# Caddo Area Council Pinewood Derby

## Rules, Regulations, Procedures, and More...

If you have fun and help others to have fun, then we are all WINNERS!

### **PINEWOOD DERBY RULES**

#### 1. <u>Goals:</u>

The derby shall emphasize fun and sportsmanship above all other purposes. This project is a parent and Scout event and is recommended as such by the National Boy Scouts of America.

#### 2. Eligibility:

The derby shall be open to all currently registered Lion, Tiger, Wolf, Bear, Webelos, or Arrow of Light Cub within Caddo Area Council.

#### 3. Ground Rules:

A. All participating Scouts may enter only one car per Scout. The Scout must be present to register and race his car to participate. Cars may not be raced by a parent or stand-in. No two Scouts may race the same car.

B. All cars must be built within the current Scout year. It is illegal to use a car or parts of cars from a previous year.

C. The Scout must participate in the building of his car. It is understood that adult supervision and assistance may be required at various stages of construction.

D. There will be one competition for each category/school grade of Scout. Categories will be defined as follows: Lion-Kindergarten, Tiger-1st grade, Wolf- 2nd grade, Bear- 3rd grade, Webelos- 4th grade, Arrow of Light- 5th grade. A Scout may race in his category only.

E. It is requested that Scouts be dressed in their appropriate uniform. A uniform is not required to race.

F. No test runs will be allowed on the official track before or after the event.

G. No one will be allowed beyond the marked off areas immediately surrounding the track except the officials, assistants. Those areas will be designated as restricted. Violators will be disqualified.

H. For safety concerns, no Scouts will be allowed outside the race area or building without their parent or den leader. Violators will be disqualified.

I. Cars shall race on assigned lanes as per a random computer selection or as per the judgment of race officials.

J. Any Scout drawing a bye will automatically win that race.

K. In the event that a car is discovered to be inadvertently in violation of a rule after registration or during a race, the owner of such car will not be allowed to continue racing and will be disqualified.

L. Computer results are final. However, in the event of a malfunction, manual judging will be implemented and become the final result.

M. Awards will be presented at the end of each category and after the final championship race.

N. A car may be disqualified if the Scout or his parents display un-sportsman-like conduct at any time.

O. Lack of knowledge of the official rules will not be considered a valid argument for non compliance.

#### 4. Registration:

A. All cars must be registered by the Scout during the posted time for his category. Unregistered cars will not be allowed to compete. **LATE ENTRIES WILL NOT BE ACCEPTED.** 

B. Each Scout may officially weigh or measure his car a maximum of three times. Alterations may be made to the car between the first and third weigh-ins or measurements. The third weigh-in and measurement will be final. If a car fails to meet any of the car specifications on the third time, it will be disqualified and not allowed to compete.

C. Before registration for each category there will be an official pit area for use by the Scout and his parents. This pit area must be used for repair, alteration, or applying graphite. There will be a separate scale in the pit area for testing a car's weight. This scale's weight is unofficial and is not guaranteed to match the official scale. It is to be used as a guide only.

D. The weight shown on the official race scale is final.

E. A wood jig will be used to determine if the car complies to the length and width limitations.

F. Once a car is weighed and measured, it will be registered and assigned a random computer number as its identification number for all

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races. That identification number will supersede any other number on the car for race purposes. The identification number will be put on a label that will be placed on the top of the car. A paper plate will be numbered with the same number for parking your car. This plate will be known as the car's "parking spot".

G. Upon assignment of the identification number, an initial race bracket will also be randomly computer assigned.

H. Once a car has been registered, no alterations, changes, or additional graphite of wheels can take place.

I. All registered cars will be impounded and not returned to their owner until they have been eliminated.

J. Ist and 2nd place winners, for fastest car, within a category will not be allowed to have their car back until the completion of all categories. Their car will then be returned for a 10 minute tune up period. It will then go through a complete weigh in, measurement, and re-registration before being allowed to compete in the overall championship race.

#### 5. Car Specifications:

A. Without exception, all cars entered shall be constructed from the "Official Pinewood Derby kit" that can be purchased from the Scout Service Center.



B. Cars may be carved, sculpted, and/or sanded in order to enhance performance and/or appearance. This may be done by manual or power tools.

a. Clearances:

-3/8 - inch minimum from the bottom of the car to the track

-1-3.4- inch minimum between inside edges of all wheels b.Dimensions:

-Length: 7-inch maximum

-Weight: 5.00 (141.75 grams) ounces maximum

-Height: 2-<sup>3</sup>⁄<sub>4</sub> inch maximum

-Width: 2-<sup>3</sup>/<sub>4</sub> inch maximum, including wheels and axles

-Wheelbase:  $4-\frac{3}{8}$  inch between front and rear

-Wheel bearings, washers, and bushings are prohibited.

C. No lubricating oil may be used. Axles may only be lubricated with a dry powdered graphite or dry silicone lubricant.

D. Axles may be lightly filed, sanded, and polished. This light filing, sanding, and polishing is the only axle modification allowed.

E. The car may not ride on any kind of spring and must be freewheeling.

F. Adequate track clearance is the responsibility of the race car builder.

G. No loose material of any kind is allowed on or inside a car. (BB's, Mercury, etc)

H. Only the wheels and axles from the "official Pinewood Derby Kit" may be used.

I. Wheels must not have been modified in any way from the official kit except as allowed below and must be perpendicular with the side of the car body (no wheel tilting) and may not be beveled on the edges.

J. Wheels may be lightly sanded and polished to remove any burrs. This light sanding and polishing is the only wheel modification allowed.



K. At least 3 wheels must be touching the track at all times. Wheel axles must be in the original axel slot cut in the block of wood. Axle slots may not be moved forward or backward on the block or re-cut.

L. No car will be allowed to protrude past or above the starting gate, therefore indented noses are prohibited. Pointed noses are allowed but may be subject to further race procedures as stated below.

M. Cars may be propelled by gravity only.

N. Any additions to the original body (drivers, decals, paint, fenders, wings or weights, etc) must be firmly attached and may not be removed once registered.

#### 6.<u>Race Procedures:</u>

- A. All cars within a category will be voted on for awards and then the races will begin.
- B. All races will be within the category except for the final race of each category.
- C. The starting judge and or his assistants will place cars on the track facing forward in the lane randomly assigned by the computer and check to make sure the cars are correctly in the starting gate.
- D. The track may have minor imperfections that result in a bump or change of speed to some cars due to their construction style. These are considered as normal and will not result in a re-run.
- E. Any car protruding past or above the starting gate will be required to be run backwards or be disqualified. This is usually the result of a pointed nose or a beveled nose on a car. If both ends of a car protrude past or above the starting gate the car will be automatically disqualified.
- F. In the event of a false or early start as determined by the starting judge, the heat will be re-run.
- G. The scoring/lane judge will verify the lane assignments in each heat before a race is run.
- H. In the event of a tie, another race will be run.

- I. The format of the race will be posted on race day and is subject to change as conditions and/or events dictate at the sole discretion of the race committee.
- J. An electronic finish line scoring unit will determine the winner. The scoring/lane judge will verify the race results as per finish line device and record the results.
- K. Packs may keep their own records of winners in each heat but the record kept by the scoring judge will be final.
- L. If during a race, a car leaves the track, runs out of its lane, or interferes with the other car, the race will be run again. If the same car has the same problem again, it will be disqualified. There will be only one repeat race for this reason in any bracket.
- M.If a car has a mechanical problem, the Scout and his parents are allowed three minutes with judges present to fix the car. The judge will then run the heat again. If a car cannot be fixed in three minutes, it loses the heat. If this loss is the car's first and the Scout can fix the car before their next heat starts, it may run in its next scheduled heat.
- N. If a car stops on the track, it will automatically lose the race, but may continue to race until it loses the current bracket. If for some reason the car stops on the track due to interference on the track, the judge may decide to re-run the race.
- O. Due to the design of the track, cars that are not balanced in their weight oftentimes will jump off of the track. In the event that this occurs, the race will be re-run with all cars maintaining their original lane assignment. If the event occurs a second time by the same car, the car will be assigned a loss for the race and the race will be re-run with the remaining cars retaining their original lane assignments.
- P. The first and second place winner of each category will race in the championship finals.

#### 7. <u>Awards:</u>

Awards will be presented for various categories as decided by the race committee. Examples of awards are the following: Most creative, Best paint job, Scouts choice, and Most authentic.

Trophies will be presented for the following: Overall 1st, 2nd, 3rd

#### 8. Judgments and Rulings:

All rulings and judgements shall stand as made by the designated race judges after conferring with the Cubmaster. Race judges may do multiple judging positions if needed. No arguments regarding their decisions will be tolerated.

Any problems regarding lack of understanding, knowledge of the rules, interpretation or lack of written rules will be determined by one or more of the judges and the Cubmaster.

Rules or procedures may be altered or changed by the Cubmaster if the event the facility availability, track conditions, time limitations, etc change.

#### 9. Parent Participation and Safety:

Parents are encouraged to teach new skills and principles as the Scouts build their cars. The Scout should do as much as he can by himself. Try not to be too critical or expect perfection. Any technical assistance given by an adult should be fully explained to the Scout so that he may use the knowledge on future projects. Above all else, participation in the Pinewood Derby should be safe and fun.

Power tools, sharp hand tools, paints, glues, and other potentially dangerous items must only be used under the careful and strict supervision of a knowledgeable adult. Under no circumstances must parents work on a Pinewood Derby racecar when the Scout is not present.