

B*E*S*T RACE DAY

May 15, 2010 8:00 to 1:00

Car#	School	Teacher/Parent	Mentors
1	St. Francis Xavier Catholic School, Buffalo	Jim Zumbusch	Bryan Berg
2	Armatage 1, Minneapolis	Marvin Boucher	Ken Hotz
3	Armatage 2, Minneapolis	Marvin Boucher	Ken Hotz
4	Home School at The Works, Minneapolis	Kate Searls	Steve Veording
5	NE Middle School, Minneapolis	Linnea Hackett, Ken Vreeland	Earle Parris, Steve Davis, Bob Bowman, Tom Singleton
6	Farnsworth Aerospace 1, St. Paul	Eileen Johansen, Mike Carver	Jim Arnold, Matt Arnold
7	Farnsworth Aerospace 2, St. Paul	Eileen Johansen, Mike Carver	Jim Arnold, Matt Arnold
8	Cedar Park Elementary, Apple Valley	Monica Foss	Raj Adige, Melissa Howlander
9	Westonka Hilltop, Mound	Therese Frenette	Bob Bruce
10	Sartell Middle School 1, Sartell	Lori Dornberg, Duane Sprague	Lee Hart
11	Sartell Middle School 2, Sartell	Lori Dornberg, Duane Sprague	Lee Hart
12	Odyssey Academy, Brooklyn Center	Jalene Rosengren	David Fehr

(Car numbers were assigned at random, except that teams with shared leaders are adjacent.)

Schedule:

8:00 to 9:00 Cars arrive

8:30 to 9:30 Practice & Technical inspection of all cars

Times below are approximate.

9:30 Welcome & Announcements.

9:45 Drag Races: 3 heats and a final race.

10:20 Interviews & Presentations: about 3 minutes per team.

10:50 Slalom Races: 6 pairs of cars

11:30 Endurance Race: two alternating groups of 6 cars,
Group A: 15 min, Group B: 15 min,
Group A: 20 min, Group B: 20 min

12:30 Merit Award announcements

1:00 Pizza

End at about 1:30

B*E*S*T
Bridging Engineers, Science, and Teaching
www.BestOutreach.org

We are a group of volunteer engineers and teachers who are promoting science, math, and life skills for 4th, 5th, and 6th grade students (who think they're just having fun building things!). Our primary activity is supporting groups of students who are building their own electric car. Small groups in each class start out by building table-top sized electric cars, then the whole class works as a team to build an electric car big enough to ride.

The design and construction of the car is entirely up to the students. The teachers and engineers facilitate, teach related subjects, and ensure the safe construction of the vehicles. Students are given a limited amount of materials (a 12V battery, motor, and circuit breaker) and a small budget that they can spend, but they are encouraged scrounge and to be creative in using found parts and materials to build the car.

Students and mentors provide a demonstration as part of the ITCEP Mathematics Fun Fair in March. ITCEP is the U of M Institute of Technology Center for Educational Programs and the Fun Fair is a morning of exhibits and activities attended by hundreds of students and their parents. Our last activity of the year is Race Day, in mid-May when all of the teams bring their cars to a local high school track for a morning of racing, pizza, and fun. See our web site at www.BestOutreach.org for details about these activities.

The program provides many benefits:

- Students learn that they can achieve a goal that at first seems insurmountable to them, by working towards it step by step.
- Students learn principles of engineering: planning, designing, testing, and redesigning.
- Students learn how to translate dreams and ideas into reality.
- They learn communication and negotiation skills while working together.
- They learn by doing (vocational learning style). For many this is their first exposure to using tools.
- Students learn to apply math and science to real life situations, which may in turn spark an interest in the sciences.
- Students interact with a positive role model; they learn what an engineer does and what it is like to work in an engineering field.

Please feel free to call if you have questions or want to participate:

Paul Patton - 763-954-4764