

MASSABESIC DISTRICT PINEWOOD DERBY RACE RULES AND REGULATIONS

****ALL UNITS SHOULD USE THESE RULES TO RUN THEIR OWN
DERBY****

1. When the boys arrive, the boy may add graphite to his car and proceed to Pre-Check-In. There his car will be checked for proper weight. **IF IT IS NOT 5.00 OZ THE BOY WILL BE GIVEN A ONE TIME CHANCE TO REMOVE ANY SMALL EXCESS WEIGHT WITH A DRILL. IF IT STILL DOES NOT MEET THE SPECIFICATIONS OF NOT EXCEEDING 5.00 OZ., THE CAR WILL BE DISQUALIFIED.** If the car is the proper weight the boy will proceed to having the length and width checked. **NO OTHER MODIFICATION INCLUDING ADDING ADDITIONAL WEIGHT WILL BE ALLOWED THE DAY OF THE EVENT BECAUSE THE CAR MUST RUN THE WAY IT WON AT PACK LEVEL. IF IT DOES NOT MEET THE OFFICIAL MASSABESIC DISTRICT PINEWOOD CONSTRUCTION RULES, IT WILL BE DISQUALIFIED.**
2. If the car is accepted, the boy will sign in and his car will be given a number. From this point, the car will be called by number.
3. The car will then be placed on the numbered sheet on the table. The boy will not be allowed to touch their car after this time, except to make repairs to their car if needed.
4. When their car is called, the car will be placed on the track by race officials. (This is done to save time and confusion at the starting line).
5. The cars will be removed from the track and returned to the numbers on the table by race officials (again this is done to save time and confusion)
6. If there is a mechanical problem with the car, the boy will be given 5 minutes to correct the problem.
7. If a car jumps the track and interferes with another car, the heat will be restarted. If it does not interfere with another car, the car which jumped the track will be ruled last place for the heat.
8. **THE JUDGES WILL HAVE FINAL DECISION AT ALL TIMES, AND ALL SHALL ACCEPT THE DECISION.**
9. Elimination rounds will take place until there are only three cars remaining. After a car comes in third place twice, the car will be eliminated. (I.E. double elimination)
10. If there is a tie for third place, only the cars involved will race again.

11. Three cars will race at a time. In the event that only one or two cars remain to be raced at the end of a round, then the first one or two cars selected for the next heat will race with the remaining car(s). At the end of this race, the cars selected from the next heat will have completed their race for that round. During the elimination round, the car will not race more than once in any round.
12. If there is a tie between 1st and 2nd during the elimination races, the race will not be re-run, because only third place finish counts towards elimination.
13. The fourth place overall winner will be the last car eliminated, leaving only three cars to compete.

FINALS! FINALS! FINALS!**add new!***

1. When only three cars remain, they will race until a car comes in third place twice, regardless of whether or not the car came in third place in any elimination round. The first car to finish third twice will become the overall third place winner.
2. The last three cars will switch lanes between each race. They will move one lane to the right. The car in lane 3 will move to lane 2, the car from lane 2 will move to lane 1 and the car from lane 1 will move to lane 3.
3. The last two cars will race until they come in the same place twice, regardless of the placing in the previous round.

TIGER CUBS

It is the intent of the Activities Committee to get the Tiger Cubs involved in the Derby. Therefore, a separate race will be held for the Tiger Cubs. All building and racing rules for the Tiger Cubs are the same as for the Cub Scouts. Be sure to adhere to the official Massabesic District Pinewood Derby Car Construction Rules.

ATTENTION:

MODIFICATION OF PINEWOOD DERBY RULES

BSA national recently added a new supplier, Revell for pinewood products.

Because the goal of our pinewood program is to have the boy design and build his own car from the basic kit, the following products do not comply to the district rules and will be prohibited:

- All Pre-shaped Cars
- Premium Car Kits
- Racer car Kits

Revell also will offer supplies that are allowable including:

- Basic Car Kits
- Official BSA Wheel & Axle Sets
- Chassis Weights
- Decal Sheets
- Building Tools

MASSABESIC DISTRICT HOW TO BUILD A PINEWOOD DERBY RACE CAR

IT IS RECOMMENDED THAT YOU MAKE COPIES OF THESE RULES FOR EVERY BOY IN YOUR UNIT!

Included with this package are the racing rules which your unit should follow. Be sure you understand these rules, **NOT those included with the official BSA kit**. Massabesic District Rules (detailed in this book) will be used for the District Derby.

For those units who may not have had any experience with a pinewood derby race, it can be a great deal of fun and excitement for your pack. It does require some care and study of the rules. Hopefully this information will answer all of your questions.

The following are the Massabesic District Pinewood Derby Rules, please study them. If you should have any questions, please call your District Activities Chairman or Pinewood Event Chairman. Failure to follow the rules will cause disqualification of the entrant.

1. PARENTS AND GUARDIANS: This is your boy's car. Please supervise him while he makes it. **DON'T MAKE IT FOR HIM.** He will only know how good a job he can do, if he makes his car himself. If the car arrives at the district level, made from a non-BSA kit or obviously made by someone with skills beyond that of an 11 year old, it will be disqualified. Help him to do **his** best.

THE BOY SHOULD MAKE A CAR EACH YEAR. ONLY A CAR MADE BY THE BOY IN THE CURRENT SCOUT YEAR WILL BE ACCEPTED. THE BOY MAY NOT RACE A CAR THAT WAS MADE IN PREVIOUS YEARS OR BY SOMEONE ELSE

2. DESIGNING AND SHAPING THE CAR BODY: Included is a worksheet so that the boy may develop any design he likes. However, he may not start with a precut kit or any other non-BSA kit. Only the Official kit is acceptable. Do not change the wheel-base or width of wood block at axle grooves. After designing, boys should be **closely supervised** while cutting out their car using a table scroll saw or a coping saw. No other adult operated power tools such as lathes or routers can be used. A boy who has earned his whittling chip may use his knife with supervision. Sandpaper on a sanding block is the safest way for a young boy to shape his car. The boy's skill level should be considered when approving his design.

3. WEIGHT: THE FINISHED CAR CAN ONLY WEIGH 5.00 OUNCES. This could include any accessories on the car such as a steering wheel, hood ornament, windshield, etc. Only lead and other metal weights may be used and must be securely fastened. No liquid metal weights such as mercury is allowed. Weights should not extend below the bottom of the car. Any weights used on the underside of the car must be recessed into and flush with bottom of the car body.

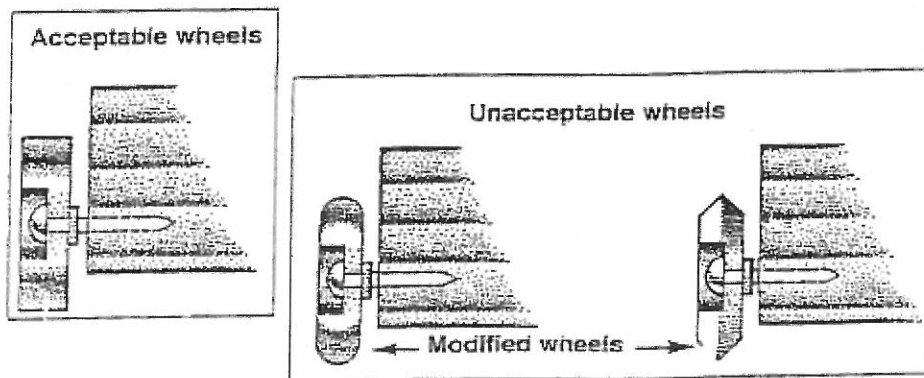
4. **DIMENSIONS:** TOTAL LENGTH SHALL NOT EXCEED 7 INCHES AND THE OVERALL WIDTH SHALL NOT EXCEED 2 AND 3/4 INCHES. TOTAL HEIGHT SHALL NOT EXCEED 2 AND 3/8 INCHES.

5. **PAINTING:** The finished car should be carefully painted by the boy. He may hand or spray paint the car with supervision **PLEASE DO NOT DO IT FOR HIM** Use the suggestions in the worksheet provided to help him finish the car. Remember, paint is included in the weight of the car, please have him allow for this in his design.

6. **WHEEL PREPARATION:** USE ONLY THE WHEELS PROVIDED WITH THE OFFICIAL BSA PINEWOOD KIT. To remove the seam from the plastic wheels provided in the Official BSA Kit, use a drill to smooth out the rough edges. It is recommended that a hand drill be used with younger boys. All 4 wheels must remain flat on the riding surface and must not be rounded, pointed or thinned down in any way. The wheels must remain at the original width and diameter as provided in the Official BSA Kit. Do not use any bearings, washers, springs, clips or foreign objects with the wheels. If you damage the wheels provided in the kit you must obtain official BSA kit replacements at the scout store.

PLEASE DO NOT ORDER ANY WHEELS OR AXLES FROM ANY COMPANY OR INDIVIDUAL SAYING THEY HAVE BSA MODIFIED PARTS. THESE PARTS ARE ILLEGAL. THE DISTRICT HAS COPIES OF THESE CATALOGS AND WILL DISQUALIFY THE CAR AT WHATEVER LEVEL IT IS RACING AT.

Cars will be disqualified if they are not in compliance with these rules. See the diagram below.



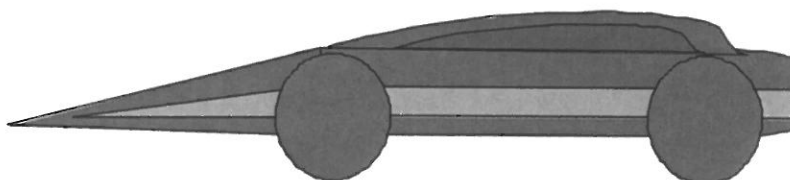
7. **INSERTING THE WHEELS AND AXLES INTO THE BLOCK:**
YOU MUST USE THE WHEELS, AXLES AND THE PRECUT GROOVES PROVIDED IN THE BLOCK OF THE OFFICIAL BSA PINEWOOD KIT

Extending or reducing the wheel base is not allowed. Use the pre-cut grooves. That's why they are there. You may not reduce the width of the wooden block at the axle area. **It will be disqualified.** Oil or grease will damage the plastic wheels and the track, therefore, the only lubricant acceptable will be dry, powdered graphite. **ALL WHEELS WILL TOUCH THE TRACK** evenly and should not be too loose. Cars should be free-wheeling with no starting devices or attachments.

Keep in mind that all cars will be inspected before the unit race and at the District Race also. If a car does not meet the requirements as specified here, it will be disqualified. Cars that win at the unit level will be held by the Pack Committee until the day of the District Race to protect them and to insure that the winning cars have not been modified. Cars will be re-inspected at the district level. The cars must arrive at the District Derby in running order. No modifications will be allowed. Only graphite may be applied.

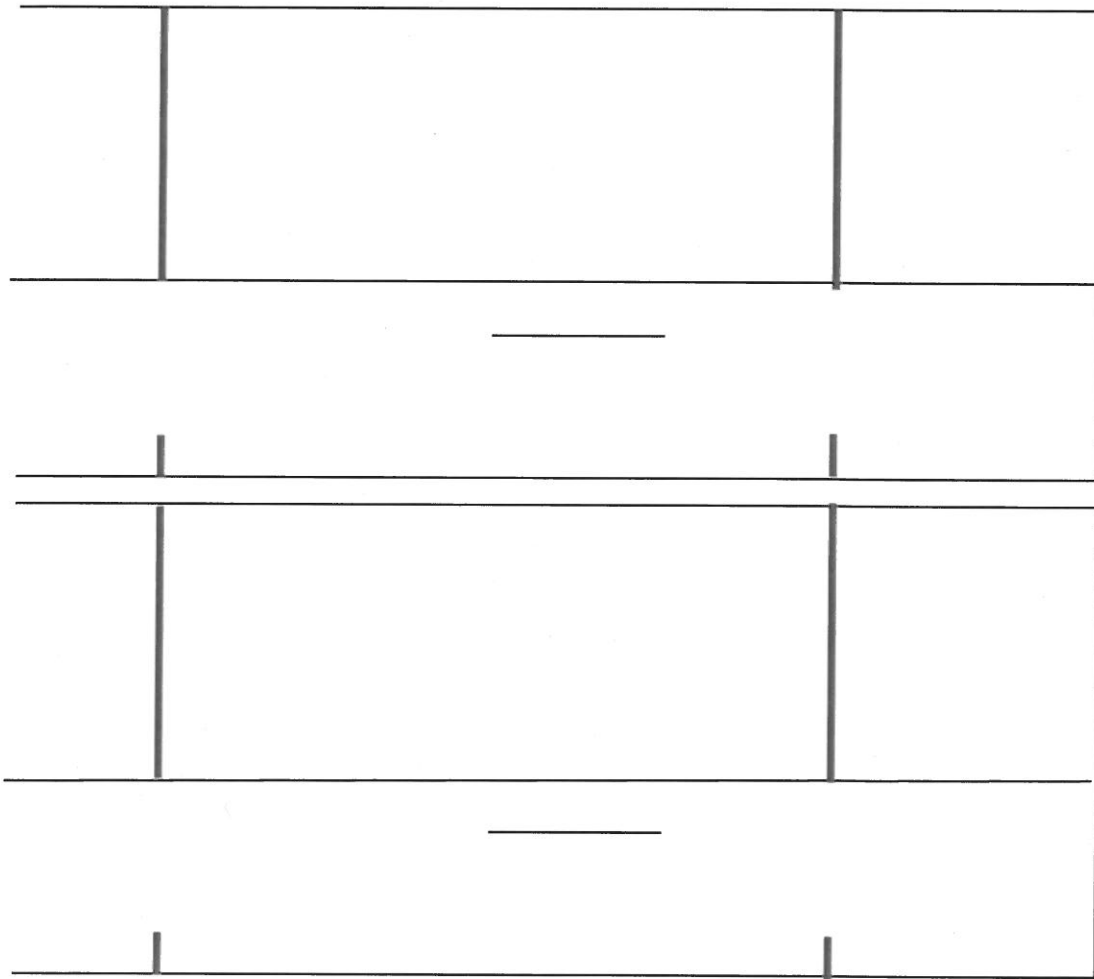
Tiger Cubs are eligible to race at the pack and district level. This is a separate race so that they may compete with boys their own age and have fun. Keep in mind that the above rules apply to them also.

Don't disappoint your son. Follow the rules, show him honesty, sportsmanship, and have fun!



PINEWOOD DERBY CAR WORKSHEET

1. Draw and refine shape of racer on paper **FIRST!**
2. Transfer drawing to wood with carbon paper.
3. Using coping saw or table scroll saw (with adult supervision) cut away waste wood from shape



4. Using a sanding block, start with 200 grit sandpaper to shape and remove saw marks. Use 320 or 400 grit paper to smooth out design and make wood finished for painting.

5. At this time, you may wish to drill holes or carve a slot in the car for mounting lead weights. Weigh shaped car, wheels and axles adding weight to the scale to bring it up to about 4 and 1/2 ounces. This allows 1/2 ounce for paint and accessories.

WHEN FINISHED, THE CAR MUST NOT EXCEED 5.00 OUNCES.

6. Use sanding sealer to prime wood. The sealer makes the wood become hard and paint will adhere to it better. Put on two coats of sealer, sanding between coats. This provides for a smooth professional finish.

7. Paint the racer as you like:

a. If using spray paint, apply three light coats. One heavy coat will usually run and not dry well.

b. If using brush paints, apply four light coats. Once dry, sand with fine wet-dry sandpaper between coats. This will make paint adhere better and be smooth.

8. Apply decals:

a. If using wet transfers, make sure all air is out from underneath, so not to create bubbles.

b. If using dry transfers, make sure the entire design is burnished down onto the surface. Failure to do so will result in cracked or lifted design.

9. Apply clear coat acrylic spray (gloss) to finish car.

10. Insert wheels and axles into **existing grooves**, leaving the width of a popsicle stick between car body and wheel. Make sure that all 4 wheels roll on the surface.