2013 Hetuck Pinewood Derby Rules

- -For the Hetuck District Pinewood Derby race the Cub Scout must be present to race the car.
- -One car is permitted per Cub Scout for the speed race and another car is permitted for the turtle race.
- -There will be a registration fee per race event. (Speed Race has a fee and Turtle Race has its own fee also.)
- -The Speed Race or the Turtle Race may be entered separately.
- -Cars must have been constructed in the 2012-2013 Scout Year. Parts made in previous years may not be used.
- -Scout may race at the rank he was during his Pack race.
- -Webelos which have crossed over to Boy Scouts this year (2013) may race in this race as Webelos.
- -Car width shall not exceed 2 3/4". Car length shall not exceed 7". Car weight shall not exceed 5 oz.
- -Car height may not exceed 5 inches for the Hetuck District race.
- -Car width between wheels must be at least 1 3/4".
- -Car bottom clearance between car and track surface must be at least 3/8". (This will be measured at check in).
- -Only powered graphite is permitted.
- -NO wet lubricant is permitted. Wet lubricant will damage the track.
- -After the car goes to the holding area, **NO** more graphite will be permitted.
- -Must use BSA wheels, BSA axles, and BSA car body. One piece axles are NOT permitted.
- -Extended wheel base is NOT permitted. (4 ½ inches is the maximum distance between front and rear axles).
- -The wheel's tread area, which is flat and the car runs on, must remain flat and cannot be altered, but light sanding is permitted.
- -No wheel covers or hubcaps.
- -All parts and weights must be secured to car.
- -No liquid mercury.
- Wheel bearings, washers and bushings are prohibited.
- -The car shall not ride on springs.
- -Details, such as steering wheel and driver are permissible as long as these details do not exceed the maximum length, width and weight specifications.
- -The car must be free-wheeling, with no starting devices, magnets, slip weights, or adhesives.
- -All parts of the car must rest behind the gate side of the starting post.
- -Each car must pass inspection by the official Inspection Committee before it may compete.
- -If, at check-in, a car does not pass inspection, the owner will be informed of the reason for failure, and will be given time within the official check-in time period to make the adjustment.
- -The parents will be responsible for any changes that need to be made to the car to pass check-in and weigh-in.
- -A car is NOT declared as passing any part of the inspection until it has passed all of the inspected areas at one time.
- -After the car is placed in the holding area, **NO** further adjustments may be made, and the car can **NOT** be removed.
- -It is the responsibility of the racer and the parent to make sure their car is facing the proper direction on the track at the starting line and that their car is placed on the proper lane. Any problem must be immediately addressed <u>before</u> that race begins.
- -The finishing order determined by the finish line will stand as the official results.
- -Your car must be weighed-in and inspected by the end of the weigh-in period.
- -If a car jumps the track and interferes with the other cars, then the heat will be rerun only once. The second time the car jumps the track in that heat then the car is disqualified.

-TURTLE RACE <u>RULES</u> are the same as above with the following added rules:

- -The goal of the Turtle race is to be the **LAST** car to activate the finish line detector.
- -Turtle Race Entry may consist of a Cub Scout by himself or a Cub Scout and a partner such as a parent, grandparent, guardian, brother, sister, relative, friend, youth or adult.
- -The <u>Cub Scout partner</u>, <u>only</u> for the turtle race, is encouraged to participate with the Cub Scout and is allowed to help the Cub Scout to adjust the turtle car to the desired setup between race heats.
 - -For the Turtle Race only, each Cub Scout will get one practice run down the track.
- -During the elimination phase, each car will get 4 runs down the track and the 4 cars with the slowest times will move to the Turtle Trophy Round.
 - -During the elimination phase if the car does not cross the finish line, it will be given the race time of 1 sec. for that run.
 - -Turtle Trophy Round is one race, and the last car to be detected by the finish line is the winner. Car must finish to place.

SPEED RACE FORMAT:

We will be using GrandPrix Software. This software uses a charting method in which all racers race in every lane, and all racers race an equal number of times for that particular event.

<u>DEN competition</u>--A racing chart will be generated meeting the above requirements. The top 3 places will be determined by the sum total accumulation time from all of that car's runs. This means that <u>the times from each run will be added together toget the total time for that car. The car with the shortest sum total of time is the winner.</u> This means the fastest cars will truly be the winners. It may be possible to get a 1st place or a 2nd place and not make it to the top 3 positions because you were racing slower cars at the time when you got 1st or 2nd place. <u>The race times are more important than the position in which the car finished.</u> The top three cars will move on to the Grand Finals Elimination Phase.

<u>Grand Finals Elimination Phase--</u>A racing chart will be generated in which all racers race in every lane, and all racers race an equal number of times. The top 3 cars with the shortest total times <u>will move on</u> to the Grand Finals Trophy Round.

<u>Grand Finals Trophy Round</u>-- A racing chart will be generated in which all racers race in every lane, and all racers race an equal number of times (4 times on the 4 lane track). The car with the shortest sum total of time will be the winner.