

# Timberline District Pinewood Derby

## Primer



The purpose of this primer is to give helpful hints and suggestions for all Cub Scout packs in running their unit pinewood derby and prepare all participants who choose to participate in the Timberline District wide Pinewood derby race.

A pinewood derby race is a fun and exciting time for Cub Scouts to take a simple race car kit and craft it into an exciting racing machine to compete in a race. The winners are obviously thrilled when they are called in front of the pack and presented with their trophies, and sometimes this can be the same boy over and over again. The intent is to have the pinewood derby car build by the Cub Scout with the help of an adult, and it can be perceived that the adult may do more of the work than the scout. The judgment to the amount of help the scout receives from the adult is left up the adult who is helping the scout. There is not much of anything that the Cub Scout pack leadership can do about this, but what control the leadership has over the amount of help is to ensure the playing field is level through detailed and comprehensive written rules for the pack. Enclosed with this document is a copy of the Timberline District Pinewood Derby Rules. These rules are updated every year, mostly to explain who and who cannot participate in the district race. The basic premise of the rules (Length, Width, Clearance, Wheels, Axles, Bodies, Weight, Lubrication, Ground Rules, Dress Code, Inspections and Disputes) to what can and cannot be done to the pinewood derby car kit remains mostly unchanged. I would recommend that you adopt these rules for you unit's pinewood derby race. Please feel free to copy the rules verbatim, and adjust the participant's portion (Eligibility of Contestants and Cars) to meet your unit's needs. Remember, that if you choose to change the portions of the rules that outline the limitations to what can be done, or not done to the official Boy Scout Pinewood Derby kit, may disqualify the car for the district race.

Pine wood derby season generally runs October through May of each year. Just remember, that the District race generally occurred the weekend before Mothers Day in May, and if your pack plans to participate in the district race, the car must be built during the current pinewood derby season (October of the preceding year through May of the current year of the district race). Cars built the year before will not qualify.

**The Derby Car Kit:** Depending on the amount of expendable cash your unit may have, the Official Boy Scout Pinewood Derby car kit makes an excellent Christmas gift for the boys. With this kit, a copy of the rules, you can give your scouts and families enough time to build and race a car for your unit and participate in the district wide race. Recommend that you only give one kit to the scouts. Any

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replacement kits are either purchased by the scout from an official Boy Scout supplier or from the unit at an extra fee.

**Building the Car:** Some scout families may not have the facilities or experience to design, cut, shape, sand, and paint a pinewood derby car. One solution is to have a Pinewood Derby build day for your pack. Solicit the members of your pack to see what resources are available for a build day. Some tools that are helpful are; copies of pinewood derby car designs, blank graph paper, band saw (cars are cut by an adult only), rasp files, sand paper, drill, metal files, power sanders (used by adults only), coping saws, C clamps, clamps, glue, paint, paint brushes, stickers, hammers, pliers, scale, weights, etc.

You may want to set up stations for the boys to go visit to design the car, cut, sand and paint. Experienced adults who have built pinewood derby cars and show the scouts and adults how to use a portable drill to file off burrs and flanges from the axle and polish the axle and wheels. How to place weights and how to sand, seal and paint their cars. The paints at the build day are there to get the urge to paint the car out of the boys right away and to give thought how to finish a car later with the adult partner. This build day is especially helpful to families who may not have the resources or experience in building a quality pinewood derby car and to help their son design and build an exciting racing machine by subject matter experts.

**Race Day:** Race day is a bundle of excitement for all, especially the scouts. The scouts are excited to show off their finished product and boast how fast their car will be. Much noise of “zooming” can be found and anxious adult partners guarding the finely crafted machine in a well guarded shoe box telling the scout that it’s ready for racing, and not to “run the car across the room”, to “save” that for after the unit’s race.

Check in is the time for the pinewood derby committee to ensure that the cars comply with the units rules. The rules set the level of the playing field and ensure that to the best of everyone’s abilities all cars are in compliance and that any overzealous adult who has done extensive research did not modify the car in any way to make it go faster. Some of the typical modifications that can be done are:

- Wheel modifications to make them thinner in the width or circumference
- Beveling, rounding of the wheel hub
- Coning, beveling, rounding of the axle which makes contact with the wheel
- Overweight
- Placing the axles in other than the pre-cut slots
- Angling the axle other than 90 degrees from the car
- Using other than official “BSA” wheels
- Using other than and Official “BSA” pinewood derby kit

It is important that the individuals who are inspecting the cars have read and understand the rules and that any and all disputes and misunderstandings get ironed out and finalized by the derby master before the car is checked in. You may want to have some extra wheels, axles and tools (drill with drill bit, files,

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pliers, hammer, thick super glue, extra weights) are on hand so cars can be brought into compliance with the rules before check in.

**Races:** Normally there is the race of all scouts who built a car to compete against each other. It's up to you if you choose how you want to race either it be rank specific or an overall race amongst the entire pack. You may find that individual races with the dens with associated awards works well since the Tigers have less experience making cars than Webelos, and then have the overall "top" finisher's awards who will represent the unit at the district race. Since Cub Scouting is a family event you may want to have an "Open class" race, with associated awards, for siblings and possibly an "adults" race for those adults who want to build and race a car. I have even heard of an "outlaw" race which all the rules go out the window except the height, width, length and clearance rules stay the same.

**Disputes:** Recommend that the Cubmaster, Committee Chair, Charger Organization Representative, and Derby Master all be in agreement that once a car has been inspected and checked in, that the determination the car meets the standards outlined in the rules, and is legal to race. If a car is pointed out to being modified, having illegal parts or is just "too fast" be noted, but, once the car is checked in, it will race. This must be the stance of all who are in charge and stand firm that the car was deemed "legal" and ready to race, and award handed out to the winners of the race regardless of what was found after the fact. Do not waiver from this position. It will cost you more than you realize if you deviate from the agreed upon standards and don't speak with one voice. Remember, the race is about the boys having fun, not the adults wanting to win. If you find yourself faced with a mob of parents who found a car that is perceived to be "illegal" you may want to state openly to the entire pack that a error was made by the judges in qualifying the car for the race, but the judgment of the race committee is final (in according to the written rules), and that you would gladly accept any and all help on next year's race committee to ensure this does not happen again in future races. Have some adult application handy to hand out to any and all who continues to protest with a big smile and a "glad to accept your help" attitude.

**Awards:** Order your awards early. There are many on line companies who have pinewood derby trophies and awards. You may want to consider an award to each scout for participation and certificated handed out for special cars such as the "most creative", "looks the fastest," "coolest paint job," etc. Your imagination is the limit. There are Pinewood derby metals available through the scout shop. Boys love to wear medals, and you will see them always on the uniform, even when they get washed!! Happy Racing and May the Fastest Car Win!

See you at the Timberline District wide race!

Charles Mocalac  
Timberline District  
Pinewood Derby Chair