



Lenape Trail District Pinewood Derby District Championship 2020 Rules

The purpose of the rules is to provide a reasonable and level playing field for all contestants. Please read and heed the rules! If you have uncertainty about what is allowed, please contact the 2020 District Pinewood Derby Committee at ser@progressroot.com.

Eligibility of Contestants and Cars

- The 2020 Lenape Trail District Pinewood Finals are open to all Cub Scout packs within the Lenape Trail District. Packs may enter up to 6 cars, one for each category. These are each rank winner from the pack Lion, Tiger, Wolf, Bear, Webelos I, & Webelos II. In case of illness or a valid conflict, an absent scout may be represented by a family member.
- The 6 entry categories include: Lion, Tiger, Wolf, Bear, Webelos I, and Webelos II. A racer must have been a registered Cub Scout as of January 1, 2020.
- **Participation is by pre-registration only.** Registration and deadlines will be published on the LT web site.
- **Pre Race check-in is required:** The pre race check-in is scheduled for Thursday, April 2nd at the Trinity Gymnasium, 235 Bloomfield Ave, Caldwell. No race day registrations or weigh-ins are allowed.
- Cars in the 2020 Competition must have been made for this race season (September 2019 to race registration dates). Cars or parts of cars such as wheels or axles, from previous years may not be used.
- Construction of cars should be done using the block in the official Grand Prix Pinewood Derby kit or authentic BSA approved parts that are purchased at an authorized BSA Scout Shop or authorized BSA retailer.

Ground Rules

- If a car jumps off the track due to a mis-mount or for any reason, the heat will be run again. If the same car jumps off the track a second time for the same heat and determined car engineering was the cause, it will be given a Did Not Finish time.
- If a car leaves its lane & interferes with another car, the heat will be run again. If the same car leaves its lane a second time and interferes with another car, the heat will be run again without the interfering car.
- If a car suffers a mechanical problem and a repair can be accomplished within 5 minutes, the heat will be run again. Cars can be repaired only under the supervision of the Official Inspection Team.



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Inspections and Disputes

- Each car must pass inspection by the Official Inspection Team before it may compete. There will be one inspection opportunity in the week prior to the race.
- No race day inspections will be performed, and the car must register and be inspected by the inspection date.
- The car will be impounded once passing inspection and be securely held by the LT District Derby Race Staff until race day. The cars will be stored at the Council office in safe keeping, and brought to the facility for the race.
- The Inspection Team has the right to disqualify those cars which do not meet the rules. Car owners or their representatives will be informed of the violations and given an opportunity to modify the car to meet these rules.
- It is recommended that each racer brings tools to the weigh-in for any unforeseen compliance issues with the District Rules in this document.
- Once a car is approved and checked-in, it may not be touched or removed from the impound area.
- Un-ladylike, un-gentlemanly, or conduct conflicting with the Scout Law by any participant or member of their racing team will be grounds for expulsion from the weigh in or race day competition.

Length, Width & Clearance

- Maximum overall width (including wheels and axles) shall not exceed 2-3/4"
- Minimum width between wheels shall be 1-3/4" to clear the track center rail.
- Minimum clearance between the bottom of the car and track shall be 3/8" so the car will clear the center guide strip.
- Maximum length (including wheels) shall not exceed 7-1/8".
- The wheelbase (distance between the front and rear axles, center to center) shall be the same as the default kit body distance of 4-3/8".
- Axles are to be positioned 1 inch from one end (usually the front) and 1 & 5/8 inches from the other end (usually the rear), as in the standard official Grand Prix Pinewood Derby kit. Cars can be run in either orientation (front facing or rear facing).
- The maximum height is 2 & 3/4" to clear the timer tunnel.



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Wheels and axles

- Only the wheels and axles from the official Grand Prix Pinewood Derby kit may be used. Wheels and axles not from the official kits are prohibited with the exception of official BSA colored wheels available at an authorized BSA retailer such as the Scout Shop.
- Axles may be lightly filed, sanded and polished. This light filing, sanding and polishing is the only axle modification allowed.
- Wheels may be lightly sanded and polished. This light sanding and polishing is the only wheel modification allowed.
- Wheel bearings, washers, or bushings are prohibited.
- No inner wheel weights, air dams, or any other inner wheel accessories are allowed. No wheel covers, cosmetic or other, translucent or other, are allowed.
- The car shall not ride on any type of springs. The car must be free-wheeling with no starting device or other propulsion, such as adhesives, magnets, rubber bands, motors, jets, etc.

Weight and Appearance

- Weight shall not exceed 5 ounces. The readings of the Official Race Scale will be considered final. A word of caution. We have been advised that some US Postal scales might weigh cars slightly light (approximately .1 ounce). It is advisable to have shed'able weights that can be added or removed at weigh-in.
- The car may be carved, sculpted, and/or sanded in order to enhance performance and/or appearance.
- No loose materials of any kind are permitted on or inside the car.
- Additional materials may be added to the car for the following purposes only:
 1. Weights may be added to increase the weight and/or alter the weight distribution of a car.
 2. Paints/decals/decorations may be added to alter the appearance and/or aerodynamics of a car. Car body fenders are allowed.
 3. Glue may be used to adhere the axles to the car body.
 4. Wood putty, or a similar wood-like substance, may be used to repair minor damage to a car.
 5. Details such as steering wheel, driver, spoiler, decals, painting and interior details are allowed as long as these details do not exceed the maximum length, width, height, and weight. Metal frames and metal axle supports are prohibited. Axles must be mounted into the wood.
- Car bumpers or noses cannot extend beyond the start gate pin in any way and are prohibited.



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Lubrication

- Only dry powdered lubricants, such as graphite or white powder Pinewood Derby Car Lubricant, may be used. Oils and silicone sprays are prohibited. Graphite will be applied to any car that is suspected of using liquid lubricants. Note that graphite added to oil creates a gum like substance and increases friction rather than reducing it.
- A car may be lubricated with graphite before inspection. Once checked in, no further modifications or lubrication will be allowed. Cars may not be lubricated on race day, before or during racing.

Racing Process

- The race is structured to race regardless of Rank where Cubscouts of different rank will race together. The LT Race Staff will determine the car order and schedule on the morning of the race. The 1st place speed winner from each rank will race together in a Grand Final for the fastest overall District Derby title.
- Each car will have an opportunity to race four (4) times, once in each lane of the Official Track. This compensates for any lane performance deviation. A race between four cars is considered a heat. The four heat times will be accumulated to determine a car's overall time and standing against other racers in that rank.
- The 1st place racer from each rank will be promoted to a Grand Final Round, and each car will again race 4 times, once in each lane. The four heat times will be accumulated to determine a car's overall time and standing against other racers in the Grand Final Round. The fastest car (with the lowest accumulated time total) will be declared the faster Lenape Trail District Cub Scout for 2020.

Trophies

- Trophies will be awarded to the following:
 - Lion 1st, 2nd, 3rd Place Speed Winner
 - Tiger 1st, 2nd, 3rd Place Speed Winner
 - Wolf 1st, 2nd, 3rd Place Speed Winner
 - Bear 1st, 2nd, 3rd Place Speed Winner
 - Webelos I 1st, 2nd, 3rd Place Speed Winner
 - Webelos II 1st, 2nd, 3rd Place Speed Winner
 - Overall Grand Final 1st, 2nd, 3rd Place Speed Winner