



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Tori Adler; Emily Stephens	Project Number S0301
Project Title The Truth about Childproof	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals In doing this experiment we will test young children's capability of opening child proof products in the hopes of discovering if they truly protect today's children.</p> <p>Methods/Materials 1.) First we met and tested subjects, ranging from ages 2-6 years old. 2.) We then individually tested each child, by having them attempt to open a variation of childproof medicine bottles and cleaning products. 3.) After testing the children we recorded the results. 4.) We repeated this many times with each child. 5.) Afterward we reviewed our data and converted it into graphs and charts. Materials: LA's Totally Awesome Cleaner- Bleach; LA's Totally Awesome Plumber- Liquid Drain Opener; Spic and Span- Antibacterial Spray Cleaner; Target Brand- Ibuprofen; CVS Brand- Medicine Bottle; Small Pharmaceutical Bottle; Medium Pharmaceutical Bottle; Large Pharmaceutical Bottle; Children Ranging from 2-6 Years Old.</p> <p>Results From our careful observations and data our results show that children ranging from ages 2 to 3 were incapable of opening the products and were confused by the childproof lids. However they we able to open the Spic and Span which obtained an average screw top. The older children ranging from ages 4 to 6 were more successful in opening the products. The results were very scattered and inconsistent because of each child's differing determination and strength.</p> <p>Conclusions/Discussion After researching and experimenting we have come to the conclusion that today's common household products are insufficiently sealed with proper childproof lids. Although the majority of children could not get past the childproof lid, many accomplished opening the supposedly childproof bottle which could result in a potentially life threatening situation. Our hypothesis was partially correct because although not all the children could open the dangerous products an unacceptable amount were successful. Some minor errors came about during our experiment such as the child's strength and motivation affected our results. If we were to conduct further experimentation on this topic, we would test the same group of children multiple times and compare our results in order to improve accuracy. Our goal for this project is to raise awareness to parents and adults everywhere and prompt them to protect their kids by keeping hazardous products, labeled childproof or not, out of children's reach.</p>	
Summary Statement Our project involved the testing of young children to see if they could successfully open products with childproof caps.	
Help Received Philipa Adler helped by allowing us to use the children at her preschool as test subjects and Adrienne Stephens helped by teaching us how to use Windows XL.	