## <u>Pinewood Derby Official Rules (not guidelines)</u>

Cars must be made to race <u>this year</u> by a registered Cub Scout with the help and guidance of an adult. One car per Cub Scout. **Cars must be assembled before arrival**.

Cars must be made from official BSA Pinewood Derby kits following instructions supplied with the kit.

Wheels and axles cannot be altered in any way (except to sand ridge and burr off outer surface of wheel and to polish axles. shape of wheel cannot be changed). Wheel assemblies cannot have added bearings, washers, beads or hubcaps. 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. The axle dimensions may not be changed substantially. The outside surface of the axle head (the non-contact surface) may not be changed substantially, such as, by polishing. It must be obvious to the judges that the wheels and the nails from the kit are being used. No single axles allowed.

Race cars may be no longer than 7 inches, nor wider than 2 3/4 (2.75) inches, nor taller than 3 inches, as determined by the official gauges during race day inspection. (Underside clearance of at least 3/8 (0.375) inches and inside wheel to wheel clearance of at least 1 3/4 (1.75) inches is recommended, so that the car will run on the racetrack. (Adequate clearance is the responsibility of the race car builder.) The entire car must stage behind the starting pin (i.e. the body must not be altered so that any part of the car reaches beyond the starting pin).

Weight of the car cannot exceed 5 ounces (total weight) as determined on the official scales during race day inspection. Cars at or under 5 oz at weigh-in will be considered registered and committed to the staging area. A maximum of 2 re-weighs will be allowed for alterations of cars to reach legal weight.

Weights must be firmly attached to the body of the car. 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, etc.

Only dry lubricants such as graphite may be used on the axles and must be applied **outside of building prior** to registration.

Car widths (at the axle) and wheel-base lengths (axle to axle) cannot be altered.

No pre-racing before the race on the official track.

Each car must be labeled with scout name, rank and pack number prior to being turned in on race day.

**Open Class rules**: Car must be unpowered, fit on the track, and stop at the end.