 

**PACK 459 PINEWOOD DERBY**



**THE 2018 RULES**

1. The car weight shall not exceed 5.0 ounces. The official race scale shall be considered final.
2. The overall length of the car shall not exceed 7 inches.
3. The overall width of the car shall not exceed 2 ¾ inches.
4. The car must have 1 ¾” clearance between the wheels.
5. The car must have 3/8” clearance underneath the body.
6. The wood provided in the kit must be used. The block may be shaped any way that is desired.
7. The wheels supplied with the kit must be used. The wheels may be cut, drilled, beveled or rounded.
8. The axles (nails) supplied with the kit must be used. They may be polished or dry lubricated.
9. Wheel bearings, washers or bushings are prohibited.
10. The car must not ride on any type of springs.
11. The car must be freewheeling, with no starting devices.
12. At least one point of the car is required to be taller than wheel height (to prevent the ‘lead sled’).

**Open/Siblings Class** - Above rules apply.

**Unlimited Monster Class** - THE ONLY RULE THAT APPLIES IS THAT THE CAR MUST FIT ON THE TRACK. (*Rules 2,3,4 and 5 above. Please no model rocket engines.*)

**Awards**

**Pack Scouts**

1st, 2nd and 3rd Place per Flight (based on Average Track Times)

Most Creative per Flight

**Pack-wide Championship Flight**

1st, 2nd and 3rd PACK WINNERS

Most Scout-Like Car

Most Race-Like Car

**Open/Siblings Class**

1st, 2nd and 3rd Place (based on Average Track Times)

**Unlimited Monster Class**

1st Place (based on Average Track Times)



**10 TIPS FOR AN ENTRY THAT WILL COMPETE**

1. Aerodynamics! Just like real racing. Prepare your Car to have little to no wind resistance. Smooth design lines and a good slick paint job will go a long way.

2. Eliminate all chances of friction in the axles and wheels. Graphite will help, yet you may have to file and polish the axles and wheels.

3. Having your car weigh exactly 5 ounces is the key. You might not think that 4.9 ounces matter...but it does!

4. Make sure that your car is weighted evenly and towards the back of the car. Remember this race is all about gravity.

5. Pack your wheel hubs with dry graphite. No liquid lubricants will be allowed. *Church rules restrict the use of graphite in Trinity Hall, so please do this at home.*

6. Roll your car on a flat hard surface. It should roll in a straight line.

7. During the Race, keep your wheels turning to keep them spinning freely. Just before each race, GENTLY/LIGHTLY pull each wheel away from the car. This will place the wheel in the optimum racing position.

8. In between races, do not roll your car on the carpet or allow others Racers to play with it.

9. Maintain at least 3/8" under clearance, yet 7/16" to 1/2" is suggested.

10. MOST IMPORTANT...Have Fun! Good Luck!!

There are probably more, so share them if you know them!