2013–2014 Activities

Demosat B
Robot Challenge
Stem Goals
Design: Heavy metal detection using absorption spectroscopy
Obstacles

- Cost: 5K+
- Mass limitation
- Time constraints
Solution: Attainable Goals

- Build platform that students can build on from year to year
- Test Microprocessor
- Gyroscopic Stabilization
- Go Pro camera
Ball and knuckle pivot system
Counter balance rail system
Stabilization motors
Pivot Ball
Launch, Eaton CO
From the ground
Go-Pro stopped at 43000 ft
Robot Challenge
Microprocessor

- PIC32MX series processor with 50 MHz/83D MIPS, 32-bit RISC CPU
- Designed circuit board, printed in Canada, by You PCB
- Designed motor control board
You PCB, 10 boards approx. $50.00
Obstacles: Weight

Team getting scale results pre-competition
Obstacles: Time

Katie working and Gary loosing more hair pre-competition
Not enough testing/time constraints
STEM Goals and Recruitment

- Recruitment support from science department
- Recruitment support from Continuing Education Training Division
- Working on approval for a STEM laboratory
- Requested dedicated classroom
Questions and Comments