

CWSF 2015 - Fredericton, New Brunswick



Tyler Galea

Tribology and Surface Patterns

Challenge: Discovery

Category: Junior

Region: Chinook Country

City: Calgary, AB

School: Red Deer Lake School

Abstract: Shoes are sold with a variety of tread patterns, but do they impact friction? This project investigates the impact of surface area and patterns on the coefficients of static and kinetic friction for a selected pair of materials on a clean, dry surface using an inclined plane. The hypothesis that the coefficients of friction are independent of both surface area and patterns was accepted.

Biography

My name is Tyler Galea. I am in Grade 8 at Red Deer Lake School just outside of Calgary. I enjoy playing soccer, basketball, badminton, hiking and running. My hobbies include building Lego and solving puzzles. My favourite subjects are math and science. I plan to be an engineer when I finish school. The inspiration for my project came during a visit to the Museum of Science and Industry in Chicago where I tried an experiment on friction and surface area and the outcome didn't make sense to me. I would like to investigate other areas of friction such as rolling friction and maybe the impact of lubricants on friction. Students thinking of doing a project should come up with a topic that really interests them and try to make it fun to do.

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