



DSBN REGIONAL LEGO MECHANICS CHALLENGE 2006 ELEMENTARY LEVEL SCOPE

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PURPOSE OF THE CONTEST:

The design and engineering team will submit a proposal, complete with a working prototype, design sketches and written documentation. The team must design and construct a working prototype of the solution and demonstrate its effectiveness. Each team will be asked to discuss features and mechanical devices used in the prototype and will be tested on their mechanical knowledge.

EVENT DETAILS:

Date: March 1, 2007

Time: 9:00 -3:30

Location: St. Catharines Collegiate

SKILLS AND KNOWLEDGE TO BE TESTED:

Assembly and manipulation of mechanical systems using lego/dacta. Team work. Various curriculum expectations from the Ontario Science and Technology document.

SAFETY REQUIREMENTS:

Competitors are required to follow all industry safety standards during the competition.

EQUIPMENT, MATERIALS, TOOLS AND SUPPLIES:

Dacta 1032 kits, and various assorted dacta elements.

Equipment Supplied by the Contest Coordinator: Dacta 1032 kits, various lego elements

Equipment Supplied by the Competitor: none

CLOTHING REQUIREMENTS: Regular school attire.



PROJECT AND COMPETITION EXPECTATIONS:

The project will be completed on site and completed that day. Projects will be test and evaluated at the end of the build time.

JUDGING CRITERIA:

Contestants will be given performance and expectation criteria on the challenge day. Performance of prototype will make up the majority the scoring, with design briefs and mechanics test to complete the evaluation.

JOB INTERVIEW COMPONENT:

N/A

ENTRY:

Teams of 4 students (male and female) should register when the Elementary Challenges are announced via email a few weeks prior to the competition date.

TRANSPORTATION:

Teams are responsible for their own transportation.

TEACHER'S ROLE:

Instructors are expected to acquaint their student participants with all of the enclosed guidelines prior to the competition. Teachers should attend the competition with the students and help the students stay focused and on task and may help in decision making but should not offer technical support.

SPECIAL INSTRUCTIONS OR GUIDELINES: Teams should be comprised of 4 hard working well motivated students from grade 7 and/or 8 and ideally have two boys and two girls, but must be co-ed to qualify to go on to Skills Ontario.

COMPETITION AGENDA:

9:00- 9:30 Teams arrive, given challenge and introductions and instructions
9:30- 2:00 Teams participate in challenge (lunch provided at 12:00)
2:00- 3:30 Performance tests and evaluation/judging of challenge material.