

# 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 Sponsor: Nuclear Waste Management Organization	\$100
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 100