



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

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| <b>Name(s)</b><br><b>Benjamin A. Glazer; Larsen Weigle</b>  | <b>Project Number</b><br><br>34021 |
| <b>Project Title</b><br><b>Maglev Transportation</b>  |                                    |
| <p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b><br/>The purpose is to find out if maglev trains are more efficient than wheel trains.</p> <p><b>Methods/Materials</b><br/>We designed a track that allowed both maglev and wheel trains to be launched on it. Then we built the two trains for our testing. We tested both trains at multiple launch forces and measured how far they traveled. We used the data we collected from our tests to prove that either wheel trains or maglev trains are more efficient.</p> <p><b>Results</b><br/>The maglev train traveled further than the wheel train at all launch forces.</p> <p><b>Conclusions/Discussion</b><br/>We came to the conclusion that the maglev train is more efficient than the wheel train because it loses less energy per inch.</p> |                                    |
| <b>Summary Statement</b><br>Our project tests if a maglev train is more efficient than a wheel train, and therefore more practical for real-world use.  |                                    |
| <b>Help Received</b><br>We received help from one of our fathers with editing our writing to make sure it was understandable, with using a spreadsheet to analyze data, and with the construction of the track.   |                                    |