













PINEWOOD DERBY

Car Creation Steps

- Design the car (use the plan sheet if needed).
- Transfer the design to the block of wood.
- Cut the block into the rough shape of the car.
- Shape the car to the desired design using rasps, coarse sandpaper, and other tools.
- Check for weight - add weight to get close to 5 ounces.
- Determine center of gravity for wheel position.
- Drill wheel holes and inspection holes (if using drilled wheel holes).
- Apply primer-sealer to the car surfaces (except bottom).
- Use medium & fine sandpaper to smooth the car surface for painting.
- Paint the car.
- File and polish the axles.
- Polish wheel bores
- Add accessories (canopy, decals, pinstripes, etc.)
- Lubricate and install the wheels and axles.
- Test wheels for smooth rolling & straightness.
- Check final weight - add / remove weight to up 5 oz.
- Test car (carefully!)
- Race!!!



Pinewood Derby Coaching Hints for Parents

-  Remember, the Cub Scout Motto is not "Dad (or Mom), do your best". And is definitely NOT "Win at all cost". Help the Cub Scout to do THEIR best, both in Pinewood Derby and in life.
-  Help your scout plan and schedule as they build their car, so it's not a rushed last-minute activity that doesn't allow them to truly do their best.
-  Help your scout understand the rules and specifications, and why they're important for a fair race.
-  Help your scout use the Pinewood Derby Plan Sheet to design a cool and fun car. Provide friendly guidance & feedback if the design looks like a bit much for them to be able to build themselves.
-  After your scout chooses their favorite design, help them transfer it onto the block of wood. Guide them in the use of tools in the shaping of the wood, and encourage them to do their best in cutting, sanding, painting, decoration, and wheel and axle preparation.
-  Don't forget about the workshops - they're a great way to get things done, share tools, resources, tips, ideas, and techniques, and for both of you to have fun as well.
-  Help your scout understand that this is THEIR project, with you assisting them when they need it. The parent should provide instruction and guidance, not labor. Don't build the car for your scout - but conversely, don't be so wrapped up in building your own car that you neglect to coach your scout in building their car.
-  Help your scout understand that "doing your best" is much more important than having the fastest car.
-  Feel a sense of pride and satisfaction when the car and race are finished. Share it with your scout. You have both earned it.
-  When the race is over and the car is on the shelf, you want your scout to look at it with pride, thinking "I made that car."
-  Spending time with your scout and helping them "do their best" will be remembered by both of you long after the race is finished.
-  We sincerely thank you for all the help you give your scout on their project and on all other Cub Scout activities. But a successful program relies on parents who have stepped up to help all the Cubs by assisting at an event. If you have the interest and the time, please volunteer to help or judge at the Pack Pinewood Derby, or at the District Pinewood Derby. It'll be a rewarding, fun, and memorable experience, and the help would be greatly appreciated.