



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Charlotte B. Monke	Project Number J0722
Project Title Cell Phones and Their Effect on Reaction Time	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective is to determine if cell phones increase your reaction time.</p> <p>Methods/Materials -iPod touch -Cell Phone with recorded stories</p> <p>Results The average reaction time, without using to a cell phone, was 333 milliseconds. The average percentage of correct answers, without using to a cell phone, was 97.9 percent. The average reaction time, while using to a cell phone, was 607 milliseconds. The average percentage of correct answers, while using a cell phone, was 68 percent. While talking on a cell phone, the amount of milliseconds it took to react, increased by 274. The percent of correct answers went down by 29.9 percent.</p> <p>Conclusions/Discussion My experiment showed that the use of a cell phone does have an effect on reaction times. I found that the student#s reaction times were faster when they were not using a cell phone, because they were not distracted. Reaction time is the ability to respond quickly to a stimulus, although it is important in many daily activities, it is often not measured. My experiment proved that a good reaction time is necessary when completing these daily activities, especially driving. The more distracted the person or the more they have on their mind, the worse their reaction time. That is why I tested students in quite areas, without other people. While driving, people should be especially focused on driving, not on their cell phones. My study proves that if the person is engaged in a conversation, and trying to listen to someone speaking, they will be less focused on driving. My hypothesis was supported because the use of a cell phone increased reaction time. I also found that people have a hard time listening to the phone while completing the reaction time game. They listened better when that was all they were doing. When they had to listen and test their reaction times, some students did poorly at both. Using a cell phone while driving is very hazardous and it should be avoided at all costs.</p>	
Summary Statement My project is about finding the reaction time of student while they are using a cell phone and while they are not.	
Help Received Father helped proof-read board; Teacher helped me get students to test.	