



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Benjamin K. King	Project Number S0307
Project Title Magic the Gathering Card Sorter	
Abstract Objectives/Goals Magic The Gathering Players need a quick, time efficient way to sort their cards, otherwise the cards pile up all around the house making a huge mess. The objectives are to provide a method of sorting Magic cards that is time efficient, is cheap, is accurate in the way that it sorts the cards, doesn't take up more than two square feet, and can run off batteries or some other man-made fuel. Methods/Materials I programmed a NXT robot, using NXT software which I didn't modify, and obtained online. My materials were a NXT kit, however the only reason I used the kit was monetary. I couldn't buy an actual robot with the resources I had, so I used a NXT robot which I had previously owned. Results my prototype is successful. It fulfills my objective by being relatively cheap, (especially compared to Magic Cards) is time efficient, it can even run overnight, it runs off rechargeable batteries, is extremely accurate, and is fourteen inches by eleven inches. I only have one issue with my project. It cannot sort many cards at the same time. However, this is only a small issue, and with more time can be easily adjusted. Therefore, I personally judge my project and prototype a success by my standards. Conclusions/Discussion Unfortunately, my project doesn't expand our knowledge on any subject at all. However, I have proven that it is possible to make a Magic The Gathering Sorter, which may be sold as a product.	
Summary Statement My project is a automated Magic the Gathering card sorter, which sorts Magic Cards based on approximate value.	
Help Received My teacher, Ms. Barry, provided me with motivation to complete a project like this.	