

CWSF 2008 - Ottawa, Ontario



Rachel Irving-Beer

Fibre on Fire: Fabrics & Fire Safety

Division: Life Sciences / None
Category: Junior
Region: Ottawa
City: Ottawa, ON
School: Fisher Park P.S./Summit A.S.
Abstract: Fire safety of three fabric types -- wool, cotton, and acrylic -- was tested. Initial flammability, duration of flame, and effect on exposed skin were measured; to approximate human skin, skin-on raw chicken thighs were substituted. Wool, a protein-based fibre, charred but self-extinguished; cotton, a cellulose-based fibre, burned quickly, causing second-degree burns; and acrylic, a petrochemical product, burned quickly and melted into the skin.

Biography

I am a Grade 8 student at Summit Alternative School in Ottawa. I love to read, and I especially enjoy creative writing. In fact, I hope to become a writer, though I don't know what kind yet. This summer will be my sixth year at Camp Manitou, where I've won awards for 2-D and 3-D Arts; last year I learned to water ski there. I love music, and play djembe and cowbell in Boom!, a percussion group at Summit. My science fair project, "Fibre on Fire," was inspired by my interest in yarns and textiles; when my science teacher told me he didn't think it was a great topic, I decided to make it the best I could! The project won "Best Overall Project - Grade 8" at my school science fair, and went on to win gold in the "Health Sciences - Junior" category at the Ottawa Regional fair. I think I proved my point!

Awards

Value

Honourable Mention - Health Sciences - Junior Sponsor: Canadian Institutes of Health Research	\$100
Total	\$100