The intent of the Pinewood Derby is to strengthen the relationship between the Cub Scout and his parent(s) by the introduction of a construction project requiring planning, design and building techniques. The success of the project is in the construction of the car itself, not in the resulting races. The race will determine the fastest car in the fairest setting, but it will not necessarily reflect the most successful project. As the construction of the car strengthens the Cub's relationship with his parent(s), the race strengthens the Cub's character by accepting winning and losing gracefully. The Pinewood Derby race should be an enjoyable and fun family experience for all those participating. Remember, "Keep It Simple, Make It Fun!"

The top finishers from each rank will advance to the “District Pinewood Derby.” Therefore, it is important to follow all the rules to make sure your scout’s car is legally eligible for all races.

These rules have been adapted from the Standard rule that was included in each Pinewood Derby Car kit and from the handout of the District rules.

**Race Requirements:**

**General Requirements**

- A. Only cars made from the “Official Cub Scout Grand Prix Pinewood Derby Kit” will be eligible. Cars made from other kits will be disqualified. Plastic and other car bodies may not be placed over the Pinewood block.

- B. The car must have been made for this year’s Derby. Cars from previous years are not eligible.

- C. Each car must be registered and pass inspections by the Official Inspection Committee. Each rank will be designated a time to check in for final inspection on race day. The inspectors have the right to disqualify any cars that do not meet the rules and specifications. The participant will be informed of the violation(s) and given the chance to modify the car, but it must be completed by the deadline.

- D. Each participant may only race one car and must be present on Derby day to race.

  - Note: Pack 236 Rule - If a scout is unable to attend the derby their car may race in the open class.
  - Note: District Rule - Alternate racers may be designated in special circumstances, but the Race Officials must be notified before post time and the situation is subject to approval by the Race Committee.

- E. Each participant (or parent of a participant) has the right of appeal to the Race Committee for an interpretation of these rules. The Race Committee, by majority vote of the members present, will be the final judge of these rules. In the case of a tie vote, the decision of the Race Committee Chairman will be final.

- F. Ungentlemanly or unsportsmanlike conduct by any participant, parent or member of the audience may result in disqualification and will be grounds for expulsion from the race area.
II. Racing Specifications

A. Dimensions

1. The overall length shall not exceed 7 inches.

2. The overall width, including the wheels, axles or decorations shall not exceed 2¾ inches.

3. The minimum width between the wheels must be 1 ¾ inches so the car will clear the center guide strip.

4. The minimum ground clearance between the car and the track surface must be 3/8 inch to insure that the car will clear the center guide strip. The ground clearance at the front end of the car shall not exceed ½ inch to prevent any car from hanging over the starting posts. Due to a number of elevated designs, including a template kit that is sold by the Cub Scouts at the Council Trading Post, a bumper made from stiff, heavy gauge wire (like a paper clip) or a large headed screw may be necessary to prevent the car from hanging over the starting post.

5. The wheelbase (distance between the front and rear axles) may not be changed from the original length that is precut in the kit. The groove provided in the kit shall be used, unless they were defective (not parallel to each other or perpendicular to the sides of the stock), but the space between the axles cannot exceed 4 3/8 inches.

6. Due to the type of starting gates and finish line mechanics used, extreme needle nose designs may be disqualified. These designs make it difficult for the starting pin (3/16 inch diameter) to hold cars in place. Likewise, the infrared finish line sensors will not be triggered accurately as the car moves across the finish line.

B. Weight

1. The total weight of the car MUST NOT exceeds 5.00 ounces. No loose materials of any kind are permitted in the car. The car body may be hollowed out and built up to the maximum weight by adding wood or metal provided it is securely built into or firmly affixed to it. A few wood screws may be put into the bottom of the car so they can be easily removed during inspection.

2. Due to the potential health hazard, mercury is prohibited and lead should be avoided as well. The Boy Scouts of America sells zinc weights as an alternative. Note: The pack also provides weight during the pack weigh in.

3. Unconventional weight material such as bullet casings and live ammunition are prohibitive as well due to a variety of reasons.
C. Wheels and Axles

1. Only the Official Grand Prix wheels and axles may be used. This includes the wheel and axles from the Grand Prix kit that was given to each Cub or the Grand Prix replacement wheels and axles that are available through the Official Scout Catalog or the Council Trading Post.

2. The wheels may be lightly sanded to remove any mold projections on the tread. The hub may be lightly reamed using a drill bit to remove any mold flash. Beveling, tapering, thin sanding, wafering or lathe turning of the wheels is prohibited.

3. The axles may be polished with emery cloth. They may not be chromed or have any other technical process applied to provide a smoother finish.

4. Wheel bearings, washers, bushings or hubcaps are prohibited.

5. Wheels may not be packed with any substance. The wheels must stay hollow as provided in the kit.

6. The car shall not ride on any type of springs.

7. The car must be freewheeling and gravity propelled with no starting devices or other means of propulsion.

8. All four wheels must touch and roll.

D. Lubrication

1. Only dry powdered lubricants, such as graphite, moly or Teflon may be used. Regular oils and silicon sprays are strictly prohibited. These liquid lubricants may injure the race surface of the track.

2. Cars may be lubricated prior to inspection. No further lubrication will be permitted after a car passes inspection and is garaged (impounded) for racing.

E. Detailing/Appearance

1. Details such as a steering wheel, driver, spoiler, decals, painting and interior details are permissible so long as these details do not cause the car to exceed the maximum length, width, and weight specifications.

2. The cars should be a Cub Scout project, with a minimal amount of help and guidance from adults.

3. Cars cannot be accepted with wet paint.

4. Each car will be given a number at weigh-in, which must be displayed on top of the car during the race. This helps the judges to make sure racers are in the correct lane for each race.
Racing Procedure will be outlined at the Pinewood Derby.

Thing to keep in mind:

Derby Date: **Saturday, March 11th**
1. The date was changed to **Saturday, March 11th** for the derby.
2. The derby will be held at The First United Methodist Church of South Lyon. 640 S. Lafayette Street.
3. Scouts should be in Full “Class A Uniforms.”
4. Race day registration/check-in:
   a. Cars will be re-weighed at registration.
   b. Cars will be impounded at registration until race time.
   c. Tentative Race Day Schedule:
      8:00 am - Final Race Set-up Begins
      9:30 am - Wolf Registration
      9:45 am - Tiger Cub Registration
      10:00 am - Opening Ceremonies
      10:05 am - Racing Begins
      The order of racing is: Wolf, Tiger Cub, Bear, 4th Grade Webelos, 5th Grade Webelos, Pack Finals, and Open Class.
      11:00 am - Bear Registration
      11:30 am - 4th Grade Webelos Registration
      12:00 pm - 5th Grade Webelos Registration
      12:30 pm - Open Class Registration
      2:30 pm - Racing Complete (estimate)
      Clean up Immediately Following Open Class Racing.

Derby Pre-Registration: **Wednesday, March 8th**
1. The pack pre-registration will be held on **Wednesday, March 8th**. Scouts pre-registering their car will receive a derby pin or patch.
2. Pre-registration will be held at the Sayre Elementary School cafeteria.
3. Wheels should be attached for pre-registration.
4. You will be asked to name your car at pre-registration.
5. Some tools and weights will be available at Pre-Registration.
6. Pre-registration times:
   6:30 – 7:00 p.m. Tiger Cubs
   7:00 – 7:30 p.m. Wolf Scouts
   7:30 – 7:45 p.m. Bear Scouts
   7:45 – 8:00 p.m. Webelos Scouts
   8:00 – 8:30 p.m. Open Class
   (Open Class is for parents, siblings, friends, and teachers.)

Race Set-up: **Friday, March 10, 2005**
First United Methodist Church, 640 South Lafayette (Pontiac Trail) South Lyon

5:00 pm to finish Race Set-up All Volunteers welcome.

7:00-8:00pm Car Tune Up: $2 entry fee, test your car on all six lanes of one of the tracks. All proceeds donated to charity.