

## Cub Scout Pack 80 Pinewood Derby Rules

**Race Night: Friday March 11, 2016 at Freeman-Kennedy  
auditorium**

**Check-in starts at 6:30 pm**

**Races start at 7 PM**

The Pinewood Derby is intended to be an interactive, fun project between adults and their Cub Scout. The race offers an opportunity for you and a Scout to work on a project together and to enjoy the spirit of friendly competition. The Pinewood Derby is also a chance for your Cub Scout to enjoy the satisfaction of building his own car from the kit provided. Please feel free to give guidance and assistance to your Scout on an "as needed basis" as he builds his Pinewood Derby car, but let the finished project be "his own".

This year we would also like to offer others (siblings/parents) of the scouts the chance to build their own car. Once the scouts race is complete we will open the track up for others to race their own cars. Kits can be purchased at

<http://www.scoutstuff.org/>

The Pinewood Derby also presents an opportunity to remind your son of the Cub Scout Motto, "Do Your Best," and to practice positive sportsmanship. The Pack rewards some Scouts by presenting prizes in several categories to recognize effort and creativity without overemphasizing winning. This philosophy is reflected in these rules.

There is not an official set of Pinewood Derby rules issued by the Boy Scouts of America organization. Every Pack makes its own rules. Since we will be participating at Districts we incorporate theirs into ours. The rules below are designed to support a fair competition by imposing limits on the extent to which the Pinewood Derby Kit can be modified. Please feel free to contact the Cubmaster if you have questions, comments, or would like clarification regarding the Pack 80 Pinewood Derby rules.

### **A Note about Graphite Lubricant**

**Due to safety and facility maintenance concerns graphite lubricant is NOT permitted inside the school building. Please don't bring it into the race.**

### **Pinewood Derby Car Specifications**

- The total length of the car shall not exceed 7 inches and no part of the car can extend beyond the starting post.
- The total width of the car shall not exceed 2 3/4 inches, wheels included.
- The total height of the car shall not exceed 3 inches.
- The total weight of the car shall not exceed 5.0 ounces.
- The car must have a minimum of 1 3/4 inches clearance between the wheels (original width of the wood blank). Maximum width 2 3/4 inches.
- The car must have 3/8 inch ground clearance underneath the body so that the car does not rub on the center guide strip of the track in the transition zone from sloped to flat.
- The wheel-base (distance between the front and rear axles) may be changed as long as the wheels do not exceed the maximum length of 7 inches.

## Car body, Wheels and Axles

- The car must have been built new for this year's race, using all new components. Cars which competed in any previous Pinewood Derby race will not be allowed to enter. No component of a car other than decorations (e.g., cockpit cover, driver, steering wheel, etc.) which is entered in this year's race may be "borrowed" from a car which competed in any previous Pinewood Derby race.
- No starting systems or propulsion devices of any type are allowed in or on the cars. The car must be freewheeling and powered only by gravity.
- Cars must be built from the pine block supplied in your official Pinewood Derby Kit provided by Pack 80. The block may be shaped in any way desired, as long as the finished car meets all specifications described above.
- The car may be hollowed out and weights added, up to the maximum weight allowed.
- Any additions to the car (such as weights or decorations) must be securely attached to the body. Details such as steering wheels, driver, decals, painting and interior details are permissible as long as these details do not cause the car to exceed any stated specifications. No loose material of any kind, such as lead shot or liquids, may be used in or on the car.
- Four wheels must be used and all four wheels must make contact with the track.
- Only the Official BSA wheels supplied in this year's Gran Prix Pinewood Derby Kit may be used. The wheels may not be cut, drilled, beveled or rounded. Wheels may be lightly sanded to smooth out seams and molding imperfections on the tread area. This light sanding is the only modification allowed to wheels.
- Only the axles supplied in the Pinewood Derby Kit the Pack supplied may be used. The axles may be polished and lubricated if desired.
- Powdered graphite is the only lubrication allowed. The graphite must be applied prior to entrance to the school building and prior to the official weigh-in.
- The car must not ride on any type of spring or other suspension system, other than the axles and wheels supplied in this year's Gran Prix Pinewood Derby Kit.
- Any type of wheel bearing, washer, bushing or hubcap is prohibited.
- Cars with wet paint or glue at check-in will be disqualified.
- The scout's name should not be visible on the car. Each car will be assigned a number at check-in.

## Technical Inspection

- Each car must pass inspection by the official inspection committee before it will be allowed to compete.
- The reading of a car's weight on the official scale at check-in shall be considered final.
- Once a car passes inspection and entered into the race, the car will be impounded and only race committee members may touch it. No modifications are allowed once the car passes final inspection.
- The Inspection Committee has the responsibility to disqualify those cars that do not meet all specifications.

## Ground Rules

- If a car becomes damaged after final inspection (i.e. loses a wheel or is otherwise damaged), the racer shall have 5 minutes to make a repair. If repairs can not be made within the 5 minutes allowed, the racer shall be disqualified from the event. Work on a car after it passes final inspection is strictly limited to the repair of any damages necessary to return the car to the condition equal to that at which it passed inspection. No modifications of the car shall be permitted during the repair period.

- If a car leaves its assigned lane or interferes with another car during a race, the race will be run again. If the same car leaves its assigned lane or interferes with another car a second time, that offending car will be disqualified.
- Only race officials and scouts participating in the current race may enter the track area.
- If any car is interfered with during a race by a race official or spectator (intentionally or unintentionally), the race will be run again.
- Unsportsmanlike conduct by any participant or spectator will be grounds for expulsion from the competition and/or the race area.
- Winners will be determined by means of an electronic "finish line". Race results shall not be challenged.

## Race Format

- The track has four lanes. A run is one trip down the track. All cars will make four runs and the overall time for the four runs will be recorded.
- A race heat will consist of from two to four cars competing against the clock, not against each other. All cars will rotate between the lanes of the track for each run.
- Cars will be mixed between runs down the track. In other words, the same cars will not always be racing against each other on the track.
- Winners will be determined based on their overall time for four runs.

## Awards will be distributed for the following (Can only win 1 in each Category): Speed Awards

- Tiger (1<sup>st</sup>-3<sup>rd</sup>)
- Wolf (1<sup>st</sup>-3<sup>rd</sup>)
- Bear (1<sup>st</sup>-3<sup>rd</sup>)
- Webelos I (1<sup>st</sup>-3<sup>rd</sup>)
- Webelos II (1<sup>st</sup>-3<sup>rd</sup>)
- Pack Champion – fastest overall rank winners (Will not be the same as a Den Champion. Will still go to Districts)
- Precision Design Award  
(This award will go to the car that crosses the finish line under its own power but has the highest overall time. To win this award you must design your car to go slowly but not so slowly that it stops before the end of the finish line. The entire car must cross the finish line on each of its four runs to qualify for this award.)

## Design Awards

Scouts Choice  
Best Scout-oriented Design  
Most Creative Design  
Funniest

## Eligibility for District Race

The top three Rank winners in the Speed category, the Pack fastest, the Scouts Choice and most Creative Design winners will automatically be eligible to participate in the Seven Rivers District Race to be held on March 21, 2014, 11 AM – 5 PM at the Bass Pro Shops at Patriot Place. The entrance fee has already been paid by the Pack. If a winner in one of these categories is not able to attend the District Race at Bass Pro Shop the spot will be offered to the next person in order of finishing position until all spots are filled.

**NOTE: If a scout does not win a design award you may still participate in districts for a design award. However, your entry fee is not paid and you may not participate in any of the races.**