

## Pack 476 Pinewood Derby Rules

Pinewood Derby cars are pinewood models of specified dimensions, designed and shaped by Cub Scouts under adult guidance, and raced by the Cub Scouts. The Pinewood Derby cars are gravity powered and run unaided down a regulation racetrack to a finish line. A strip down the center of each lane may be used to guide the cars in a straight path.

Scouts race in three divisions: Tiger, Cub (Wolf & Bear combined), and Webelos (Webelos and Arrow of Light combined). Winners are determined by fastest times. Each car is run on all four lanes of the track to normalize differences between the lanes.

The top three cars in each division win trophies and go on to compete in the Appalachian Trail District Super Derby in March, for a total of 9 Scouts. If a Scout cannot attend the Super Derby, the Scout in that division with the next fastest time may be sent as an alternate. Scouts must race the same Pinewood Derby cars they raced at the Pack Pinewood Derby during the same program year as the District Super Derby.

Siblings and parents may build and race cars at the Pack Pinewood Derby but do not advance to the District Super Derby. Sibling and parent cars must comply with the same rules as Scouts' cars.

Certificates are also given out for various design categories.

1. Only the parts (wood, nails, wheels, etc.) contained in the OFFICIAL BSA PINEWOOD DERBY KIT can be used to construct the car except for weight additives, decals, DRY lubricant, and other items specifically permitted in these rules.
2. Wheelbearings, washers, hubcaps, bushings, shims, etc., are not permitted for use on the wheels or axles.
3. Axle slots are pre-cut into the wood block provided in the kit. These slots are the only place permissible for mounting the axles and wheels.
4. The only acceptable lubrication for the Pinewood Derby car's axles and wheels is dry powder lubricants. Oil, grease, silicone spray, or other wet lubricants are **NOT PERMITTED** as they can damage the track. Lubricating powder can be applied to the cars prior to check in.
5. No loose materials of any kind are permitted on or in the Pinewood Derby cars. Fasten weights and decorative elements firmly
6. The overall Pinewood Derby car width shall not exceed 2-3/4 inches.
7. The overall Pinewood Derby car length shall not exceed 7 inches.

8. The overall Pinewood Derby car height shall not exceed 5 inches.
9. The distance between opposing wheels (width) of the Pinewood Derby car must be at least 1-3/4 inches, so that it can properly straddle the racetrack.
10. The unobstructed clearance of the Pinewood Derby car must be 3/8 inches or more from the total underside of the car to the base of the wheels.
11. The Pinewood Derby car shall not exceed the standard 5 ounces or 141.75grams. The weight of the Pinewood Derby car should be 5 ounces prior to coming to the derby; however, the Pinewood Derby car may be adjusted prior to final check in, to allow for variances in scales.
12. Only the nails provided in the official Pinewood Derby kit can be used as the pinewood derby axles. However, they can be sanded or polished, and affixed (glued, etc.) to the underside of the pinewood derby car in the slots that were precut into the block. NO after-market or vendor-modified nails are to be used. The Cub Scout must work with his parent or guardian, if any modifications need to be done to the nails.
13. Only the wheels contained in the official Pinewood Derby kit can be used as Pinewood Derby car wheels. The wheels cannot be modified into shapes such as "V" or wafered to reduce friction. Slight imperfections can be removed from the wheels. REPEATING: Absolutely no after-market or vendor-modified wheels are to be used. The Cub Scout must work with his parent or guardian, if any modifications need to be done to the wheels. The wheels cannot be modified into shapes such as "V" or "u" or thinned to reduce friction or weight. Only SLIGHT imperfections can be removed from the wheels. The installation of weights in the wheels is not permitted . Purchased "ultra" wheels will be disqualified.
14. The Pinewood Derby car can be painted and/or waxed to finish the car for the purpose of reducing air friction. Plating or plasticizing is not permitted.
15. If a car is found to be in violation of the above rules at check-in, the Scout will be given the opportunity to bring the car into compliance. If the car can be brought into compliance, it will be allowed to race and qualify in the official standings. If the car cannot be brought into compliance, the Scout has the option to race but not qualify for the official race standings. However, violation of the height restriction or the prohibition against wet lubricants disqualify a car from racing due to the danger of damage to the track.
16. Once a Pinewood Derby car is officially inspected, approved, and checked-in, no one is allowed to handle or repair the car except an authorized race official or the Cub Scout who constructed the car.

17. Race officials may re-inspect a Pinewood Derby car at any point in time during the Pinewood Derby for possible violations.
18. In the unlikely event that a car is run more than three times in races that do not count (i.e. timer or track issues prevent a "clean" race) then the Cub Scout may re-lubricate his car with dry lubricant (not provided) one time, under the supervision of a race official.
19. If a car leaves its designated lane during a race, it may be considered a "Did Not Finish" for that race unless it interferes with another car's ability to finish. In such a case, the race will be re-run (at the judge's discretion).
20. In the event of a tie in the top three positions, a one-time run-off will occur for those cars involved in the tie.
21. Race officials' and judges' decisions are final. Remember to conduct yourselves as Scouts with honor, goodwill, and good sportsmanship at all times.
22. Observation of or knowledge of rule violations needs to be reported to a Scout leader..
23. Any questions about the rules prior to the event can be addressed to the Cubmaster at [cubmaster@middletowncubs.org](mailto:cubmaster@middletowncubs.org).