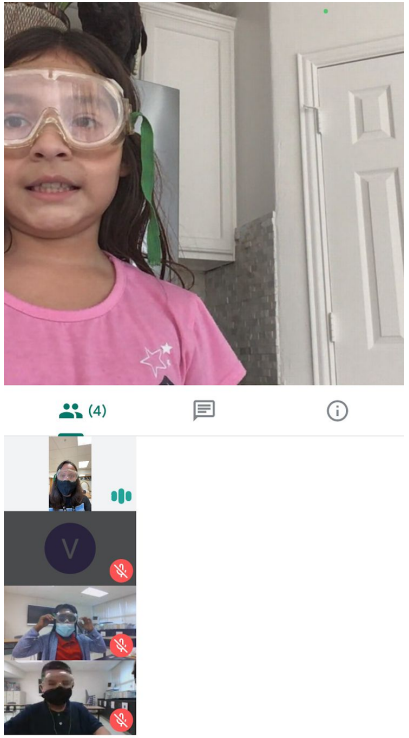
Here is a list of the parts that we found in the HP laptop:

Part Name	Role
Keyboard	A keyboard is for putting information including letters, words and numbers into your device.
CD/DVD Drive	A CD/DVD Drive is a disc holder that allows a CD, or blu-ray disc to be inserted into a computer.
Battery	A battery gives a device power.
Memory	Memory stores data instructions and information.
Laptop Screen	A screen shows the graphics or pictures on the device.
Laptop Cover	The plastic cover protects the device from bumps, scratches, water and dust in everyday use.
Cooling Fan	The cooling fans keep the laptops cool so it does not overheat.

WiFi Card	The wifi card receives the wireless signal and communicates with the wireless network, and gives you access to the Web with your laptop.
CPU Microprocessor	A CPU is a computer part that sends signals to control other parts.
Motherboard	The motherboard connects all of the other pieces to communicate to each other.
Video Cables	Video cables carry electronic signals from a video.
Hard Drive	A hard drive is the hardware component that stores all of your digital content.
Speakers	The speakers create sound from the laptop
Screws	The screws hold all of the objects together.

We learned a lot from this challenge. The first thing we learned is that there are a lot of different types of screws that hold a laptop together. We had to borrow a lot of different screwdrivers to take apart our laptops.

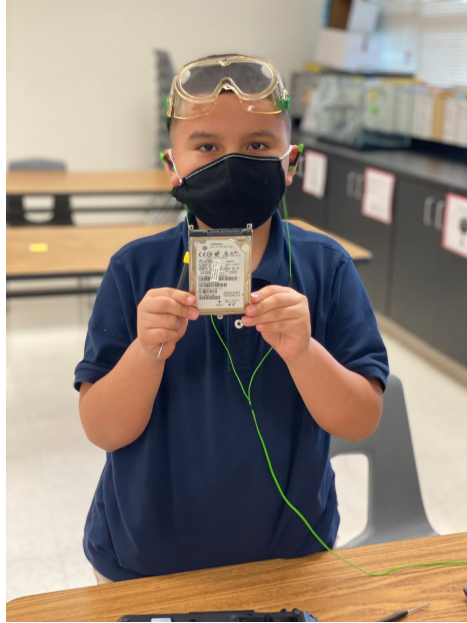
We also learned that there were a lot of different parts inside a laptop and they all have a different role. We were able to learn about a lot of the different components in our laptop from an expert, but he didn't know all of the parts so we had to also do research. Even after researching we were not able to name all of the parts.



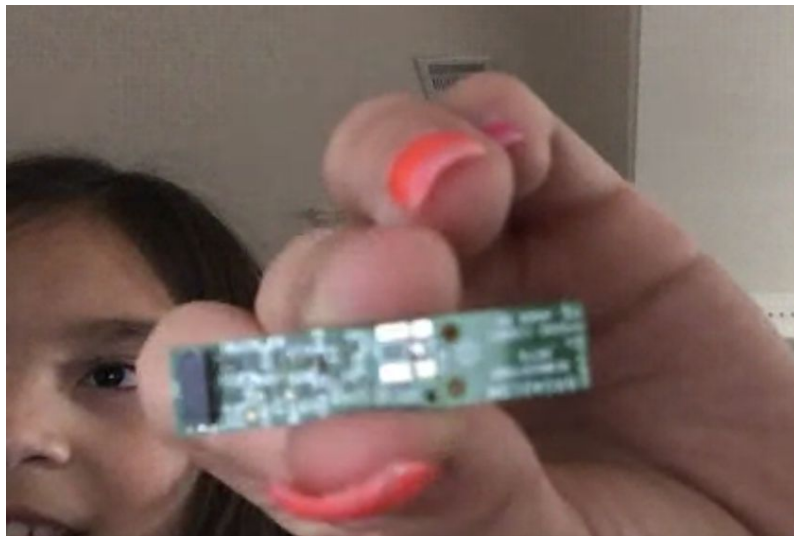
We wore safety goggles to protect our eyes.



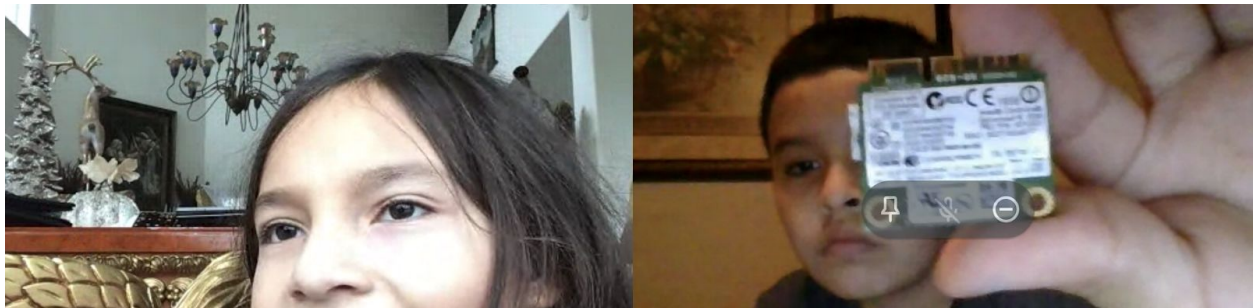
We used different types of screwdrivers to take apart our laptop.



The first piece we took out of the laptop was a hard drive.



We found memory inside the laptop



We worked from home to take apart some of our laptop and we both found a wifi card.



Here are all of the parts we took out of our computer.