

# CWSF 2011 - Toronto, Ontario



## Katherine Silversides

### Grab It, Drop It: the design of a robotic arm

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** Esquimalt Community School

**Abstract:** As part of a FIRST Tech Challenge team, we create a robot to compete at tournaments. This year's game required a scoring arm that I designed, built and programmed. As part of the research, I investigated mobility aids (reachers and grabbers) only to discover there was nothing commercially available to pick up multiple items. My arm could be adapted as a reacher or grabber.

#### Biography

Katherine has been home school all her life, until last fall when she joined the curling academy at Esquimalt HS. She is a competitive curler who has spent the last season improving her technique, and helping coach the novices at her club. She's part of Movimento!, an early dance and theatre company. Katherine was delighted to visit Egypt last year and explore the tombs and monuments that have fascinated her for years. She enjoys being part of the Girl Guides, and has lots of fun being a Jr. Leader for girls from 9-11 years old. Katherine is part of a competitive FIRST Tech Challenge robotics team and her project relates to part of the robot her team used in this year's competition. With all these activities, she's working at learning time management skills!

#### Awards

#### Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	\$300
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
<b>Total</b>	<b>\$1 300</b>