



ROBOTICS CHALLENGE

Challenge Description

“Volcano Detector”

Mission: Find the volcano opening and plant a warning marker.

Design a robot to climb a ramp and locate the heat source at the top of the ramp. Upon locating the heat source, the robot places a marker within 5 cm of the heat source.

Specifications

- Challenge starts at the designated start area at the bottom of the ramp.
- Robots must be made with LEGO Mindstorms Robotics Invention System and be programmed with Robolab programming environments.
- Robots can consist of a maximum 1 RCX, 8 Wires, and 3 motors.
- Nothing can be added or removed from the robot during a round.
- No non-lego parts are allowed
- Challenge is maximum 3 minutes long
- **No touch sensors are permitted in this challenge.**



Adaptations

Scoring

-10 points each time robot falls off the playing area

120 point challenge

Up to 5 points will be deducted from the total score for the total amount of damage sustained by the robot, as determined by the judge.

Hints and Tips

If you're planning the volcano garbage disposal challenge, do this simpler version first as a training mission.