2019 Scout Truck Rules:

1) Every truck must be a 2019 model - no racing last year's truck

2) Trucks must be built from an official 18 wheeler Tractor Trailer kit available from the Scout Shop.

3) Truck specifications are:

- overall length of 44.5 centimeters

- overall width of 8.5 centimeters

- overall height of 11.5 centimeters

- overall mass of the truck can not exceed 1200 grams

4) All parts of the truck must be securely fastened

5) Each truck must pass inspection prior to the race

6) Only the Scout owner can race the truck

7) The size of the wheels can not be changed

8) No lubricants - powder graphite all times-of any kind can be used after it has been registered

9) Once the truck has been inspected and registered, it can't be altered in any way

10) The decision of the judges is final

** If trucks are over weight, they will have to be lightened. If they are too light, it is the responsibility of the Scout to decide if he/she wants to add weight and must supply the weights. This process must be completed BEFORE registration takes place.

Guidelines/Tips for Youth

1) Make sure to read the official rules for Kars and Trucks.

2) No liquid lubricant can be used on the vehicles since it gums up the track

3) A dry lubricant called Powdered Graphite (usually available at Canadian Tire, Princess Auto, etc.) can be used to lubricate the wheels of the cars/trucks to reduce friction

4) Make sure not to put decorations on the car that increase the width/height/length beyond allowed dimensions e.g. no headlights that stick out of the front of the car, exhaust pipes out the side of the car etc... This can only be done if the decorations are within the dimensions prescribed in the official rules for <u>Cars</u> and <u>Trucks</u>.

5) Alignment of the wheels is very important to the speed of the car. Use the wheel slots pre-cut into the car so the car will not scrape the track but care should be taken to keep the wheels straight. To test the car, place it on a slight incline and roll it. The car should roll smoothly and run straight.

6) There are official Cub Car weight kits meant to be embedded in the cars. These are available at the Scout Shop, just search for "Pit Kit Kub Kar". The kit comes with two weights and three extra wheels/pins. The weights are meant to be put into a recessed area on the bottom of the car e.g. a spot that has been routered out of the bottom etc... This gives the car it's additional weight but keeps it aerodynamic. Cars can also be drilled and weights inserted into the car, just be sure you can easily get the weights out if the car is overweight when it arrives at the rally.

7) Reduce friction as much as possible. Air friction, track friction and wheel friction will all slow down your car. Try to reduce friction between wheels and axles, between wheels and the car body and between wheels and the guide rail. When the car races it does not sit between two guide rails, it sits on top of a guide rail <u>as shown in this photo</u> (not the actual PEI track). Friction can be reduced by sanding or polishing wheels and axles and making sure the car runs straight.

8) Paint the car early and paint often. This will improve looks of the car but is also good for speed. If paint is not well dried before the wheels are put on the paint will still be tacky and stick to the wheels, causing more friction.

9) Choose an aerodynamic car design

10) There are plenty of websites out there with good ideas for design and tips and tricks for speed. Most of them refer to Pinewood Derby races - these are the USA equivalent of the Canadian Kub Kar Races. Use these site for ideas etc... but make sure to follow the PEI rules above all!!

11) PLEASE REMEMBER - this is meant to be a fun and educational exercise for youth, not a race between parents. There is a parents race at the end of the youth races. ALL parents are encouraged to design and race a car on race day - show them how it's done, but let them design and build their own car :-) Some guidance and assistance is allowed by parents, particularly for younger members but should be restricted to guidance and assistance where possible.

12) You can take your car to a grocery store etc... to get it weighed and bring it close to the 142 gram (5 ounce) maximum weight. The official scale used at the rally has the final say for maximum weight. Even if you've measured it at the store and it weighs exactly 142 grams the official scale is still final for weights. This is done to keep things consistent and fair for all Cubs at the rally. Make sure any added weight can be easily removed, the pit crew doesn't want to drill your car if it's overweight but they can't let you race if the car weight shows over on the official scale. This has been the source of a lot of frustration in the past so we want it to be clear :-)

13) Arrive a bit early on race day in case modifications need to be done to the car.