

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

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Project Number

S0702

Project Title

A Comparative Study of the Reception of Different Cell Phone Companies at Locations in Tuolumne County

Abstract

Objectives/Goals

The hypothesis for this study is that Golden State Cellular will perform better in Tuolumne county than AT&T Wireless.

Methods/Materials

Materials: One Motorola Timeport phone with Golden State Cellular, one Nokia 1260 with AT&T Wireless; clipboard, pen.

Methods: The experimenter was driven mainly along Highway 108 to different towns in Tuolumne County. At each stop the number of reception bars showing on the phones was checked and recorded. Calls to local numbers were attempted and whether or not the calls went through was recorded.

Results

Golden State Cellular performed better overall but in some locations AT&T Wireless was better. At higher elevations on the mountain, Golden State Cellular was far superior to AT&T Wireless. In Jamestown, at lower elevations, AT&T Wireless performed better. For locations in between, performance between the two companies was about the same.

Conclusions/Discussion

Some support for the hypothesis was found. Golden State Cellular did perform better than AT&T Wireless in completing calls overall. Choice of cell phone company really depends on the area calls are placed from. People living at higher elevations up the mountain would probably want to use Golden State Cellular, but for those living down the hill, AT&T Wireless might be the better choice. For areas in between, both companies performed about the same.

Summary Statement

Comparing the reception of two cell phone companies in Tuolumne County.

Help Received

I thank my science teacher, Mrs. Skutches for her inspiration and my Mom for making sure I did my experiment.