

EARTH DAY[®]

Ottawa

**OVERVIEW
and
ADMINISTRATION
Manual**

Earth Day Ottawa proudly presents the

Solar Sprint Competition Manual

This manual is version 2009-07-24

© 2009, Earth Day Ottawa

Table of Contents

Definitions:	2
Thank you to Sponsors and Volunteers	3
Declarations and Know the Rules:.....	3
Welcome to the Solar Sprint	
Competition.....	4
What is a Solar Sprint Competition?	5
Awards	5
Why a Solar Sprint Competition?.....	6
Who Can Compete?	6
Work Commitment Guideline:	6
Registration Information.....	7
Extra Cars.....	8
Pre- Race Inspection Criteria (Used by Technical Inspector).....	13
Pre-Race Checklist (for Students).....	14
Race Officials Instructions.....	15
1. Start Line Officials.....	15
2. Finish Line Officials	16
A Note to Parents	17

Definitions:

Throughout the Solar Sprint manuals, you may come across references to various teams. This can be confusing so here are the definitions of them.

Teams:

- **School Team:** The members of the school that designs, builds and races the cars and that produce the Websites or PowerPoint presentations or digital videos or other related activity.
- **Race Team:** the 2 students in the track area that start the car and catch the car (part of the School Team).
- **Design Team:** The students involved that design the car (part of the School Team).
- **Build Team:** The students involved in building the car (part of the School Team).

Note: The same students may be part of many teams and the team members are allowed to move from team to team at any time. On race day, any 2 members of the school team are allowed in the race area for the running of a race and they are referred to as the Race Team. There is more on this in section 6 in this manual.

School or Organization:

Most student participants will come from regular Public, Catholic and Private schools but some participants may come from Home School situations. This is acceptable as long as the students do the work.

Due to the amount of work required, 2 or more Home School groups may wish to join forces to spread the load. Remember, only the students are allowed to do the work.

In this manual, the word school is used but it can also mean Home School students as well.

Thank you to Sponsors and Volunteers

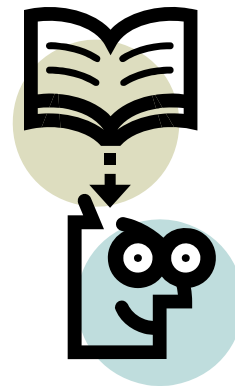
Thank you to all of our sponsors and volunteers. Without you, this program would not be possible.

Declarations and Know the Rules:

Each school representative will be asked to sign a declaration stating that the students (and not the adults) have done the work in the design and building of the cars, Websites, PowerPoint Presentations and Videos and any other required submission.

Make sure that every student on your race teams knows all of the rules of the competition, including design and race rules.

Ignorance of the rules is no excuse and can be the source of much disappointment on race day.



Welcome to the Solar Sprint Competition

Thank you for your interest in Earth Day Ottawa's annual Solar Sprint competition. This solar powered car race competition has been run every year since it was started in 2001 and it is designed to introduce students to technology as a means to help the environment. Students will investigate solar power as an alternate source of energy for the race cars they design. It is hoped that in doing so, they will gain a better appreciation for not only solar power, but also the design efficiencies necessary to make the most of this free, clean, source of energy.

The students in each participating school have 2 main tasks. The first task is to design and build at least one vehicle that will complete a 20-meter race in the shortest possible time. The second task is to produce at least one computer related item (such as a Website or a digital Video or a PowerPoint presentation) for judging a week before race day.

The chassis and drive train of your car is to be "home-made" and designed and built by the students, not the adults.

Commercially purchased car bodies are not allowed. Parts can be purchased from the organizers but reuse of previous year's components is encouraged. You are also encouraged to scrounge for parts from old machines, toys, wherever. Feel free to experiment – the joy is in the seeking.

The winner of the racing competition will be the school team whose vehicle is the top finisher in a series of head-to-head races. There will be prizes awarded for the three fastest cars.

Each school will also be required to prepare at least one computer related item such as a Website or a digital Video or a PowerPoint Presentation. This part of the project should focus on the experiences of the design,

building and testing of the cars as well as solar (renewable) energy in general and applications or uses of solar powered systems. For this second main task, more ideas are given in the other manuals you can download from the Earth Day Ottawa website: www.earthdayottawa.ca

There will be prizes awarded to the three best Websites, PowerPoint presentations and digital Videos as determined by the judges.

A separate notice will be provided with details of the race date and location. However, it should be noted that unless stated otherwise, there will **not** be a rain date. **The cars will be run rain or shine on the specified date.** If necessary, the cars will be raced using batteries that you will have to provide and the races will be run indoors in poor weather.

The length of time it takes to run the event depends on the number of entries. The last few years has seen the event **start at about 10:00 AM and finish at about 1:30 PM** although if we get a full field of cars, then the racing could last until about 3:00 PM.

The race day plan, including a break for lunch if any, will vary depending on the location of the event and the number of entries. A separate notice will be provided with details of the race day plan. Please check with the organizers before race day regarding the plan. You may wish to arrange for your own lunch.

Best of luck to you all! I hope that we will have another exciting year of Solar Sprinting, and a great environmental educational experience for all.

Please feel free to contact me if you have any questions or concerns.

Elaine Gibson,
Solar Sprint Coordinator
Earth Day Ottawa
Phone: 613-599-3112
e-mail: see web site for email address
Web site: www.earthdayottawa.ca

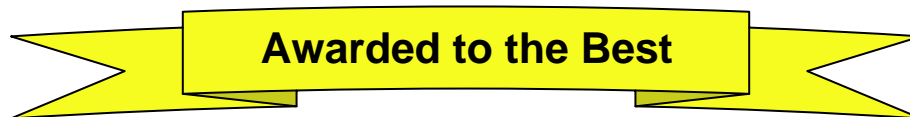
What is a Solar Sprint Competition?

The Solar Sprint competition is an event where students in each participating school have two (2) main tasks to perform.



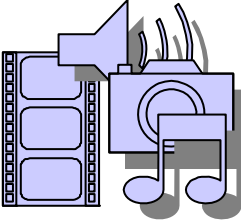
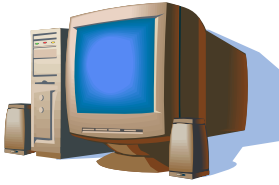
- The first task is to design and build at least one vehicle that will complete a 20-meter long race (run in a straight line) as fast as possible. The school team whose vehicle is the top finisher in a series of head-to-head races in a double elimination format is the winner.
- The second task for the students is to create at least one computer related task, a website or digital video or PowerPoint presentation for judging a week before race day.

Details of the limits of the number of entries are given in the Earth Day Ottawa website (www.earthdayottawa.ca).

Awards



Prizes are to be awarded for the top 3 (as determined by the judges) in each of the following categories:

3 Fastest Cars	3 Best Websites	3 Best Digital Videos	3 Best PowerPoint Presentations
			

The instruction manuals for each of these components of the Solar Sprint Competition are available from the Earth Day Ottawa web site (www.earthdayottawa.ca).

Why a Solar Sprint Competition?

The objectives of the Solar Sprint competition are:

- i) to design and build a vehicle that will complete a race in the shortest possible time using the available power
- ii) to engage students in researching science principles relating to solar (renewable) energy so that they might gain an understanding and appreciation of renewable energy sources
- iii) to help students advance their computer skills by providing a useful avenue to generate a website or digital video or PowerPoint presentation that is educational in the doing and educational in the content
- iv) to provide students an outlet to express their artistic abilities in producing graphics for the website or digital video or PowerPoint Presentation and to provide a direct link to science and technology oriented tasks in the hope that they might gain an appreciation for science and technology
- v) to share with the wider community the potential for science and technology to open up new possibilities for the future for the benefit of the environment

In short, the answer is . . . for

EDUCATION and the ENVIRONMENT

Work Commitment Guideline:

Students find this project quite challenging so plenty of time should be allowed for the students to experiment. Successful teams from 2007 and 2008 began a few weeks before the March break, ran sessions as an after-school project and had about 20 hours in sessions. A suggested minimum would be to start just after March break and spend at least 10 hours on the project. The project may be done during school hours or after school.

Who Can Compete?

Only students are allowed to compete. Students in **grades 6 to 8** compete with "home-made" solar powered model size cars and web sites or digital video productions or PowerPoint presentations. Home school students in the same age group and similar education level are also allowed to compete.



Registration Information

The registration form may be downloaded from the Earth Day Ottawa website and it is located at:

www.earthdayottawa.ca

Follow the links to the “Events” section and then to the Solar Sprint page.

Or you can go directly to:

http://www.earthdayottawa.ca/events_solar_sprint.htm

Four-Step Process:

1. Download the registration form
2. Fill it in
3. Attach it to an email and send it to the email address listed on the web site.
4. Cheques should be made payable to “Earth Day Ottawa”, and mailed or delivered to

Earth Day Ottawa
56 Robson Court
Kanata, ON
K2K 2W1

Registration Fee and Limits

The registration fee and fee structure is given in the registration form that you can download from the **Earth Day Ottawa website** mentioned above.

The registration form also lists the spare parts that may be ordered from the Solar Sprint organizers of Earth Day Ottawa.

Note: Each school is allowed to register up to a maximum of 5 cars.

The submission limits for the other components (website, PowerPoint presentation and video) of the Solar Sprint Competition are given in the registration form. There are no additional costs for these other components of the competition.

Ordering Spare Parts:

Parts and materials used in previous year’s competitions may be reused this year, however; solar panels, motors and spare parts can be ordered from Earth Day Ottawa if necessary.

Note: teams are required to use the solar panel and motor that is (or was) supplied by Earth Day Ottawa.

Again, see the registration form for details of the items available for order from the Solar Sprint organizers.

Registration Summary:

Open to the first 64 cars that are registered.

Cheques should be payable to “Earth Day Ottawa”, and mailed or delivered to

Earth Day Ottawa
56 Robson Court
Kanata, ON
K2K 2W1

Contact Elaine Gibson if you have any questions.

Elaine Gibson
Phone: 613-599-3112
e-mail: see website for email address
Website: www.earthdayottawa.ca

Extra Cars

Even though each school is allowed to register up to 5 cars maximum, please bring any **extra cars** that you may have built during your development sessions. Usually there are a few spots available caused by no-shows and by not having a full field after all schools have registered. The maximum number of cars that can be run is 64 and the organizers will attempt to fill up the field (using your extra cars) to this maximum number of 64 cars as fairly as possible.

Note: Not necessarily all of the extra cars that are brought on race day will be able to be included in the official racing. It will depend on the maximum number of cars registered and the total number of cars that are brought to the race event.



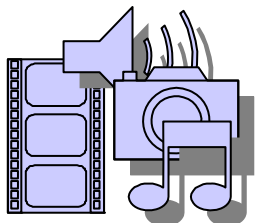
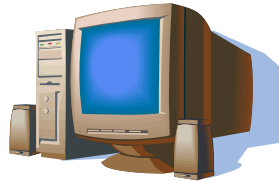


Getting Started

1. Download the Instruction Manuals

The instruction manuals for each of the components of the Solar Sprint Competition are available for download from the Earth Day Ottawa web site (www.earthdayottawa.ca).

www.earthdayottawa.ca

Race Cars	Websites	Digital Videos	PowerPoint Presentations
			

2. Checking Your Order

Note: There are many small parts packed in your order. Be careful when unpacking your order not to lose anything.

Inside each “Full Junior Solar Sprint Kit”, you should find:

- 1 solar panel (3 Watt)
- 1 electric motor with lead wires
- 1 motor mounting bracket with screws
- 1 set of 3 gears for motor shaft (3 sizes)
- 1 accessory bag containing; 2 shafts, 4 wheels/tires, and 2 spur gears (large size gears)
- 1 Rocker switch (3-Way: On-Off-On),
- 1 Push Button Switch (electrical current flows when you let go of the switch button)
- 1 battery holder
- 6 jumper leads (not shown)
- 2 or more eyelets (Screw eyes) (not shown)



The photo above shows most of the components in a “Full Junior Solar Sprint Kit”. Check that you have received all the parts that you have ordered. You may have

ordered extra parts to make multiple cars. Compare with your registration order.

The solar panel is fragile – keep it wrapped in the protective foam and in the box when not actively in use. For your early test runs, it is suggested that you add some weight to your cars to simulate the weight of a solar panel and use the 2 AA batteries. This will help preserve the solar panel.

You may also receive:

- A sample of track guide wire cable (fishing line).
- A sample of track material (roofing roll). This is the track surface you will be racing on. Your wheels should not slip or get stuck on this material for racing.
- **Solar Sprint Manual** – this manual contains information you need to know to participate in the competition. **Encourage all members of the team to become familiar with all the rules.**
- A copy of your registration form
- A receipt for fees paid

You will also need:

- 2 size “AA” Batteries
- Materials to make the car chassis

3. Recommended Parts/Tools to Mooch or Borrow

- Alligator clips and wire or patch cords with alligator clips already attached. These will allow for easily attaching and detaching wire leads from the motor to the battery pack, switches and solar panel. Available from The Source by Circuit City (Radio Shack), Active Components, Gervais Electronics, school science department etc.
- Wire strippers – you can strip the ends of insulated wire with a knife, but it is too easy to cut yourself or the wire. Proper wire strippers make the job very easy and are well worth having them
- Tape, Duct, Masking, Transparent – excellent for taping together car parts, attaching batteries, etc while designing
- Velcro is very useful for holding the solar panel and battery box on the cars. Using Velcro allows for easy sharing of a solar panel as long as you make the cars similar in the sense that you put, say, the fuzzy loops part of the Velcro on the solar panel and the hooks part of the Velcro on all of the cars
- Fast drying glue (Hot glue guns are useful)
- Lightweight and strong building materials – coreplast (election sign board), foam core board, balsa wood, Styrofoam, straws, craft (Popsicle) sticks, etc.
- Gears and wheels from old toys, VCRs, tape recorders, appliances, etc.
- Rubber bands to use as drive belts with pulleys
- A Voltmeter can be useful to help solve wiring problems
- Small pliers
- Small screw drivers for attaching motor mounting brackets etc.
- Cutting tools to shape the chassis platform
- A strong light source such as a 100 Watt light bulb (not fluorescent!) to test solar panel when you don't have the sun
- Ruler to measure height of eyelets used for the guide wire
- String and elastic bands may be useful

Model Solar Car Design Hints

- Keep in mind that your solar panel provides only 3W of power. Your car must be light weight if you want it to move! The winner in 2001 weighed less than 300 grams. Choose materials that are strong, stiff, and lightweight for your car body. Suggestions include (but are not limited to!):

- Poster board
- Foam core board
- Balsa wood
- Plastic pop bottles
- Straws
- Styrofoam
- Popsicle (craft) sticks
- Insulating foam
- Corrugated cardboard

Note that glue can be heavy.

- Strive for an aerodynamic shape. Try to make your vehicle have as little resistance to wind as possible. Investigate shapes that pierce the air rather than plough through it. Don't forget that winds from any direction may affect the cars in an outdoor event.
- Friction in the drive train is your enemy! Your wheels must rotate easily with as little resistance as possible. Pulleys that are too tight or gears that don't mesh well will make it hard for the drive shaft to turn.
- Your car must be sturdily built. It is very disappointing to have it fall apart during the race. We do have a Repair Station for repairs, but try to make a car that holds together.
- Your solar panel is fragile – protect it! It is suggested that your solar panel be easily detached from the chassis, and connected to the motor leads by removable alligator clips, so that the panel can be removed during transport or repair. It can be damaged if it is dropped, so treat it with respect. Keep it protected in its shipping box when not in use.
- Keep your panel clean. Dirt and dust will block sunlight.
- Label your terminals on your solar panel, so that when you connect it to your motor, the car moves forward! It is difficult to do well in a race if you are going the wrong way. (This really happened in a previous year!).
- Scavenge for parts. This should not be an exercise in who can spend the most money! Old VCRs and appliances are an excellent supply of pulleys, gears, belts and hardware. Parts and old appliances may be available at Thrift shops, repair depots, garage sales, basements, etc.
- Cars must attach to a guide wire to race. Cars that come off the guide wire lose the race. Make sure your eyelets are easily accessible and are only slightly opened to allow the guide wire to slip inside. One team in 2001 put their eyelet on a front extension, like a spar on a boat. This made it easy to connect. Watch the overall length so you don't exceed the design specs.
- Popsicle sticks are very useful for mounting the motor and axle. If a Popsicle stick is used to separate the motor from the axle, the dimension between the motor shaft and axle will be about the right value that will allow the available gears to mesh properly.
- Velcro is very useful for holding the solar panel and battery box onto the cars. Using Velcro allows for easy sharing of a solar panel as long as you make the cars similar in the sense that you put, say, the fuzzy loops part of the Velcro on the solar panel and the hooks part of the Velcro on all of the cars.

Useful Sources of Information

There is a lot of useful stuff on the U.S. Department of Energy site regarding their competition, called Junior Solar Sprint. Most of the information is in Adobe Acrobat format, often 30-40 pages each. Print what is useful to you.

Junior Solar Sprint – Teacher and Mentor Guide

www.nrel.gov/docs/gen/fy01/30829.pdf

Junior Solar Sprint – Inside Tips on Parts and Construction

www.nrel.gov/docs/gen/fy01/30827.pdf

Junior Solar Sprint – An Introduction to Building a Model Solar Car

www.nrel.gov/docs/gen/fy01/30828.pdf

Junior Solar Sprint – Classroom Investigations

www.nrel.gov/docs/gen/fy01/30830.pdf

The National Renewable Energy Laboratory website has a lot of interesting information. Try their website at:

www.nrel.gov/education/jss_hfc.html

There are other Junior Solar Sprint Websites from various groups throughout the United States. Looking at them may be helpful. You can use a search engine such as Google to find them. Try a key word search on “model solar car” or “Junior Solar Sprint”.

<http://www.google.ca/>

If you are looking for general information about cars, motors, materials, solar panels, a good website is “How Stuff Works”

<http://www.howstuffworks.com/>

The Earth Day Ottawa website has some photos of past events. Have a look; it is located at: <http://www.earthdayottawa.ca>.

The KidzOnLine is a useful site. It has information on how to build websites using animation, digital audio and video. It also covers network basics, security, ethics and utilizing the internet. Try these:

<http://www.nnkol.org>

<http://www.nnkol.org/TechTraining/>

<http://www.nortellearnit.org/>

Some of the components to make a car come from:

<http://www.solar-world.com/index.htm>

<http://www.solar-world.com/JuniorSprint.htm>

Pre- Race Inspection Criteria (Used by Technical Inspector)

Cars are checked by the technical inspector to make sure they comply with the rules in this manual. Some items checked are;

1. The vehicle body is homemade. It may use a few commercial parts (such as Lego or K'nex), but cannot be a complete commercial chassis.
2. The cars dimensions do not exceed 60 cm x 36 cm x 30cm.
3. The solar panel and motor have not been modified.
4. There are no sharp edges, projectiles or unsafe aspects of the car.
5. The car chassis is separate and independent from the solar panel. Wheels and axles must **not** be mounted on the solar panel.
6. The car has a permanently attached battery holder, with 2 "AA" size Alkaline batteries installed, which is wired to be alternate power source to the solar panel. There is a switch to go instantly from solar to battery power as per the starters' instructions. Test with light source. The car cannot use both battery and solar at the same time.
7. Ensure the momentary switch (used for battery operation only) works correctly; in battery mode only.
8. The battery box and batteries are clearly visible to the judges at all times, not hidden by chassis, solar panel, etc.
9. Measure Voltage on Motor to ensure it is 3 Volts. Have student hold car off table. The wiring must be correct.
10. The official car number is clearly visible on the car.
11. The car appears to be the product of student workmanship. The adult supervisor can attest that the majority of the work was done by students.
12. The car has 2 or more opened eyelets under the chassis to attach to the guide wire and goes easily on the sample guide wire.
13. Eyelets are positioned so that they don't stretch the track guide wire (cable). The guide wire is allowed to be pulled up above the track surface to a height (distance) of 1.5 cm maximum. Measure this dimension.
14. The race team must have something (such as a file folder or something else) to cover the solar panel for the start of a solar powered race. Ask the students if they have something for this function.

If the car meets all of the above criteria, attach an official inspection sticker to the car (near the car number sticker). If the car does not meet all of the above requirements, send the car to the repair area for modification. Re-inspect car after repairs or modifications are made.

A car must pass inspection before it can race.

Pre-Race Checklist (for Students)

- Are the eyelets securely fastened to the underside of the car? Have the eyelets been opened slightly to allow it to slip onto the guide wire (fishing line)? Are the eyelets positioned so they will not pull on the guide wire?
- Is the car number sticker attached and clearly visible on the car?
- Have the panel terminals been labelled for forward and reverse connection?
- Can your car be easily converted from battery to solar power? Do you have your batteries ready to bring to competition?
- Is the car sturdily built? Are there any loose or dangling pieces which might come apart during a race?
- Does the car run in a straight line without the guide wire? If your car pulls to one side excessively, it will drag on the guide wire.
- How much does the car weigh? The 2001 winner weighed less than 300 g.
- Can the car go 20 meters on a relatively smooth surface when exposed to sunlight or using the batteries?
- Do all school team members know the location, time and date of the race?
- Have you or someone on your team completed and submitted at least one computer based entry (web site or digital video or PowerPoint presentation) for judging?
- Do all school team members know that they need to bring a lunch, snacks, a sunhat, and appropriate outdoor clothing?
- Do all team members have on a name tag, with their full name and name of their school?
- Do you have a file folder or something comparable to shade your solar panel to start the race?

Make sure that every student on your race teams knows all of the rules of the competition, including design and race rules.

Ignorance of the rules is no excuse and is the source of much disappointment on race day.

Race Officials Instructions

There are 2 positions for race officials; at the Start Line and at the Finish line.

4. Start Line Officials

The start Line officials must:

11.1 Ensure the cars have the 2 “AA” size batteries installed even if it is a solar powered race. The cars must have the weight of the batteries to be legal.

11.2 Ensure the car has passed technical inspection. There should be a small sticker attached to the car near the car number. Also, see the "List of Cars Passed Technical Inspection" sheet.

11.3 Determine and call the race as either Solar Power or Battery Power

11.4 If it is a solar powered race, make sure the students have some kind of opaque cover to use to start the car.

11.5 Ensure the cars are placed on the guide wire. Please be patient with this step. The kids have trouble with this step and it sometimes takes several minutes for the car to be put on the guide wire.

11.6 Have the car handlers test the car for just a second or so. This test is to make sure the car is going in the right direction and it actually will start going. If it is a solar powered race, ensure the opaque cover is used to test. If it is a battery powered race, ensure the button works. The same kind of power source is to be used by both cars.

IMPORTANT: If an adult interferes with the any part of the car set-up, the student should be asked to remove the car from the guide wire and place it back on the wire again. Interference by non-students is not fair to the others.

11.7 To start the race, ask if the car handlers are ready. When the car handlers are ready, then say: “On your mark, Go!” or “Ready, Go!” to start the race. (Only 2 steps should be used to try to prevent a jump start.)

11.8 On “GO!”, the contestants are to remove the opaque covering or release the button if it is a battery race. An early removal of the covering or releasing of the button may result in a “false start” at the discretion of the starter. Two false starts and the car is given a loss for that race.

11.9 Push Start: Cars that are pushed or “helped” at the start which results in an advantage may be given a “false start” at the discretion of the officials. This applies to pushing the car directly or by using the opaque cover to help push start the car. Push starts are forbidden.

11.10 Time to Move: A car will be given 15 seconds to start moving after the start of the race. Starters may not touch the car once the race has started. See Section 8 above for how to determine the winner if the cars do not move.

11.11 No Touch Rule: Team members may not accompany or touch the vehicle while it is racing on the track. Vehicles stalled on the track may be retrieved after the end of the race has been declared.

5. Finish Line Officials

12.1 Declaring a Winner: The finish line race official must determine which car has won. This can be more difficult than it sounds. Some races can be very close and it is difficult to tell which car won.

- The winner of the race will be the first vehicle to cross the finish line.
- If neither car crosses the finish line, the winner will be the car that goes farthest down the lane.
- If neither car finishes the race, but they go the same distance, the car which reached that point on the track first will be declared the winner.
- If a car comes off the guide wire, even if it has gone the farthest down the lane, it will be given a loss and the other vehicle will be given the win.
- If neither car moves when the race is started, both cars will be given a loss. However, the race officials have the authority to request that the 2 teams come back in about 3 to 4 minutes. This will allow a little time for the teams to try to fix the problems.

If the finishing order cannot be determined, the race officials have the option to allow

the same two cars to run again preferably in different lanes. Also, the race officials have the authority to discuss other options to determine a winner.

Again, vehicles that come off the guide wire (cable) during the race will be given a loss for that race.

12.2 Recording the Winner: Ensure the record sheet is filled in with the correct information.

12.3. Protests: Challenges protesting the winning order of the heat must be made before the race judges begin the next round of heats. All challenges must come from the race team members who are actively competing, not spectators. The decisions of the race judges are final.

A Note to Parents

Your son/daughter has chosen to participate in Earth Day Ottawa's Solar Sprint contest.

The students in each school have 2 main tasks. The first task is to design and build at least one vehicle that will complete a 20-meter race in the fastest possible time. The second task is to create at least one website or at least one digital video or at least one PowerPoint presentation for judging a week before race day. These tasks will help their research and computer skills.

The time commitment for each student will depend on how the project is handled by the school. It may be done in class, or as an after school club project. Students will build solar powered cars using the solar panel, motor, switches, etc provided by the school. They may need to scavenge for parts and materials to build some parts of the car. Trial and error building methods are used and **all work on the cars, web sites, digital videos and PowerPoint presentations must be done by students.**

The race event will be held on a Saturday in May. Everyone will be notified of the exact day and location in a separate notice. **There is no rain date – we will proceed in any weather.** The race will be held outside unless it is raining. Batteries are used to power the cars if the weather is poor.

Depending on the number of entries, it could be a full day event. **Check-in and technical inspection time is from 9:30 to 10:30 AM. Expect racing to start shortly after 10:30 AM and it may run to approximately 2:00 PM.**

Families are welcome to come as **spectators**. Please note that spectators are asked to keep toys, pets and items that may interfere with the racing well away from the track area. Basket balls, soccer balls, tennis balls, golf balls, Frisbees (disks), etc are to

be kept well away from the track area. If any one of these items were to hit a car, it could damage the car beyond repair. There have been too many close calls in the past. If you are watching siblings of contestants, please refrain from playing with potentially damaging toys in the event area.

On race day, an adult must accompany the students and be responsible for them. The organizers of the race are not in a position to baby-sit!

Prizes will be awarded to the 3 fastest cars and the 3 best computer related activities in each category as determined by a panel of judges. The computer related competitions are opportunities for non racing classmates to participate in the contest. **The fastest cars will be decided by a series of double elimination heats.**

Students are responsible to bring a lunch, snacks, and appropriate clothing (including a hat) for race day. **Please, no food or drinks in the track area and please obey the local rules of the host site regarding food and drinks.**

The students are expected to behave in a courteous and sportsmanlike manner at all times. Students who cannot make the designated race days should let their teacher know as soon as possible, so an alternate can be chosen.

We hope that you will support your student in this fun and educational endeavour.

Should you have questions about this event, please contact your child's teacher, or the Coordinator at the number listed below.

Elaine Gibson
Solar Sprint Coordinator
Earth Day Ottawa (www.earthdayottawa.ca)
Phone: 613-599-3112
e-mail: see web site for email address