



## PACK 459's PINEWOOD DERBY

#### THE SCHEDULE

Weigh In is FRIDAY NIGHT, JANUARY 30 from 6:30 to 8:30 PM at Trinity Hall.

Race Day will begin promptly at 8:00 a.m., January 31<sup>ST</sup> at Trinity Hall.

The following times are approximates, so each Scout who'll be racing is requested to be at Trinity Hall <u>AT LEAST 15 MINUTES BEFORE</u> their designated race time:

Time	Rank/Flight*
8:00	Webelos- First Flight
8:45	Webelos- Second Flight
9:30	Bears- First Flight
10:15	Bears- Second Flight
11:00	Tigers- First Flight
11:45	Tigers- Second Flight
12:30	Wolves- First Flight
1:15	Wolves- Second Flight
2:00	Pack Championship
2:45	Siblings/Open Class
3:30	No Rules Monster Race

\*NOTE: Your position to be in the First or Second Flight will be determined on the time of your arrival at Weigh-In. First entries get to choose their Flight time!

All Scouts will race their cars a minimum of three times (one run per lane) during their Flight.



# WHAT'S WEIGH IN ABOUT?

By this time, your car will be as ready to race as it can possibly be!

Your car will be weighed, checked for clearance and other specific measurements. Once your car has met all the requirements and qualifies to race, the Racer and their Car will be entered into the Computer and given a race number for their car.

**Remember to give your Car a name!** The Car's Name and other information (Scout's Name, Rank, Den #/Patrol Name) will be entered onto a Race Entry Form that will accompany you and your car at Weigh In. Finally, the Car will be sequestered until the next day when the car will be raced.

What happens if the car does not weigh 5 ounces and/or does not pass the clearance testing?

By the time of Weigh In, you should have already checked out your car and measured it against the rules and regulations (at the end of this flyer). Regarding the weight, some cars will be heavy, some light and some...just right.

Just in case your car is one of the heavy or light ones, there will be a Workshop Table set up for those last minute tweaks.

#### What's a Last Minute Tweak?

A last Minute Tweak is where you may have to shave off some weight or add a little bit. You will not have the time to paint or do major repairs. Remember to bring a tool kit and some extra weights along with other race preparatory items. Remember, the goal is to have your car 99% ready by the time of Weigh-In.

In the event that your car does not meet the weight or clearance qualifiers, you will go to the workshop area, make your tweaks and return to the Weigh In area to see if your tweaks did the trick! If you have to tweak, then expect to stand in line again to be re-weighed.



## WHAT HAPPENS IF YOUR CAR HAS A BREAKDOWN DURING THE RACE?

Emergency Repairs will be permitted and can only be performed by the Scout. If an adult's help is needed, then only one of the Race Organizers may assist. Repairs will be limited to 5 minutes, and then if not completed, unfortunately the car will be out of the race.

### TO THE WINNERS GO THE SPOILS

Everyone who races will receive a Pinewood Derby Patch!

There will be a 1st, 2nd and 3rd Place and Most Creative Winner per Flight.

There will be a Pack-wide Championship Flight, where all the 1st, 2nd and 3rd place Flight winners will race together. At the end, there will be the ultimate 1st, 2nd and 3rd PACK WINNERS...with the Grand Trophy Awards.

Open Class/Siblings will also have trophies for the kids who place 1st, 2nd and 3<sup>rd</sup>.

\*\* NEW FOR 2015 WE WILL HAVE ONE ADDITIONAL RACE THAT WILL BE FOR THE CREATIVE SOULS WHO WANT TO SEE A REALLY FAST CAR. THE ONLY RULE THAT APPLIES IS THAT THE CAR MUST FIT ON THE TRACK. (Rules 2,3,4 and 5 below. Please no model rocket engines. Remember we are in a church!!) WE WILL HAVE ONE UNIQUE TROPHY FOR THE FASTEST CAR.



There will also be two special prizes awarded at the Pack level to the Scout who makes the: MOST SCOUT-LIKE CAR and MOST RACE-LIKE CAR.

#### TRIAL RUN:

We will have a portion of the Pinewood Racetrack set-up at the January Pack meeting. This would be a great opportunity to run your car down the track to see how it rolls and behaves on the track. Bring your car for a chance to make a practice run. We will also have our official scale to weigh your car.

#### THE CONCESSION STAND WILL BE OPEN ALL DAY!

We'll have coffee, hot chocolate, sodas, water and prepackaged goodies. Please bring dollar bills and quarters, as everything will be priced in fifty cent increments. All profits will go toward Pack 459's operating fund and help defray the derby costs!









#### THE 2014 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 3/4" 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 dowels and screws 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').
- There will be no working on cars on Weigh-In night (with the exception of minor tweaking as discussed above).
  All cars are to be brought to be registered and sequestered that night only... so please make sure all specs are met BEFORE car is brought in.

Open Class/Siblings - Above rules apply.



### 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.
- 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!