Rules for Building your Pinewood Derby® Car

Each local Pinewood Derby® committee determines the rules for building and racing cars. The committee will need to make sure their rules don't conflict with those of the district or council to ensure their members can participate in events at those levels.

Car Building Rules

According to the BSA’s Cub Scout Leader How-To-Book, all cars must pass the following inspection to qualify for the race:

- Width shall not exceed 2-3/4 inches.
- Length shall not exceed 7 inches.
- Weight shall not exceed 5 ounces.
- Axles, wheels, and body shall be from the materials provided in the kit. Additional wheels can be purchased separately.
- Wheel bearings, washers, and bushings are prohibited.
- No lubricating oil may be used. Axles may be lubricated with powdered graphite or silicone.
- The car shall not ride on any kind of spring.
- The car must be free-wheeling, with no starting devices.
- No loose materials of any kind are allowed in the car.

NEED HELP?

- Check out our helpful “how-to” videos at www.pinewoodderby.org
- Find expert advice in our popular Pinewood Derby books in-store and online.
Planning Your PWD Race

Each pack organizes its own Pinewood Derby®, establishes their own rules and conducts the event. The Cubmaster can designate volunteers (for small packs) or a committee (for larger packs) to manage the event. The following outline makes it easy for your pack to get started:

- Get the pack interested and excited about the event
- Evaluate your unit's capabilities and the experience of your leaders
- Gather your resources and consult with neighboring Scout packs if necessary
- Organize the volunteers
- Make sure every Scout has access to the materials and tools they need to build and race
- Buy, borrow, or build a track to race on
- Be sure to test that it's in good working order in advance of the event

HELPFUL HINT

No boy or girl should miss out on the fun – this means the Cub Scout pack may need to gather resources to help the dens – or an individual Cub Scout – to make sure everyone has access to tools and necessary materials to build their cars.

As the Cub Scouts are completing their designs, test runs can be useful in fine-tuning and building excitement for the upcoming race day. Check with your local Scout Shop for weigh-ins and special event dates!

Good Timing

Three Months Before Race Day

- Determine the date/time of your Pinewood Derby and add it to pack/den calendars
- Decide on the derby location and reserve the space
- Put together an event staff by using a mix of veterans and newcomers. This provides a good mix of continuity and fresh ideas
- Buy, borrow or build a track and make sure it's working properly
- Some packs have agreements with Scouts BSA troops to provide a track and run the derby for the Cub Scout pack as a service project
- Finalize your pack's rules and scoring methods for distribution at the next pack meeting
- See general rules and scoring tips below

Two Months Before Race Day

- Assign responsibilities to derby volunteers
- Arrange for all participating Cub Scouts to obtain official kits
- Some packs purchase and provide the kits, others inform parents how to obtain the kits themselves
- Kits can be purchased at your local Scout Shop or scoutshop.org
- Check out Pinewood Derby® trophies, ribbons, decorations, etc. to use for your event at your local Scout Shop
**One Month Before Race Day**
- Distribute Pinewood Derby® kits to pack
- Verify that all boys and girls in the pack have received their kits
- Optional: Host a car-building day for Cub Scouts and their adult mentors
- Provide access to plenty of tools and guidance from derby veterans

**HELPFUL HINT**
If you don’t have experienced leaders, consult with your district and neighboring Cub Scout packs.

**Pinewood Derby Day**

**Committee/Volunteers**
- Set up the race area and test the track, timing devices, and derby race tracking programs

**Cub Scouts**
- Register and weigh their cars
- Get assigned a car number which is inserted in the derby scoring system

**Ready, Set, Race!**
- Hand out awards and share snacks and highlights!

**One Week Before Race Day**
- Visit the derby site and decide where to place the track, check-in center, and refreshments
- Set up alternate activity areas and tables for displaying cars and awards
- Plan set-up and clean-up with site managers to ensure a successful event
- Coordinate volunteers in charge of refreshments, check-in, and weighing race cars
- Gather materials needed for repair center (charts, scales, and tools, including glue, spare wheels and axles, and other materials teams may need to make adjustments and repairs)