



2010 CHITMACHA PINEWOOD DERBY

Come One, Come All

*American Legion
W.L. Bernauer Jr. Post 242
3700 Hwy 90, Patterson*

*Pre-Registration Deadline:
Friday, March 12, 2009*

*Race Date:
Saturday, March 20th, 2010
Check-in begins at 12:00 p.m.
Racing Starts at 1:00 p.m.*

Concessions Available

*\$5.00 Entry Fee
for All Racers*

Official Rule Book





2010 CHITMACHA PINWOOD DERBY

Come One, Come All

American Legion Patterson - Saturday March 20, 2010

Car Check-in 12:00 p.m. / Races Start 1:00 p.m.

Registration (participant info) Deadline, March 12, 2010 to: John Jones - Pack 339 (johnnyjo55@yahoo.com or 985-745-3185)

Unit # _____	Unit Leader _____
Rank _____	Name: _____
Rank _____	Name: _____
Rank _____	Name: _____
Rank _____	Name: _____
Rank _____	Name: _____
Rank _____	Name: _____
Rank _____	Name: _____

Total Participants: _____ x \$5.00 = \$ _____

Registration fees may be paid at the event (cash or check), OR Mail registration form to Evangeline Area Council - P.O. Box 80115 - Lafayette, LA 70598 - By Fax with credit card information: (337) 235-8556 or by E-Mail with credit card information: crystal.ryder@scouting.org or online at www.eacbsa.org (Reference Sellwise# _____)

Payment Type: Cash Check Credit Card Unit Account

Credit Card # _____ Exp/ Date: ____ / ____

Name of Card Holder or Authorized Signature for Unit Account

Evangeline Area Council Refund Policy

It is the policy of the Evangeline Area Council, that all fees are transferable but not refundable. However, refunds may be requested in writing, two weeks prior to the event for unforeseen circumstances. Failure to participate in an activity does not warrant a refund.



OFFICIAL CHITIMATCHA DISTRICT PINEWOOD DERBY EVENT RULES AND PROCEDURES

Table of Contents:

I. GENERAL: (Applies to all Race Events)	2
Rules about entering your car	
II. CUB SCOUT RACE CAR DESIGN STANDARDS	4
Rules about building your car	
III. CONDUCT OF THE RACES	6
Rules that will be used during the races	
IV THE RACING ENVIRONMENT	8
Things you need to know about the track, timers, and scoring	
V. OPEN DIVISION RACE CAR DESIGN STANDARDS	10
A race for parents, leaders, siblings, friends and supporters of Chitimatcha District	
VI. SPECIAL NOTE TO ALL CONCERNED	11
Some notes on Sportsmanship!	

adapted from Beau Basin race guidelines

I. GENERAL RULES: (Applies to all Race Events)

G-1. Essential Materials: All cars entered shall be constructed from the current year's "Official Grand Prix Pinewood Derby Kit" (referred to below as the kit) as sold by the Scout Service Center. Additional kits may be purchased from the Scout Service Center.

G-2. Competitor Categories: Cub Scouts will compete with others in the same Rank: Tiger, Wolf, Bear, and Webelos. First and second year Webelos will compete in one "Webelos" group. In these rules, the terms "Rank" and "group" are synonymous. The Open Division is open to all parents, guardians, leaders, siblings, friends, and supporters of Chitmatcha District as well as any registered Boy Scout.

G-3. Entries: Starting in 2009 the race will be open to all registered Cub scouts in Chitmatcha district. The District race winners in each division (places 1st-3rd) will be eligible to enter the Council race.

G-4. Attendance: The Cub Scout MUST enter his own car. This means that the Cub Scout must be present at "Inspection and Registration" to enter his car into competition.

G-6. "New Work": Construction of ALL entries MUST have begun during the current scouting year.

G-7. Single Entry per Person: Only one car may be registered by any person in the Pinewood Derby, except in the Open Division.

G-8. Inspection and Registration: Each car must pass a technical inspection before it may compete. Technical inspection and registration of cars occurs prior to the beginning of each Group's race on Race Day. Race officials reserve the right to re-inspect any car before, during or after the race to determine if it continues to conform to the technical standards set forth herein.

G-9. Late Registration: A Cub Scout may register his car for competition at any time prior to the start of the last heat in his Group's race. Any car that is not registered prior to the start of his Group's last heat will be deemed a late registration and ineligible to race in his Groups' race.

G-10. Failure to Pass Inspection: The Inspection Committee shall disqualify cars which do not meet the rules as described herein. If a car does not pass inspection, the owner will be informed of the reason his car did not pass. Cars which fail the initial inspection may be modified until it passes final inspection. If the car cannot be modified to pass inspection before race time it will be allowed in the open race if the owner so chooses but will not be eligible to participate for a place in the Council race.

G-11. Impounding: After a car passes inspection and receives its registration number, it will be stored by the Pinewood Derby Race Committee until the race and may not be lubricated or otherwise improved until racing is completed.

G-12. Car Design Rules Interpretation: Interpretation of the rules described in G1 through G-10, and T-1 through T-10 are at the sole discretion of the Inspection Committee Judges present during the Registration and Inspection process.

G-13. Race-Day Rules Interpretation: On Race Day, the Cub Scout must make all questions of rules interpretations and procedures to the Derby Chairman or Race Officials promptly. Decisions of Race Officials on questions of rules interpretations and procedure may be appealed to the Derby Chairman. All decisions of the Derby Chairman are final. Decisions of Race Officials on questions of fact (i.e. the result of a specific race) may not be appealed beyond the Track Chairman and/or Finish Line Judges.

Note: Unsportsmanlike conduct by any participant or spectator will be grounds for expulsion from the competition and/or the race area.

II. CUB SCOUT RACE CAR DESIGN STANDARDS

T-1. Material: Race cars shall be constructed from the current year's "Official Grand Prix Pinewood Derby Kit" (referred to below as the kit) as sold by the Scout Service Center. The race car must utilize the block of wood, the axles, and the wheels from the kit. Special paint, decals, decorations, etc. are allowed insofar as they do not violate any of the following technical specifications.

T-2. Weight: Race cars may weigh no more than five (5) ounces / 142 Grams (total weight) as determined on the official scales during the pre-race check-in.

T-3. Wheels and Axles: The wheels and axles of the car must be from the kit or a current official BSA Pinewood Derby wheel replacement kit. The car shall roll on the wheels from the kit. The wheels shall turn about the axle nails from the kit. The axle nails shall be firmly affixed to the wood of the car body. It must be obvious to the judges that the wheels and nails from the kit are being used. All four wheels must simultaneously touch the running surface of the track.

T-4. Size: Race cars may be no longer than 7 inches, wider than $2\frac{3}{4}$ (2.75) inches, nor higher than 4 inches overall, as determined by the official gauges during Registration and Inspection. Underside clearance of at least $\frac{3}{8}$ (0.375) inches and inside wheel to wheel clearance of at least $1\frac{3}{4}$ (1.75) inches is recommended, so that the car will run on the race track. Adequate clearance is the responsibility of the race car builder.

T-5. Weights and Attachment: Weight may be added to the car and will be considered part of the car for purposes of all measurements. "Weight" is considered to be any material on the car that is not provided in the kit. All weight must be securely fastened to the car, e.g. by permanent glue, nails or screws, but not by "sticky substances", e.g. tape, or tack spray. Weights shall be passive, i.e. non-moveable, non-magnetic, non-electric, non-sticky, non-liquid, etc.

T-6. Wheel Treatment: Wheel treatment (hub and tread smoothing and polishing) may not result in substantial removal of mass from the original kit wheels. Some of the original "tread marks" on the wheel face must remain intact, i.e. apparent to the inspector. Wheels may not be machined to a beveled condition and the portion of the wheel surface that contacts the track must remain parallel to the axle.

T-7. Unacceptable Construction: The following may NOT be used in conjunction with the wheels or axles: hubcaps, washers, inserts, sleeves, bearings, springs or suspensions.

T-8. Gravity Powered: The race car may not be constructed or treated in such a way that the track's starting mechanism imparts momentum to the car. (For instance, this provision disqualifies cars with sticky substances or magnets on the front of the car and protrusions which may catch on the starting pin.)

T-9. Lubricants: Only dry lubricants such as graphite or powdered Teflon "white lube" will be allowed for lubricating the wheels. *Lubricants may not foul the track.* Cars should be lubricated prior to final inspection and impounding. After a car is impounded, no further lubrication is allowed.

T-10. Body: The car body may have no moving or loose parts. All paint and adhesive must be dry to the touch. The front-center of the car body (front being defined as the end that goes down the track first) must be the farthest point in the length of the body. This point must be $\frac{1}{4}$ (0.25) inch above the axle line and must have at least a $\frac{1}{8}$ (0.125) inch wide flat section to allow for proper mounting in the starting gate.

III. CONDUCT OF THE RACES

Track officials are responsible for the proper conduct of the races.

C-1. Inspection Gauges: All inspections will be conducted at a special inspection area using scales and gauges approved by the Derby Chairman. This check-in equipment will be the official equipment for the race. Please stress the following to all Cub Scouts: They should be prepared to make adjustments to their cars if necessary.

C-2. Race Day Lubrication: Cars should be lubricated prior to final inspection and impounding. After a car is impounded, no further lubrication is allowed.

C-3. Car Handling Responsibility: After the Car has been placed on the staging table, It cannot be touched by anyone but the race officials. A race official will handle the placing and removing of individual cars on the track.

C-4. Finishing : A car will be judged to have finished a heat if, after being released from the starting gate, it proceeds at all times in its assigned lane, under its own power, to the finish line and a portion of the car sufficient to trigger the electronic finish sensor crosses the line. Any car not meeting these criteria will receive a Did Not Finish (DNF).

C-5. Did Not Finish (DNF): Any car receiving a Did Not Finish (DNF) will be assigned a time of 9.9999 seconds for scoring purposes for that heat.

C-6. Car Leaves Lane: If, during a race heat, a car leaves its lane but proceeds down the track in a manner that does not interfere with its opponent or the opponent's race results, then the race will be called normally. If the car leaves its lane and interferes with another car or the other car's race results, the race will be re-staged and re-run. If the same car again leaves its lane and interferes with another car or the other car's race results, the offending car will receive a DNF, and the race will be re-staged and re-run without that car.

C-7. Car Leaves Track: If, during a race heat, a car leaves the track without interfering with its opponent, it shall be considered to have ended its heat at that point and will receive a DNF.

C-8. Car Repair (Without Fault): If, during the race, a wheel falls off or the car becomes otherwise damaged, then the Cub Scout may, to the best of his ability perform repairs with the assistance of his adult partner or Pit Crewmember.

C-9. Car Repair (With Fault): If a car is damaged due to track fault, or damage caused by another car or person, then the Track Chairman, at his/her sole discretion, may allow additional repair assistance to the Cub.

C-10. Call to Race: Competitors will be called by car number prior to each heat. When his car is called, each Cub Scout will come down to the racing area to see his car race more clearly.

If the Cub Scout does not respond, his car will be called a second and third time. If the Cub Scout has not presented himself in time for his heat, he will receive a DNF for that heat. If no competitor is present, the Track Chairman may, *at his/her sole discretion*, defer the race heat in a manner that does not interfere with progress of the racing.

C-11. Track Fault: If a car leaves its lane, at his/her sole discretion, the Track Chairman may inspect the track and, if a track fault is found which probably caused the initial violation, the Track Chairman may order the race heat to be rerun after the track is repaired.

C-12. The Race Area: Only race officials may enter the track area. This rule will be strictly enforced.

C-13. Grand Champion: At the conclusion of racing for all Scout Divisions, a Grand Champion of the Chitimacha District will be declared based upon the lowest accumulated time of all cars entered in the race as calculated per R-9.

C-14. Rewards and Recognition: The most important values in Pinewood Derby competition are parent/son participation, good sportsmanship and learning how to follow rules. The Awards Committee is responsible for recognizing and encouraging these qualities in addition to traditional racing awards. Racers will be recognized as follows:

- a) Every participating Cub Scout will receive a Pinewood Derby Patch.
- b) Medals and/or trophies will be awarded to the first, second and third-place finishers in each Cub Scout Group.
- c) A trophy will be awarded to the Grand Champion.

IV. THE RACING ENVIRONMENT

R-1. Track Length and Drop: The track shall have a racing surface (starting line to finish line distance) of approximately 48 feet with a drop of approximately 4 feet.

R-2. Track Slope: The track slope shall decrease from approximately 30 degrees at the starting line to approximately 0 degrees at the finish line.

R-3. Lanes: Each lane will consist of a straight, smooth aluminum or wood strip approximately $1\frac{1}{2}$ (1.50) inches, but certainly less than $1\frac{3}{4}$ (1.75) inches, wide and approximately $\frac{1}{4}$ (0.25) inches, but certainly less than $\frac{3}{8}$ (0.375) inches thick, centered on a smooth surface no less than 4 inches wide. Each race car shall straddle such a strip during its heats.

R-4. Starting Mechanism: The "starting line" shall consist of vertical pins of approximately $\frac{1}{4}$ (0.25) inch diameter, extending approximately $1\frac{1}{2}$ (1.50) inches above the track surface and approximately centered in the each lane.

R-5. Finish Line Sensor Location: The track has electronics called "finish line sensors" that shall be in alignment with the corresponding starting line pin and be approximately centered in its lane.

R-6. Finish Line Judging: Three impartial Finish Line Judges shall be at station to observe each heat. Heat finish judging is determined by the finish line sensor, but may be challenged by a majority rule of the Finish Line Judges. If the track's electronic finish line sensor's result is challenged by the Finish Line Judges, the race will be re-staged and re-run.

R-7. Finish Line Judge Backup: Finish Line Judges will temporarily excuse themselves if they know that one of the heat contestants is a son or relative. Backup Finish Line Judges shall be available in case a judge needs to be excused for any reason.

R-8. Competition Method: Competition will be conducted with an Enhanced Lane Rotation Chart (aka Partial Perfect-N) format designed to accomplish the following:

- a) Equality of Lane Assignments: Every car races the same number of times in each lane.
- b) Best Possible Equality of Opposition: No head-to-head matchup count between two cars should exceed any other head-to-head matchup count by more than one.

R-9. Race Outcome: The outcome of all races will be determined by the fastest accumulated time of all heats run by a car in that race. In calculating the fastest accumulated time, the slowest heat will be ignored. All races will utilize a computer to time the heats. The car with the lowest accumulated time will be declared Group Champion.

R-10. Timing System Malfunction: In the event of a timing system malfunction, the outcome of a race will be determined on a Point System wherein 1st place = 1 point, 2nd place = 2 points and so on. Vehicles that do not finish (DNF) will get last place PLUS one (e.g. 5 points on a 4 lane track). This is to make sure they do not get the same number of points as a vehicle that did finish, but was just slow. The winner will be determined based on the lowest accumulated points for all heats. All heats will be used to determine the outcome. In the event of a tie, a tie breaker round will be run and scheduled to allow all tied racers to race in each lane.

R-11. The Display: The result of each heat will be displayed on an event chart or projection display.

R-12. Finish Line Electronics Sensitivity: Track Finish Line Electronics, if used, must trigger correctly if a lead pencil is passed $\frac{3}{4}$ (0.75) inches above the track surface at a speed of 15 feet per second.

R-13. Finish Line Clearance: Track Finish Line Electronics and other track accessories, if used, must be no closer than 4 inches above the track.

V. OPEN DIVISION RACE CAR DESIGN STANDARDS

(... or "Why should the kids have ALL the fun?")

The purpose of the Open Race Division event is to have a little fun and to help finance this year's Pinewood Derby. It will also help us to redirect some of our nervous competitive anxiety, allowing us to be calm and collected during the Cub Scouts race! (right?)

The Open Race Division is open to all parents, guardians, leaders, siblings, friends and supporters of Chitimacha District as well as any registered Boy Scout. Parent-Son "team" entries are allowed. All entrants must build their own cars.

M-1. Technical standards: The Technical Standards for the Cub Scout race (above) will be used in the Open Division Race.

M-2. Entry Fee: An entry fee of \$5.00 will be paid prior to participating in the race.

M-3. Number of Entries: You may race as many cars as you wish as long as you pay the standard entry fee for EACH car.

M-4. The Car: You may NOT use your son's current car for this race. The car must adhere to the same standards as the Cub Scouts do.

M-5. Weigh-In: Cars will be inspected, weighed, and registered just prior to the race.

M-6. What Do The Winners Get? Winners will be recognized with honor, glory, and bragging rights!

V. SPECIAL NOTES TO ALL CONCERNED

This project is a parent and son event, and is recommended as such by the Boy Scouts of America. The Pinewood Derby Committee STRONGLY SUGGESTS that each parent emphasize this idea with your son. In the Cub Scout events, we require that the cars be built this year.

Sportsmanship:

Two things the Pinewood Derby requires each participant to learn are 1) the craft skills necessary to build a car, and 2) the rules that must be followed. Even more important, though, is how we act and behave while participating in the Pinewood Derby or any other group activity. This is called sportsmanship.

The **first** thing to remember about sportsmanship is that everyone's skills are a little different. You may be good at something like singing or drawing, but not as good at something else like basketball or computers. Parents have different skill levels, too. This doesn't mean that you are a good person one time and not good another time. You can always be a good person, whether or not you have good car-building skills. Remember, you and your friends are individuals first and racers second. This idea is often called having respect for others.

The **second** thing to remember is to follow the rules. Without rules, there would be no Pinewood Derby. You will never know if you are really good at doing something unless you follow the rules. This is often called being honest.

The **third** thing to remember about good sportsmanship is that there are winners and losers in every competition. You accept this when you choose to compete. There may be times when you win and feel happy, and times when you lose and feel unhappy. Being a winner is easy, and losing is sometimes hard. If you win, you must not brag or gloat. If you lose, you must not feel jealous or bitter. To be a good sportsman, you must be able to say "I did my best" and be satisfied with the results. You must also be able to appreciate and feel happy for someone else when they run a good race or build a neat car.