## **Electronics Online Challenge**

Engineers work hard to make electronics for our use, and we use them without thinking about what is inside and what makes them work. I have taken apart a Uniden Cordless Telephone and I saw a lot of interesting components. I chose this to take apart because I thought it would be interesting to see how older phones work and how they might be different from the phones we use today. Most of us use smartphones these days but remember, without the cordless telephone, smartphones might not have been invented.

I found many components that all contribute to making the phone functional, none of them had the name of their brand and there were no Texas Instruments products. For example, one of the first components I saw when I opened up the phone was the rechargeable nickelcadmium battery, it gives all the components power to function. Another component I found was the Keypad Circuit Board. This component was in charge of putting in numbers, ending calls, redialing, and much more. It had little black lines and squares in the shape of the keypad that were connected and when you pressed a number on the keypad, those lines were touched and a circuit was closed, which resulted in a number being dialed. The next components were the microphone and buzzer/ringer, they were placed right next to each other. You were supposed to talk into the microphone which recorded your voice so that the person you were talking to could hear you. The buzzer/ringer made a noise so that you could know when you got a call or so that you knew when the call ended. Another component was the speaker, this was an important part because it let you hear the person you were calling; it also was in charge of the volume. The final components were the capacitors, they store energy and are found in almost every circuit. All in all, there were many components in the Uniden Cordless Telephone and they were all equally important to make the phone functional.

In conclusion, it was very fascinating to see and learn about the many components that help make a Uniden Cordless Telephone function properly. I learned about new parts and I learned that some of the components in a cordless telephone are almost the same as the smart phones we use today.

> Components I have Discovered 1) Batteries 2) Keypad Circuit Board 3) Microphone 4) Buzzer/Ringer 5) Speaker 6) Capacitors



This is the phone before taking it apart.



This is the phone after taking of the covering on the back.



This is the keypad circuit board.

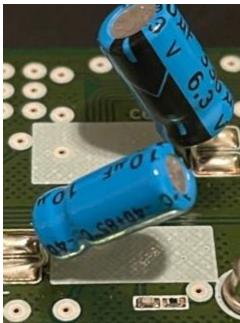


These are the batteries.



These are the buzzer/ringer (top and solid black) and microphone

(bottom and silver with a black circle.



These are the capacitors.



This is the speaker.