



**2010 Arapahoe District Pinewood Derby Championships
Saturday, April 10, 2010
General Information and Official "Rules of the Road"**

Get ready for the 11th annual Arapahoe District Pinewood Derby Championships!

This year's District Races will be hosted by Packs 263 and 730 and will be held at **St. Mary Catholic Church – Joachim Hall**, 6853 S. Prince Street (north of Mineral just east of Santa Fe) in Littleton. Joachim Hall is located on the South West side of the church parking lot. This is an optional event intended to enhance your Pack program, with an admission fee of \$7.00 per Scout to help cover the costs of the event. Your Pack may elect to pay this fee for your participants, and all fees will be collected on or before Race Day, before the Scout is eligible to race.

To register, please go to the District's web site at: www.ArapahoeDistrict.org

Please see the accompanying "Rules of the Road" for the for the Arapahoe District Pinewood Derby Championships.

Eligibility: Each Pack in the District can send their **Top 2 racers from each rank** (Tigers, Wolves, Bears, Jr. Webelos and Sr. Webelos). It is recommended that each Pack designate an alternate for each rank, in case the 1st or 2nd place racer cannot attend.

Good luck and have fun!

Sincerely,

Anthony Petito / Kevin Trizna

Anthony Petito (P263) / Kevin Trizna (P730)
Arapahoe District 2010 Pinewood Derby Race Chairmen

Only Cub Scouts officially registered with the Denver Area Council at the time of the District Pinewood Derby are eligible to race, with the exception of Sr. Webelos who participated in their Pack Pinewood Derby, and who are not registered in their Pack's recharter because they are graduating; these Sr. Webelos are still eligible to race. The car entered in this championship must be the same car used in the most recent Pack Pinewood Derby. Cars constructed for previous year's competitions may not be used for this year's race.

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In order to participate, your car must fit within the rules given below. **Your Pack's guidelines may have been different, so please check your car against the Official District "Rules of the Road"**. There will be a small work area to make minor adjustments, but please make the proper measurements, ahead of time, to avoid disappointment. There will be a preliminary weigh-in scale, at the race for you to check your weight before you check-in with the official weigh-in scale. There will also be an area to lubricate your car, but only before it is checked-in. Once the car has been checked in, it will not be touched until race time and then only by race officials.

Race Day Schedule – Saturday, April 10, 2010 at St. Mary Catholic Church – Joachim Hall

(6853 South Prince Street, north of Mineral just east of Santa Fe in Littleton.

Joachim Hall is located on the South West side of the church parking lot.)

8:00 am – 9:00 am Tigers (1st grade) check-in / weigh-in

9:00 am – 10:30 am Tigers (1st grade) race

9:30 am – 10:30 am Wolves (2nd grade) check-in / weigh-in

10:30 am – 12:00 pm Wolves (2nd grade) race

11:00 am – 12:00 am Bears (3rd grade) check-in / weigh-in

12:00 pm – 1:30 pm Bears (3rd grade) race

12:30 pm – 1:30 pm Jr. Webelos (4th grade) check-in / weigh-in

1:30 pm – 3:00 pm Jr. Webelos (4th grade) race

2:00 pm – 3:00 pm Sr. Webelos (5th grade) check-in / weigh-in

3:00 pm – 4:00 pm Sr. Webelos (5th grade) race

3:30 pm – 4:00 pm Finals check-in

4:00 pm – 4:30 pm Finals race

Race Procedures:

Each Scout must bring his car to the Check-in table. If the car fails to meet any of the rules, the Official Race Inspectors will tell the Scout the exact problem. The Scout may change the car to meet the rules, but these changes will not be allowed to delay the start of a race. Each car must pass inspection before it is allowed to compete. Race Officials may disqualify any car not meeting these rules. Any adult or Scout may appeal the findings of the Race Inspectors to the Race Chairman, whose decision is final.

After inspections, Race Officials will register the cars, create a race schedule, and supervise the heats. Race Officials will place the cars on the Starters Table. Scouts may not handle the car again unless bringing the car back to the Starters Table after fixing the car as allowed in Rule #13 below. **DO NOT** take a car off of the Starters Table for any reason, or you may be disqualified.

For each heat, the race crew will stage the cars on the starting line. The Scouts whose cars are in the heat may go to the Finish Line to watch the heat. The car's nose that crosses the finish line first is the winner of the heat, as determined by the computerized finish line. Any discrepancies will be reviewed by Race Officials.

Awards and Patches will be presented at the end of each grade/rank race.

GOOD SPORTSMANSHIP AND BEHAVIOR ARE EXPECTED. Race Officials may ask anyone not following this rule to leave.

Official District Pinewood Derby “Rules of the Road”

While there are many web sites and other resources that discuss Pinewood Derby designs and many Packs have set their own rules regarding their Pinewood Derby races, the following are established as the “Rules of the Road” for the Arapahoe District Pinewood Derby Championships.

In fairness to all participants, cars not conforming to these specifications will not be allowed to race.

1.) Materials: Only official BSA Grand Prix Pinewood Derby Kits may be used. Axles and wheels must be from the official Cub Scout Grand Prix Pinewood Derby Kits. Materials from the kit may be supplemented but not replaced (i.e. addition of decals, weights, exhaust pipes, drivers, etc.).

2.) Axles: The axle nails shall be firmly affixed to the wood of the car body. At a minimum, the pointed end of each official axle-nail must be visible to the judges. If the end of the axle is covered with weights or glue, filled with putty, painted, or otherwise not clearly visible will not be accepted, and will not be allowed to race. Use clear cement if you feel the need to cover the entire axle with glue, as long as the axle-nail tip remains visible. One-piece axles (e.g. Pinecar Kit axles) and machined pins (e.g. Awana Kit axles) are not allowed.

3.) Wheels: Wheel treatment (hub and tread smoothing and polishing) may not result in substantial removal of mass nor in reducing the tread width (track contact) from the original kit wheels. Wheel tread surface must be cylindrical. The words "BSA Pinewood Derby™" on the wheel face shall remain intact and clearly visible to the inspector. Some of the original "tread marks" on the wheel face must be intact (apparent to the inspector). Removal of plastic material on the inside of the wheel is not allowed. The wheels must specifically ride flat on the track, and may not be beveled to ride on a narrow ridge or tilted to ride on an edge. All wheels are not required to touch the track surface.

4.) Construction: Construction of entries must not have begun before the previous year's Arapahoe District Pinewood Derby Championships.

5.) Entries: A Scout may enter only one car into competition. The Scout must be present to check-in his car. This is a Cub Scout/adult project, to be enjoyed by both. As such, the Scout is to participate in the construction of his entry to the best of his abilities.

6.) Car Specifications (as determined by the official gauges during check-in inspection):

Wheelbase: Approximately 4-3/8 inches (113 mm). The original kit axle slot distance must be used; the distance from the front wheel axle to the rear wheel axle CANNOT BE SHORTENED OR LENGTHENED. Use of the axle slots is not required.

Wheel Distance: Approximately 1.75 inches between the wheels.

Overall Width: Not exceeding 2.75 inches.

Overall Length: Not exceeding 7.0 inches.

Overall Height: Not exceeding 5.0 inches.

Max Nose Height: Not to exceed 1.25 inches.

Chassis Clearance: 3/8 inch minimum is recommended. Any car with less of a clearance will be checked on the track to ensure that there will not be any interference with the track.

Overall Weight: Not exceeding 5.00 ounces (142 grams) - official race scale is final.

7.) Weights and Attachments: No loose materials of any kind are allowed on the car. Decorations and/or additions are allowed, provided they are firmly attached, do not provide any motive force to the car, and do not make the car exceed the maximum dimensions allowed. Cars with wet paint will not be accepted.

8.) Unacceptable Construction: The following may **NOT** be used in conjunction with the wheels or axles: bearings, washers, bushings, hubcaps, inserts, or sleeves. Materials that would pose a hazard (e.g. mercury), with the exception of lead weights, are prohibited.

9.) Gravity Powered: The car shall not ride on any springs or suspension system, and it must be free-wheeling. The race car may not be constructed or treated in such a way that the track's starting mechanism imparts momentum to the car (e.g. sticky substances on the front of the car and protrusions which may catch on the starting pin.)

10.) Lubrication: Upon check-in, lubricants must not be dripping, falling out or otherwise be messy. Any excess lubrication is to be wiped off prior to check-in, so as not to foul the track. Once a car is checked-in it is NOT to be re-lubed.

11.) Front of Car: Cars must have a designated front and rear. If the car's front and rear are not obvious, then prior to any races, the Scout must designate AND MARK ON THE CAR which end is the front and which end is the rear. All cars MUST be raced with the front first. The car's number shall be placed on the top front of the car.

12.) Car Staging: No part of the car may protrude beyond or over the leading (uphill) edge of the starting pin. The uphill edge of the starting pin is the starting line, and no part of the car may be over the plane of the starting line prior to the start of the race.

13.) Car Repair: Within reason, and to be decided by Race Officials, if a car experiences breakage during a race, the Scout and their adult partner may be allowed a quick (up to 5 minutes) repair of the car to enable the Scout's continued participation. Officials will then run that heat again. If the car cannot be repaired within 5 minutes, it loses the heat.

14.) Car Leaves Lane: A car that leaves its lane shall be declared to have lost the race heat. If the car interferes with another car, then the heat will be rerun without the car at fault. However, see Rule 15.

15.) Track Fault: If a car leaves its lane, at his sole discretion, the Race Chairman may inspect the track and, if a track fault is found which probably caused the initial violation, the Race Chairman may order the race heat to be rerun after the track is repaired.

General Information: Please arrive one hour before your scheduled race time, to allow for check-in and weigh-in. Races will start at exactly the times shown on the schedule. The judge's watch will be set to the National Observatory Time Standard. If the Scout is late, he will not race. The race format will be the fastest cumulative time over all heats run. Each Scout will race his car in each lane of the track, at least once. Within a round, each Scout's car will race the same number of times as the other Scouts in that round. The computerized track timing system calculates each car's times, and the fastest cumulative time over all heats run will determine the standings. At the Race Chairman's discretion and time permitting, a finals round for each rank may be run of the top cars, to determine the trophy winners.

Due to the schedule, the number of races we must complete in one day, only registered Cub Scouts will be allowed to race at this event. Non-Cub Scouts and adults wanting to race their cars should take advantage of racing at your own Pack's race event. At the completion of each grade/rank race, each Scout will receive a participation patch. This will be your opportunity to take pictures, if desired. Trophies will be presented to the first, second and third place finishers in each grade/rank group. For example: all Tigers will race, all Tigers get a patch, and the top three Tiger finishers will each get a trophy. You are welcome to stay and watch the other races, but please leave room for parents to see their own Scouts who are actually racing. An optional finals race will begin at 4:00 p.m. for all trophy-holders. There will not be separate trophies for these finals. We will present a special ribbon to the final first, second and third place finishers. If you choose to participate, your car must remain with Race Officials until the finals. Finals check-in time is 3:30 p.m. Do not be late.

Uniforms: All race participants are expected to wear their Official Cub Scout uniform.

Behavior: All Cub Scouts, and other children/siblings who attend, are expected to be under the guidance of an adult or guardian at all times. Children may be cautioned or asked to leave the event for misbehavior. There will be roped-off areas for the Scouts and Race Officials to move around the track. Please respect these areas and allow a clear view for families of the Scouts racing at the time.

Weigh-in Station: There will be an official weigh-in station available one hour prior to each age group's race. Once the car is weighed and checked in, it will be impounded and is not to be handled until the car is called to race. Only the car's Cub Scout owner, or a judge, may handle the car.

Pit Area: A minimal workstation will be provided, with a very limited selection of basic tools. This is intended for those who need to make minor weight adjustments for weigh-in, or for any unexpected breakages. If you want to lubricate your car's wheels, bring your own lubrication, and use it **only** in this area prior to registration.