



## CWSF 2014 - Windsor, Ontario



## **Ryan Peters**

## **Knot Again**

Challenge: Discovery Category: Junior

**Region:** Chinook Country City: Calgary, AB

School: Red Deer Lake School

Abstract: For my experiment, I tested the tensile strength of ropes after they had

knots tied in to them. I tested if the knots would increase, decrease, or not change the ropes tensile strength. I also tested what kind of knots affected

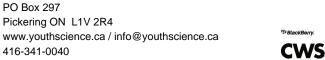
the rope's strength the most.

## **Biography**

My name is Ryan Peters and I am in Grade eight. I enjoy sports and played on the following school teams: volleyball, basketball, and badminton. Our volleyball team won gold in the 4J zones . I received MVP awards at tournaments for both volleyball and basketball. I also enjoy hiking, camping, climbing, shooting, archery, paintball and hunting. Last month I went on my second bison hunt in the Yukon. After high school, I plan to go to university. My dad is a climber, so I got the inspiration for this experiment from him. Knowing what factors weaken your rope would be very important when your life depends on it. That way you could avoid those factors. This experiment is only preliminary. I could change or test many different factors and circumstances such as: does mud, ice, or water affect tensile strength? What fibers are best for rope construction? Does stepping on your rope affect tensile strength? etc. My advice to other students would be to do an experiment that interests you or that could affect your life. After doing this experiment, I can avoid this factor to maintain my rope's tensile strength while climbing.

Awards	Value
Excellence Award - Junior - Bronze Medal	\$100
Sponsor: Nuclear Waste Management Organization	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$1 100





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