# Cub Scout Pinewood Derby Rules

### 1. Qualifications

a. Be an active scout for current scouting year (dues paid)

#### 2. Competitions

### a. Speed

- i. Scout cars are raced down the track once in each lane, with the lowest combined time being declared the winner.
- ii. Scouts will race against other scouts of the same rank.
- iii. The top two from each rank will advance to the overall championship races.

#### 3. New Work

a. Cars must have been built AFTER August 31, 2019

# 4. Registration

a. Each racer must present their car to the registration table to enter their car (racing proxies are not allowed.)

#### 5. Inspection

- a. The car must pass inspection at time of registration, if it does not pass initially it may be modified as long as it passes by the end of the registration period.
- b. Immediately following passing inspection, cars will be impounded until it's time for them to race.
- c. Each car will be inspected to make sure it adheres to the following rules

#### d. Material

- Cars must be constructed using the parts contained in the Official Pinewood Derby Car kit. Replacement materials can only come from another official kit.
- ii. Add-on may be used, but the wheelbase may not be altered, and axels must use the precut slots.

# e. Weight

i. Cars may weigh no more than 5(five) ounces total as determined the time of inspection on the official scale.

### f. Wheels & Axels

- i. The car shall role on the wheels from the official kit. All four wheels shall turn about the axels from the kit. The axels shall be firmly affixed to the wood of the car body. It must be obvious to the judges that the wheels and axels from the official kit are being used. Wheel bearing, bushings, hubcaps, washers, inserts, and springs are prohibited.
- ii. Wheels and axels may be sanded, smoothed, polished to remove defects, but substantial removal of mass or width reduction is not allowed

# g. Size

i. Cars may be not longer than 7 inches, no wider than 2.75 inches and no taller than 6 inches as determined at registration.

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ii. In order to run on the track, underside clearance of .375 inches and inside wheel to wheel clearance of 1.75 inches are required.

# h. Weights and Attachments

- Weight and attachments which may be used, will be considered part of the car for purpose of measurement. Any material on the car that is not provided in the kit will be considered an attachment.
- ii. All weights and attachments must be securely fastened to the car by method such as glue, nail, or screw, but not "sticky substance" such as tape or tack spray.
- iii. Attachments must be passive, i.e. non-moveable, nonmagnetic, nonstick.
- iv. Weights may be added to the top or countersunk into the bottom so that the bottom is flat and maintains .375 inches of underside clearance.

# i. Shape

- i. No portion of the car while resting at the start pin, may extend forward of the start pin (i.e. No "U" shaped front end unless a nonflexible brace may be affixed to allow for the car to not extend past the start pin.
- ii. The car cannot be shaped such that it would interfere with cars in adjacent lanes.

# j. Gravity Powered

 The car may only be powered by gravity, in may not be constructed or treated in such a way that the starting mechanism imparts momentum to the car.

#### k. Lubricants

- i. Only dry lubricants such as graphite or powdered Teflon will be allowed for lubricating the axles.
- ii. Lubricants may not foul the track, so all excess lubricants shall be wiped out.
- iii. There will be a lubrication area at the race for application of lubricants since they can be quite messy. Once the car passes inspection, no further lubrication will be allowed.