



2022 District Pinewood Derby

Information and Official Rules

General Information

District Race Day:	Saturday, April 23, 2022
Location:	Hubler Chevrolet 8220 US-31, Indianapolis, IN 46227
Car Check-In:	8:00am – 9:00am <i>SHARP</i>
Racing Begins:	Shortly after Check-In Window closes, approx. 9:15-9:30 am
Pack Races:	Must be completed by Sunday, April 18, 2022
Registration Deadline:	11:59pm on Sunday, April 19, 2022

Purpose

The main purpose of the Pathfinder District Pinewood Derby, as is true for all Cub Scouting Pinewood Derbies, is for Cub Scouts and their parents to spend time together working on a ***FUN*** project. While every Scout will need assistance to complete this project and is meant to be a shared experience between both Scout and Akela, it is **NOT** meant to be a contest to see which *parent* can build the best car.

Another purpose of the Pinewood Derby is to help teach youth about sportsmanship. There are specific rules that must be followed. Teaching Scouts how to compete, while still following the rules, is an important lesson. Showing respect for others, whether they win or lose, is also a lesson for the youth to learn.

- Unsportsmanlike conduct will not be tolerated. The derby officials have the authority to disqualify any Scout or ask any adult to leave the building if they behave in an unsportsmanlike manner.

The first two rules of the competition will be the Scout Oath and Scout Law.

Finally, help your Scout remember the Cub Scout Motto: “**Do Your Best**”. The following statement comes from a former derby official:

While helping at one of the tables after the district pinewood derby, a Scout said to me, “Forty-fifth! I did terrible.” I explained to the Scout that he did great. The difference between his car and the first car was only .8 of a second and that was the total difference to be divided by four races. I asked him if he could count to .2 of a second. It is quite possible on a different day, with a different order of cars; his finishing place could have been different. I also told him that 45th out of over 1,000 Cub Scouts in the district was really good.

Remind your Scout that getting to the District Pinewood Derby is a great accomplishment. If a Scout did their best, then they are living up to the Cub Scout motto.



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Qualifying & Racing Divisions

There are seven divisions that Scouts *qualify* through their Pack's Pinewood Derby race to participate:

- **Lion Division** – for Cub Scouts in Kindergarden
- **Tiger Division** – for Cub Scouts in 1st Grade
- **Wolf Division** – for Cub Scouts in 2nd Grade
- **Bear Division** – for Cub Scouts in 3rd Grade
- **Webelos Division** – for Cub Scouts in 4th Grade
- **Arrow of Light Division** – for Cub Scouts in 5th Grade*
- **Best in Show Division** – for any Cub Scout in Kindergarden – 5th Grade**

Each pack may register **two** (2) cars in each of the racing divisions (2x Lions, 2x Tigers, 2x Wolves, 2x Bears, 2x Webelos 1s and 2x Arrow of Light / Webelos 2s) and **one** (1) car for the Best in Show division to participate in the District Pinewood Derby.

*** Special Note about the Arrow of Light Division** – By mid-April, it is likely most Scouts in the 5th grade have already transferred to Scouts BSA Troops. However, if a Scout was a member of an Arrow of Light / Webelos 2 Den at any time during the 2018-2019 school year AND participated in their Pack Pinewood Derby, that Scout will be allowed to participate (even though the Scout may be a Scouts BSA Troop member at the time of the race).

**** Special note about the Best in Show Division** – This year, Best in Show car entries WILL be racing along with the rest of the car entries, competing for not only the Best in Show design award, but also Best in Show speed award in their own Best in Show class! HOWEVER, a car may only be entered in EITHER Best in Show OR their Scout rank class, but NOT both. The Scout & Pack will need to determine where a car eligible for both wishes to enter.

Open Division – There will also be an eighth “Open” Division for any cars wishing to race which did not qualify for the Scout Rank or Best in Show divisions noted above, with its own 1st - 3rd Place racing speed awards. This division is open to any sibling (youth) or Scout (youth) cars wishing to enter and race that day. (Youth only; no adult entries, please.) However, these cars must meet the same car rules and requirements as all other entries, and must pass the same car inspection upon check-in; this is NOT an “Outlaw” or an “Adult” class. *(Please note: Open Division cars are not eligible for the Top 6 Overall trophies, as cars must have qualified through Pack races to be eligible for these awards.)*



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Registration

Please note the following instructions, rules and restrictions regarding car registration:

1. Please complete your Pack's online registration as soon as possible to reserve your entry spots.
2. ONE Pack leader or representative for each Pack will need to complete a single registration for all Pack-qualifying cars to the District Pinewood Derby (ie: cars qualifying in the Lion, Tiger, Wolf, Bear, Webelos, Arrow of Light or Best in Show Divisions).
3. Scouts and their Akelas **may NOT** register on their own for the Lion, Tiger, Wolf, Bear, Webelos, Arrow of Light or Best in Show divisions. They may register on their own for the Open division only.
4. Each pack can register a maximum of thirteen (13) cars in in the competitive divisions (2x Lions, 2x Tigers, 2x Wolves, 2x Bears, 2x Webelos 1s, 2x Arrow of Light / Webelos 2s, and 1x Best in Show).
5. Both boys and girls will register and compete in the same divisions by rank / age group; there will not be separate divisions by gender. If for some reason a Pack had separate divisions by gender in their Pack Pinewood Derby race and have two 1st place and two 2nd place finishers for a(n) rank / age group, the Pack will need to choose only two of those cars to register and compete in the District race.
6. Only Scouts registered pre-registered online will be allowed to participate in the competitive divisions; walk-in registrations will not be accepted. (Cars wishing to enter the Open Division are strongly encouraged to pre-register through the online registration system as well.)
7. **Scouts must be present to race their car; there will be NO exceptions to this regardless of schedule conflict.** (This event is about the Scout, not the car.) If a Scout is unable to attend, the pack may appoint a substitute racer no later than April 16, 2019. The substitute will race their own car.
8. Payment of \$5.00 per Scout / car entry will be due when the Pack registers online.
9. Registration will close at 11:59pm on Thursday, April 16, 2019.



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Information about Race Day

- Scouts will need to check in their cars between 8:00am – 9:00am; car check-in and inspection will close promptly at 9:00am, and late submissions will not be accepted. Arriving at the beginning of the check-in period will allow you time to make changes to your car if it doesn't pass inspection the first time. Please understand that there may be a line at check in – it does take time for the judges to inspect each of the cars.
- Once cars have been checked in, they may not be altered or adjusted in any way.
- The races will be conducted on tracks that use electronic timers. Each car will be raced one time on each lane of the track to determine their average time.
- All cars will race on a single race schedule, with multiple (all) race divisions racing at the same time in co-mingled heats. However, the computer will use the times to calculate the results for divisions individually. Remember, the “place” your car finishes in individual heats does not matter, only the length of time it took to go down the track factors into the final results.
- The computer program is designed to race the cars at random. Therefore, the derby officials will not be able to tell you in advance when a Scout's car will be racing.
- Please note that there will only be one Open Division – any youth (Scouts or siblings) entered in that division will be competing against both boys and girls of all different age levels.
- If a car fails to successfully complete a run down the track for any reason, the car will receive a maximum time score of 9.999 seconds and the heat will NOT be re-run. However, the computer will eliminate each car's slowest time, so a single incident will not impact the car's overall finish.
- Any disputes will be handled by the official judges who have the final decision. Any Scout and/or their Akela who does not compete in the best traditions of the Scout Oath and Scout Law, or anyone who causes disruptions or arguments about decisions, will be disqualified from the competition and asked to leave the event, and their home Pack will be notified of their behavior.

Awards & Trophies

- 1st Place – 3rd Place for each Division Championship Class
(Lion, Tiger, Wolf, Bear, Webelos, Arrow of Light, Best in Show and Open)
- 1st Place – 6th Place for Best Overall Grand Championship
(Lion, Tiger, Wolf, Bear, Webelos, Arrow of Light and Best in Show Divisions COMBINED.
Please note: Open Division cars are not eligible for the Top 6 Overall trophies, as cars must have qualified through Pack races to be eligible for these awards.)
- Best in Show Trophy for Judges' Selection of Best-Designed Car in the Best in Show Division



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Official Rules for Car Entries

Please review the rules carefully, as these rules may be slightly different than the rules your pack uses. All cars must meet the following inspection points, or be subject to disqualification.

1. All Scouts must be present for their car to compete; no absentee entries. (The YOUTH advances, not the car.)
2. Cars should be built from the materials in an official Grand Prix Pinewood Derby kit sold by the BSA.
3. Cars must have been built NEW for the 2019-2020 Pinewood Derby season; previous years' car entries will not be permitted.
4. Only wheels and axles provided in the BSA Pinewood Derby car kit will be permitted. (If you use another manufacturer's kit from Hobby Lobby, etc. for the body of your car, you will need to purchase official BSA wheels and axles to use on the car. The wheels and axles can be purchased at the Crossroads of America Council Scout Shop.)

4.1 - All lettering and numbering, both inside and outside of the wheel, must remain complete and be visible with the wheel on the car.

4.2 - The fluting, spokes and other markings on the outside wheel area must remain visible. ("Fluting" refers to the small bumps on the outside edge of the tread.)

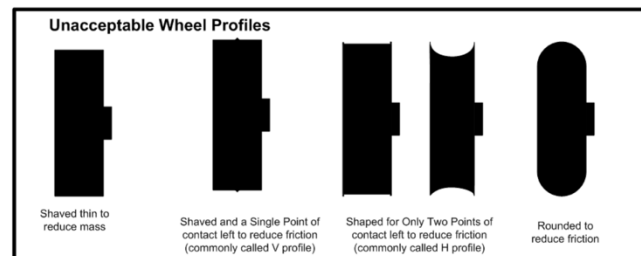
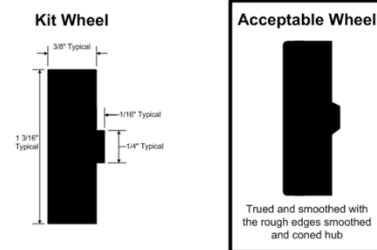
4.3 - The wheel diameter must be no less than 1.16 inches.

4.4 - The tread surface width must be no less than 7.5mm.

4.5 - The tread surface must be flat and parallel to the wheel bore. Therefore, the following modifications are prohibited: 1) *rounding of the tread surface*, and 2) *grooving, H-cutting, or V-cutting the tread surface*.

4.6 - The following wheel modifications are prohibited: 1) *removing material from the inside tread surface or the inside sidewall surface*; 2) *drilling holes in the tread, sidewalls, or spoke area*; 3) *removing material from the sidewalls or spokes*; 4) *filling wheel tread with any type of material*; and 5) *filling the wheel bores and re-drilling the bore*.

4.7 - The rules permit many wheel modifications, so long as you observe the dimension limits and restrictions listed above. Common legal modifications include but are not limited to: 1) *truing the tread surface with sandpaper, straight edge, or lathe to correct "out of round" wheels*; 2) *truing and shaping the inner edge of the tread surface*; 3) *narrowing the tread surface to 7.5mm to get straight edges*; 4) *applying wheel bore treatments such as polish and wax to smooth the bore*; 5) *tapping the wheel bore*; 6) *truing and re-coning the tip of the inner hub*; 7) *removing the double step from the outer hub*; 8) *balancing the wheel by adding material such as glue or fingernail polish to the inside of the wheel*; and 9) *adding a transparent cover to the inside of the wheel to reduce air drag*.



Some online vendors sell aftermarket BSA wheels that have been lightened by removing material from inside the wheel surfaces. Per rule 4, and specifically rule 4.6, these wheels are NOT allowed and are easily recognized at inspection. Cars with these wheels will NOT be permitted to race. If you plan to use aftermarket wheels, confirm with the vendor that no weight is removed from inside the wheel.



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5. The car **MUST** have four wheels mounted to the car; they do not all have to be in contact with the track simultaneously, though judges will not be responsible if this causes instability during racing.
6. The maximum width of the car, including wheels and axles, shall not exceed 2.75 inches.
7. The minimum width of the car between the wheels shall be 1.75 inches. There is a guide strip on the track that is 1.75 inches wide.
8. The minimum underside car body to track clearance must be 3/8" at all points under the car.
9. The maximum height of the car shall not exceed 5.50 inches. This height limit is in place so that the cars will fit under the finish line gates used with the electronic timers.
10. The total length of the car shall not exceed 7.00 inches, including wheels and any decorative features.
11. **The weight of the car shall not exceed 5.000 ounces, as determined by the judges' official scale (which is accurate to 0.005 ounces). Please note that some scales are more accurate than others, and the scale at your Pack race or at home may have different calibrations or tolerances. The judges official scale will be the ONLY scale permitted for determining car weight for entry. (Just because it "made weight" at the Pack race doesn't automatically qualify it at the District race.)**
12. Dry powder lubricant is allowed on the axles. The powder **must** be applied before entering the building. No lubricants will be allowed inside the building.
13. Liquid lubricant is **not** allowed.
14. Wheel bearings, washers and bushings are not allowed.
15. The car shall not ride on springs.
16. The car must be freewheeling with no starting devices. (For purposes of this rule, "starting devices" includes foreign substances – adhesives, etc. – applied to the front of the car to "grip" the starting pin for an artificial starting boost to the car upon dropping of the starting pin.)
17. The car shall have **NO** movable parts / objects / liquids on or contained within the car, other than the four official wheels mounted on the car.
18. The front of the car **MUST NOT** be grooved, slotted or modified in any manner that extends any portion of the car past the starting pin of the track.

If a car does not pass inspection:

- The Scout and their Akela may make alterations to the car until check-in closes, up to the point the car passes inspection and is checked in. (Once checked in, no further alterations may be made.)
- If alterations are unable to be completed allowing for the car to pass the judges' inspection prior to the closing of the check-in period, the car will not be allowed to race.

After the car has passed inspection:

- No alterations nor repairs will be permitted without the approval of a Derby official, and only in extreme or extenuating circumstances.
- If during the event a liquid lubricant is detected on any car, or if a race judge determines any car building requirement or other rule has been violated, that car will be immediately disqualified and removed from the competition.