

Pinewood Derby Information 2008

Cars were distributed at the Den meetings the week of 2/4. If you need a car, contact your Den leader or Lorin H. Siblings are also welcome to make a car and race (subject to the same rules).

The pack meeting on 2/19 is designated "cut out night". We will have saws available to do rough cutting on the cars. It would be helpful if all scouts could think about what they want their car to look like, and, if possible, draw on the car where they would like it cut (we can help with that at the meeting if they are having trouble with this).

The pack meeting on March 25 will also have some time allotted to working on cars – putting on finishing details, and most importantly, getting them close to race weight (see below for more detail on this below).

Weigh-in and Race Day

Cars shall be submitted for inspection on Friday night (April 4) at the Radnor Elementary School (RES) cafeteria/lobby between 6:30 PM and 8:30 PM. No entries will be accepted after that time. Our race officials will help you get the car's weight to the maximum so be ready to "tweak" your car on-site Friday night. Cars that do not conform to the published rules will be given until 8:30 PM to correct any infractions so please come early if you can. **Anyone who needs more information on the rules, see below or contact Lorin H, race chairperson.**

Once the car is inspected, it will remain at RES overnight and the Scout will not be able to handle it until after the race is finished on Saturday morning. Please note that there will be no test runs on the actual track before the race.

The race will be held on Saturday, April 5 at Radnor Elementary School on Matsonford Rd., near the Radnor SEPTA station in Wayne. **The racing events begin at 8:00 AM and should be finished no later than 11:30 AM.** Trophies will be awarded for the first three places and each car will receive a customized participation ribbon for entering. There will also be an award to the top sibling car that the sibling was actually involved in making (you can race extra cars as sibling cars, but they will not be eligible for the prize).

This is a very exciting event so bring the whole family. Pack 19 has a very fast, high-tech track with digital timing and computer-based race management. Current top speed on the track was measured at a real-world equivalent of 217mph at the 2006 race.

Official Rules

- Cars must be built using the BSA Official Pinewood Derby Kit. That means the car should be made out of the wood block, wheels and axles supplied. You can cut, sand and or otherwise modify the kit provided it does not violate other rules (especially regarding size, shape, and moving parts). This rules out buying third-party wheels, axles, body kits, and pre-made cars (yes... people do things like this... ugh). The official kit was handed out at the February Den meetings and looks like:



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- If you did not get yours, contact Lorin H. Additional official BSA kits can be obtained from the Scout Store. Many local hobby shops also stock Pinewood Derby car kits and other supplies.
- Here is a statement of the rules as provided in the official BSA car kit:

"Wheel bearings, washers and bushings are prohibited. The car shall not ride on springs. Only official Cub Scout Grand Prix Pinewood Derby wheels and axles are permitted. Only dry lubricant is permitted. Details, such as steering wheel and driver are permissible as long as those details do not exceed the maximum length, width and height specifications. The car must be free-wheeling with no starting devices. Each car must pass inspection by the official inspection Committee before it may compete. If, at registration, a car does not pass inspection, the owner will be informed of the reason for failure and will be given time within the official weigh-in time period to make the adjustment. After final approval, cars will not be reinspected unless the car is damaged in handling or in a race."

Car must meet the following specifications: Maximum Width 2 3/4", Maximum Length 7", Weight: Not to exceed 5 oz. Width between wheels: 1 3/4". Bottom clearance between car and track 3/8". Moving parts (other than the wheels) are prohibited.

Comments on the Rules

- To adhere to the specifications, the original dimensions of the block should be preserved where the wheels are attached. This is absolutely critical - the car will be disqualified since it won't fit on our track and there is no way to repair the car to meet the rules. (I note this especially since some "performance optimization" guides for Pinewood derby racing advocate reducing the wheel width).
- The block, axles and wheels by themselves do not weigh 5oz. That means you will need to add weight, even if you don't cut the wood block at all, to reach the 5oz maximum. Keeping the car as close to the 5oz maximum as possible is essential for being competitive in the race. We will help you get your car up to weight if need be during the weigh-in. Weight can be added in any number of ways including specialty pinewood

derby weight kits, as well as low-tech solutions such as coins, screws, washers, fishing weights and (yes...) rocks.

Design Suggestions

There are many resources available on the web for design ideas and performance improvements. Some suggestions are:

<http://www.agentz.com/scouts/pinewoodcars.shtml>

<http://www.rahul.net/mcgrew/derby/photos/builders.html>

There are a variety of other guides and suggestion sites on the Internet that can be found by simple search.

Questions

Contact Lorin H the race Chairperson.