



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

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| Name(s) Charlie K. Crane, III | Project Number J0305 |
| Project Title Shut Up and Drive: Testing a Driver's Reaction Time While on a Cell Phone | |
| Objectives/Goals To test subjects, both while talking on a cell phone and not; to see which way their reflexes are better and thus minimize the risk of an accident while driving. | |
| Abstract | |
| Methods/Materials Three tests given, each with and without cell phone 1. Ruler test: to measure reaction time 2. Tetris test: to measure eye-hand coordination 3. Timed Task test: to measure mental cognitive | |
| Results The subject's combined scores while on a cell phone for the following categories: Part One: Ruler Test, was 5 centimeters slower. Part Two: Tetris Test, their score decreased by 6,262.75 points, and Part Three: Timed Test, was performed 13 seconds slower. | |
| Conclusions/Discussion If a subject is talking on a cell phone while driving, their reflex reaction time is significantly slower and thus putting themselves and/or others in danger. Drivers need to give 100% of their attention to driving, so they can avoid dangerous situations with their fastest reflexes. Talking on a cell phone while driving is an irresponsible behavior and puts many lives at risk. *As a bonus, but not included in my results was the additional testing of the subjects using a hands-free cell phone. The scores for this option were better than the hand-held cell phone, but not as good as their scores using their undivided attention! | |
| Summary Statement How talking on a cell phone will affect a driver's reflexes. | |
| Help Received Summer school classes for research and testing subjects; mom helped with the board layout, securing the testing site and subjects; dad purchased all supplies. | |