

Pack 30 Pinewood Derby 2017

Ladies and Gentlemen start your engines. The Pack 30 Pinewood Derby is about to begin. Each year we host a Derby Day where our Scouts compete for the fastest or most stylish cars in the Pack. This year we will be handing out cars at the December pack meeting and race them in February, giving you two months to carve, sand and paint your car so that it's ready for race day.

Attached to your car is our specification sheet and below are the rules and regulations, which we will use during the inspection day to ensure your car is "street legal". This assures uniform weight and that the car will run down the track without issue. You have been assigned a number already. Please make sure that appears on your car. Also, please read ALL of the rules below, and read through the specification sheet. It speeds up the registration process if everyone comes prepared.

To accommodate all of our raceers, this year we will be running the Race on **Saturday, February 11th, 2017** at the Randall School Gym. Times will follow closer to the race day. This will allow us time to run the 60+ cars we will have in the race.

As a father (and engineer) I know how exciting it can be to build a car, but I implore you to please let your Scout do most of the work on this project. It is much more meaningful for them, and you will be surprised at the skill and creativity they bring to this project. Even if it's just a block of wood with wheels going down the track, it's theirs and they will be proud of it. If, however, you really want to build your own car, or your Scout's other siblings want a chance to compete, kits are available for purchase. They are \$3.99 and the pack usually has a few extras. Otherwise they are available at the Scout Shop on Bluemound Rd. or at Sherper's (call to ensure they're in stock).

If you have never done this before or are looking for more resources, I recommend the following resources to help you build your car:

- The scout shop will have an open test day near the end of January, at the scout office. They will have a track set up for testing your car as well as a scale to test weights. The scout office also has some great accessories (decals, tools, weights). So, check it out if you have a chance. Menards also has a great selection of accessories, lubricants and weights at good prices.
- If you're looking for more ideas, please check out one of the Lowe's events as well. <http://dremelderby.com/>. There is a fun template program on their Web site that will let you print out one of several choices of car style. Some do not conform to our rules, so be careful
- There are some great sites on the Internet on the science behind the Pinewood derby. Check out these links if you have not seen them yet to provide you with that extra 'edge' when creating your car. (Again, please note you need to follow our rules about wheels and weights, not the suggested methods to make your car faster).
Boys' Life - How to Use Science to make a Fast Pinewood Derby car.
<http://boyslife.org/hobbies-projects/projects/138909/use-science-to-make-a-fast-pinewood-derby-car/>
Boys' Life - How to make a fast pinewood derby car.
<http://boyslife.org/hobbies-projects/projects/2952/speed-secrets/>
- Remember, you don't need a woodworking shop to make your car (although it does speed the process). Hand tools work just as well. Just remember to design your car first, apply the markings to the block of wood and cut as much away as possible before sanding. If you still have questions or need help, please contact your Den leaders or other committee members.
- Lastly, this is a fun project for your Scout to work on. Provide help where necessary, but remember, it's more rewarding if they do most of the work themselves.

The following are the rules and regulations for our race. These were not put here to take the fun out of the event, but instead, to make the race fair for everyone.

Rules & Regulations:

1. The car must be built for the current Pinewood Derby Racing Season. NO REPEATS or REPAINTS.
2. A completed car purchased or tuned from a third party is not allowed.
3. Maximum Overall Width is 3".
4. Minimum Width between wheels is 1 7/8"
5. Maximum Height is not to exceed 3"
6. Minimum Track clearance (bottom clearance between the car and the track) is 3/8" (please keep this in mind when placing weights on the bottom of the car).
7. Wheelbase: the distance between the axels must NOT be changed. You must use the existing Axel grooves.
8. Front of the car: No part of the car can extend beyond the starting post and the front of the car must be no higher than 1/2" where it contacts the starting post. It must also be at least 1/2" wide at the center of the car.
9. Official materials must be used: Wheels, axels, wood.
10. All parts must be securely attached.
11. Wheel contact – ALL four wheels MUST be in contact with a flat surface when the car is placed on it. The wheels must be attached to the sides of the car body. Each wheel must be attached to the Car's wood chassis with a legal axle.
12. Wheel shape – THE SHAPE AND FORM OF THE WHEELS CANNOT BE MODIFIED OR RESHAPED, however wheels may be sanded to remove molding burrs. Wheels may not be tapered or rounded.
13. Maximum Weight – Not over 5 ounces (141.75 grams).
14. Lead (Pb) weight, if used, must be completely sealed and safe from all possible contact with youth.
15. Dry lubricants only for axel lubrication.
16. No starting devices or propellants.
17. Most of all, have fun!

The Categories this year are:

- Best Designed Car
- Best Painted Car
- Funniest Looking Car
- Fastest Looking Car
- Most Realistic Car

If you have questions on any of this, please ask. We just want to have a good time and be fair to all.