

# CWSF 2017 - Regina, Saskatchewan



## Gavin Wilson, Emmett Harrington

### Free Throw Physics

**Challenge:** Discovery

**Category:** Junior

**Region:** Simcoe County

**City:** Barrie, ON

**School:** St. Monica's E.S.

**Abstract:** This project studied and compared the effectiveness of the overhand free throw method to the underhand style. An experienced and inexperienced trial group were tested on. The parabolic arc of a shot in each method was analyzed and tracked to determine the which method provided a superior trajectory and show the reasoning behind our results.

### Biographies

Gavin - My name is Gavin Wilson, I am 12 years old and live in Ontario. I have a sister named Faith and a dog named Maple and go to St. Monica's catholic school, there I have many friends including my project partner Emmett. For the 2017 Science Fair we compared the effectiveness of overhand and underhand Basketball free throw shot. Our inspiration for this project came from a rookie NBA player named Chinon Onuaku who in his very first NBA basketball game step up to the free throw line and shot underhand. People laughed and scoffed at him, but despite that he made both his shots.

Emmett - My name is Emmett Harrington, I live in Barrie, Ontario, where I am in grade seven at St. Monica's School. At school, I play on many sports teams including basketball, volleyball, soccer as well as the cross country running team. I also pursue my interests in sports outside of school, I play on the Barrie Royals rep basketball team, play soccer in the summer and enjoying swimming and skiing with my family. In school, I'm also part of the Battle of the Books team and math Olympics team. In addition, I'm a member of my school's Social Justice Tribe, a group of students who work to raise funds and awareness about social justice issues both local...

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040