

# Pack 451's Pinewood Derby Rules

This race will be open to all ranks of Cub Scouts.

All cars must be registered by the designated deadline to be eligible to race.

The official car of the Pinewood Derby is the Official Pinewood Derby® Car Kit (Item #17006). The car is available singly or in 8-packs and can be purchased at any distributor of Official Boy Scout supplies. Each car must pass inspection by the Official Inspection Committee before it may compete. The inspection committee has the right to disqualify any car which does not meet specifications. In the event of a disagreement over qualifications of any car, the Chief Inspector will settle the dispute and his/her decision will be final. Lack of knowledge of the official rules will not be considered a valid argument for non-compliance. All entrants must comply with all of the rules, or they will be disqualified. Cars not meeting the specifications will be allowed to modify the car to meet the qualifications prior to registration. In the event a car is discovered to be in violation of a rule after racing begins, the car will not be allowed to continue racing, and will be disqualified.

## 1. GENERAL

- A.** The rules in effect for the Pinewood Derby are intended to maintain the competition at a level at which most boys are capable of achieving with minimal adult intervention.
- B.** In order to qualify for racing, car must be made with the entire Official Pinewood Derby® Car Kit as supplied, including wheels, axles, and wood block. BSA imprint must be visible on wheels.
- C.** Car must not have been made before June 1st of the prior year.
- D.** Scouts must be in full uniform in order to qualify and race. No exceptions.

## 2. RACE DAY CHECK-IN

- A.** The race car must be lubricated prior to check-in. No additional lubricating will be allowed after check-in.
- B.** The car owner-racer must be present during check-in, inspection, and during the race. An adult companion may accompany the owner-racer during the check-in process.
- C.** Each car will be inspected to assure compliance with the published rules. If a car fails inspection, the car owner-racer and adult companion may take the car to the Pit Area for repairs and/or alterations and resubmitted for inspection and check-in.
- D.** There is no limit on the number of re-inspections until the check-in time has expired.
- E.** Checked in cars will be placed in the holding area. No checked in cars may be removed from the holding area prior to race time.

### **3. WEIGHT AND APPEARANCE**

**A.** Total weight of car may not exceed 5 ounces (141.75 grams). The car may be hollowed out and built up to the maximum weight by the addition of wood or metal only, provided that it is securely built into the body of the car or firmly affixed to it. The car must be within .03 ounces (0.85 grams) before check in. No weight beyond that will be provided.

**B.** No loose materials of any kind are permitted in or on the car. No mercury-weighted cars will be allowed.

**C.** Details such as steering wheel, driver, decals, or painting are allowed, as long as these details do not cause the car to exceed the maximum weight, length and width.

**D.** All cars may be re-weighed and/or re-inspected at any time for cause, which shall be at the sole discretion of the Chief Judge.

### **4. LENGTH AND WIDTH**

**A.** Overall width shall not exceed 2 3/4 inches at the furthest horizontal protrusion, whether it is the body of the car, or the wheels. The area where the axles are inserted should be approximately 1 3/4 inches wide to ensure that the wheels will fit over the guide strip on the track.

**B.** Overall length of the car (measured from the furthest point forward to the furthest point rearward) shall not exceed 7 inches.

**C.** The wheelbase (distance between the centers of the front and rear axles) must measure between 4 1/4 and 4 5/8 inches.

**D.** The position of the axles is not regulated, provided that the wheelbase measurement complies with rule 3C above. It is not required to place the axles (nails) into the slots which have been pre-cut in the wood block. If axle holes are drilled, a view hole must be provided in order to view the axle point.

**E.** The underside of the front of the car may not be undercut to allow the car's nose to hang out over the top of the starting gate. If the nose protrudes over the starting gate and the official starter is not able to adjust for a fair start, the protruding car will not be allowed to race.

### **5. WHEELS AND AXLES**

**A.** No alteration, narrowing, lathe cutting, or re-shaping of wheels (inside or outside) is allowed. Light sanding of wheel treads to remove irregularities is permissible. Minimum wheel diameter allowable is 1.170 inches. The serrated edges of the wheel treads must remain visible. No covers, stickers, or hubcaps will be allowed over the wheels or axles. The axle head (on the outside of the wheel) and the axle point (in the body) must be visible.

**B.** Only the official wheels and axles as provided in the official car kits or the official wheel and axle kits may be used.

**C.** Wheel bearings, spacers, and washers are prohibited.

**D.** The car shall not ride upon any type of springs or suspension.

**E.** All cars must have four wheels. Three of the wheels must be touching the track surface at all times.

- F. The car must be free-wheeling with no starting or launching devices.
- G. In order for the car to avoid scraping bottom against the guide strip of the track, it should have 3/8" clearance underneath.

## **6. LUBRICATION**

- A. Cars may be lubricated before registration/check-in. Cars may NOT be lubricated after inspection by the judges. Violation will result in ejection from the race.
- B. Any type of dry lubricant is permitted. Graphite is highly recommended.

## **7. GENERAL RULES**

- A. Numbers will be assigned and affixed at registration. The official number shall be clearly marked and visible at all times.
- B. No one will be allowed beyond the registration area and into the area immediately surrounding the track except the officials and the Scouts racing. Those areas will be designated as "restricted". Anyone found beyond these areas or trying to test a car on the track will automatically be disqualified from the race.
- C. Each heat will be announced. Drivers will report to the starting line and verify their car to the Official Starter who will place the cars carefully upon the track. All other persons will remain behind the barrier and will not obstruct the view of other spectators.
- D. The Official Starter will make sure that the cars are on the track properly, and then will start the race. He/she will be the judge of whether the cars are properly aligned on the track, which cars are to race, and in which lane, and of all matters in the starting area. He/she will also be the judge of "false starts".
- E. Two to four cars will race at a time. Each race will be judged by a minimum of two Finish Line Judges. The judges must agree that the race was fair and without incident.
- F. Volunteer judges may be used. Volunteer judges shall not judge any race in which they have a family member racing.
- G. A car's time for each lane will be recorded and the average of these times will be the car's official qualifying time.
- H. When the result of each heat is recorded, the judges will take the cars back to the starting line and give it to the Official Starter.
- I. When a car has raced each lane once, the judge will take the car to the "holding area".
- J. The top three qualifying times for each rank will race against each other for the championship.
- K. As soon as a car is no longer in the top three qualifiers for his rank, his car may be taken from the "holding area". Only Official Pinewood Derby staff members may retrieve a car from the "holding area".
- L. If during a race, a car leaves the track, runs out of its lane, interferes with the other car, or loses an axle, etc., the race may be run again. There will be only one repeat race for this reason in any heat. If the same car has a problem again,

the results of such race will stand, unless the problem car clearly interferes with the opposing car. In this case the interfering car will be declared the loser.

**M.** The ranks are defined as Tiger Cubs, Wolves, Bears, Webelos and Arrow of Light.

**N.** Racers arriving late (after the end of their designated check-in time) will not be permitted to race.

## **8. REPAIRS**

**A.** There will be an official Pit Area for repairs and alterations. If the car does not qualify at Registration, alterations may be made by the racer and the adult(s) with whom he came.

**B.** Repairs will be permitted after racing begins, but shall take place in the official pit area under the direct supervision of the Chief Judge or his/her designee. It is highly recommended that racers bring their own spare parts.

**C.** The official in charge of the pit area will be the judge of what repairs are necessary and allowable. If wheels or axles are replaced, only those wheels or axles actually replaced may be lubricated.

**D.** If a racer requires repairs, his races will be delayed until such time that his car is repaired, or he withdraws. Other races within the same "flight" will continue while repairs are made. In no case will the racing be delayed more than 15 minutes awaiting repairs. If after the general racing has been delayed for 15 minutes, and no other races are possible, the racer will be called to race, and upon his failure to report to the starting line at this time, he will forfeit. Again, it is highly recommended that each racer bring spare parts and materials for repairs.

## **9. AWARDS**

**A.** Awards shall be made based on placing as determined by official scoring.

**B.** Other prizes and awards may be given depending upon availability. Such awards shall be made at the discretion of the event officials.

## **10. SPORTSMANSHIP**

**A.** All attendees will behave with good sportsmanlike behavior. No attendee will cause disruption to the day's events with negative behavior. We want all participants to have a fun event.

**B.** A racer who causes a disturbance and/or shows unsportsmanlike conduct will be told to leave and escorted from the premises. They will forfeit any future races for the day and any awards received.

**C.** If a parent or guardian of a racer causes a disturbance, the adult will be escorted from the premises and their racer may be automatically disqualified.

## **DISCLAIMER**

The Pack accepts no responsibility for the dissemination of these rules or the lack of knowledge thereof. Every attempt is made to publish the rules and distribute them at Pack meetings and on the Pack website. Any problems regarding the lack of understanding or knowledge of the rules will be disregarded and will have no bearing upon any decisions of the Chief Judge or the Chairman.