CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY

Name(s)
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Project Number
J0713

Project Title
Measuring Harmful Electromagnetic Waves Emitted from Various Brands of Cellular Phones

Abstract

Objectives/Goals
I wanted to find out how many electromagnetic waves go through different types of cell phones to determine which cellular phones are most harmful and least harmful for people's health.

Methods/Materials
electromagnetic field meter 7 different cellular phones landline phone
First I placed a cellular phone and the Electromagnetic (EM) Field Meter together on a table top: then I called the cell phone with a landline phone; I then viewed the readings on the EM field meter; recorded the highest meter reading for test one; repeated these steps ten times; crossed out the highest and lowest readings, and found the average for that particular phone. I did this for each cellular phone.

Results
The results of my investigation on testing EM waves on cellular phones indicated that some phones emitted more electromagnetic waves than others. I discuss the results of each phone on my project board.

Conclusions/Discussion
After completing my investigation, I found that my hypothesis was correct. It stated that some cellular phones will emit a greater amount of harmful EM waves than others, resulting in greater health risk to the user. The least harmful was the Sanyo 4900 and the most harmful was the Nokia 3360. People should be more aware of which brand of cellular phone they are buying.

Summary Statement
My project tests electromagnetic waves from the ring of a cellular phone to determine which brands of phone are more harmful than others.

Help Received
Mr. Carl Gong provided the Electromagnetic Field Meter; My teacher, Mr. Russell was my coach; Dr. Carolyn Chooljian provided articles from medical journals; Mr. R. Zamora from Radio Shack provided the use of some phones.