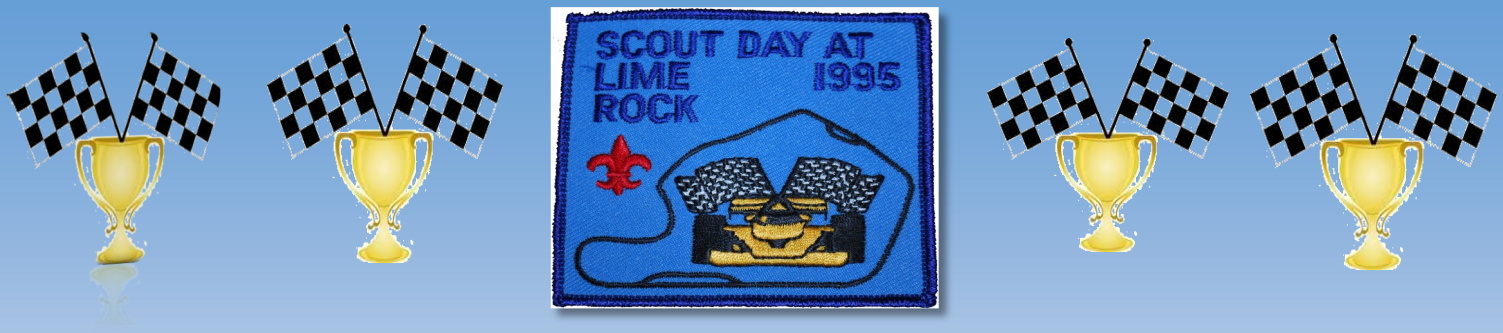


Build A Cub Mobile | Lime Rock Cub Mobile Race

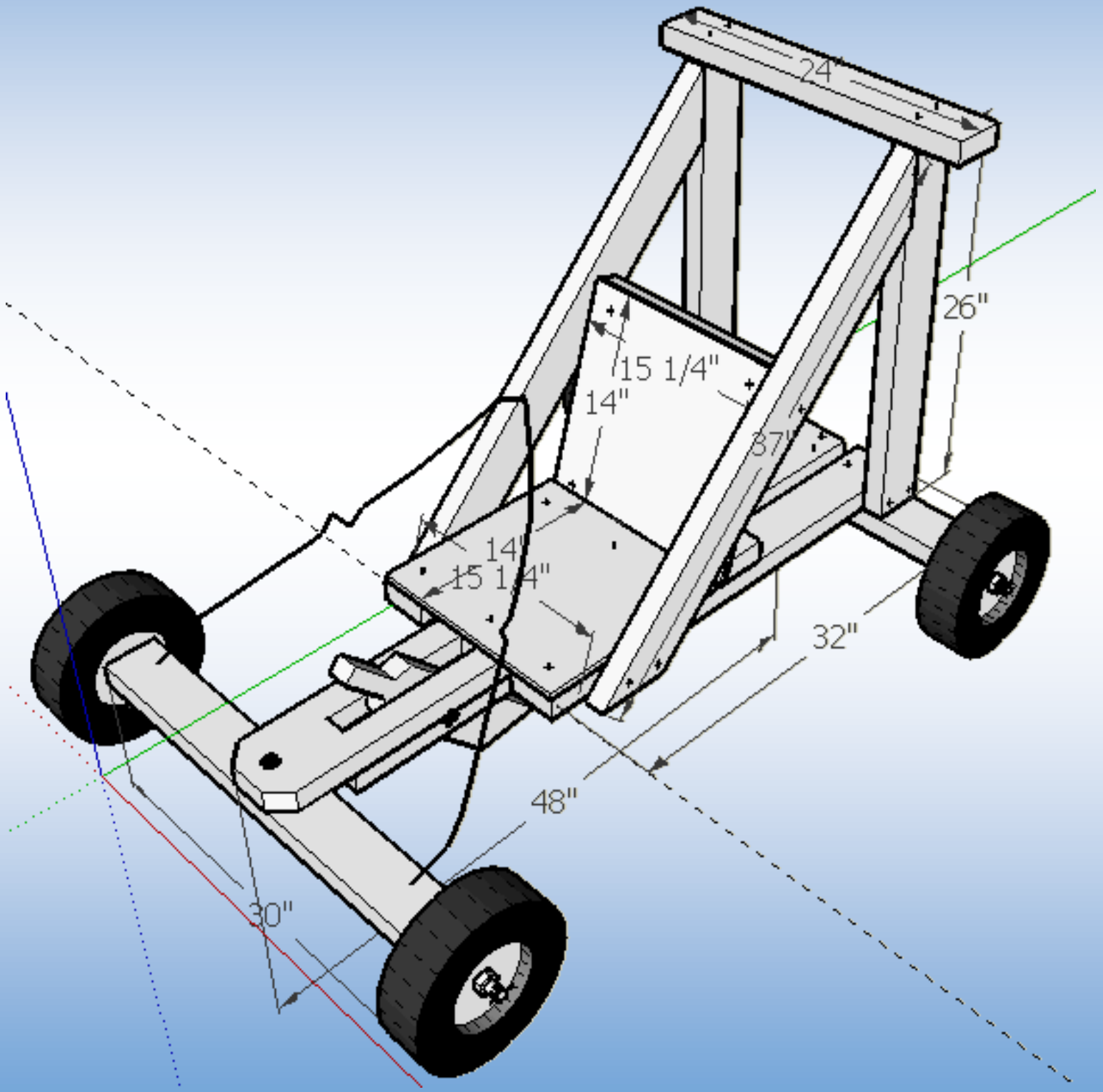
Hope You'll Join Us!

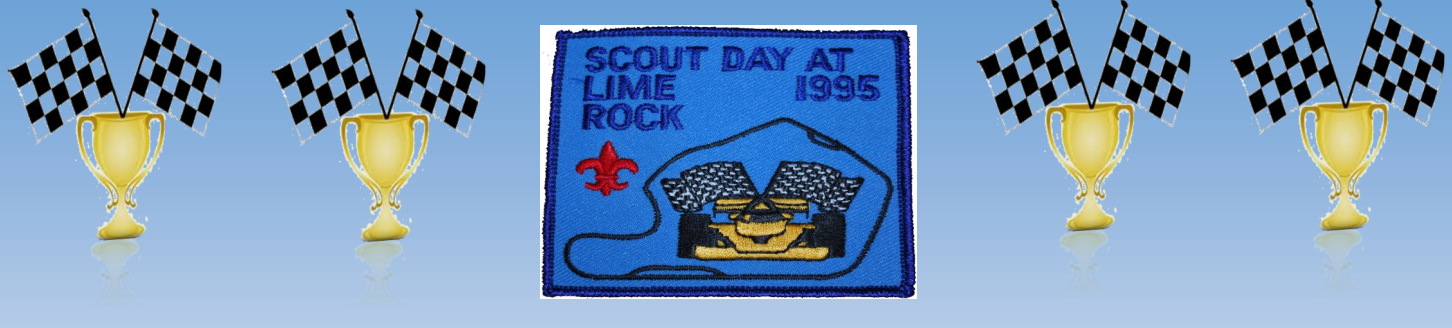
Come one, come all!!! Build your own Cub Mobile and enter your Cub Scout Pack into the Cub Mobile Derby at 11:00am on Saturday October 1st! While registering your pack, please indicate the number of Cub Mobiles that you will be entering. Prizes will be given for the first, second, and third place overall winners!

This is an open race and there are no limitations on the number of Cub Mobiles that may be entered. Please feel free to use your own cub-mobile plans other than the sample provided below. This race is open to all types of Cub-mobiles and there are no rules regarding weight or the number of wheels. Height must not exceed 12" from the ground to the to the top of the main frame (where the Carriage bolt attaches to the wooden axle), length may not exceed 72" overall and no more than 48" for the overall width. No motorized Cub Mobiles will be permitted. However, the Cub mobile must be designed so that it can be pushed. Two-seated Cub Mobiles are permitted, but only one Cub Scout may push the Cub Mobile. All riders and pushers MUST WEAR A HELMET. NO EXCEPTIONS.

Please contact Bill Reynolds at 860-806-0530 or Mike Morrell at 203-951-0613 with any inquiries

Cub Mobile Sample





Sample Material List

Lumber:

Description	Size	Qty
Main frame	2” x 6” x 48”	1
Seat frame	2” x 4” x 32”	2
Seat sides (diagonal)	2” x 4” x 37”	2
Axels	2” x 4” x 30”	2
Back (vertical)	2” x 4” x 26”	2
Push bar	2” x 4” x 24”	1
Seat backs	2” x 4” x 15 ¼”	2
Brake handle	2” x 4” x 18”	1
Brake brace	2” x 2” x 14”	2
Seat (bottom and back)	½” x 14” x 15 ¼”	2

Hardware:

Description	Qty
Wheels (5/8” axel)	4 (*Size of wheel itself may vary but 5/8 is a standard axel*)
12” x 5/8” all-thread	4
5/8” nut	4
5/8” washer	4
3/16” cotter pin	4
½” x 4” Carriage bolt	1
½” Locking nut	2
½” Washer	2
½” Fender washer	2
½” x 7” Carriage bolt	1
2 ½” Wood screws	36
1 ¼” Wood screws	34
½” Conduit straps	12
4” Spring (brake)	1
6’ x ¼” rope	1

Comments

This Cub Mobile was designed for general Cub Scout use. It must be pushed using the built-in push bar or used in gravity races. It is designed to be strong and can take a moderate amount of abuse without repair.

As stated above, please feel free to use your own Cub-Mobile plans other than the sample provided below. This race is open to all types of Cub-Mobiles and there are no rules regarding weight or the number of wheels. Height must not exceed 12" from the ground to the top of the main frame (where the Carriage bolt attaches to the wooden axle), length may not exceed 72" overall and no more than 48" for the overall width. No motorized Cub Mobiles will be permitted. However, the Cub Mobile must be designed so that it can be pushed. Two-seated Cub Mobiles are permitted, but only one Cub Scout may push the Cub Mobile. All riders and pushers MUST WEAR A HELMET. NO EXCEPTIONS.

The wheels can be purchased at hardware stores such as Harbor Freight. They have 5/8" ball bearing axels. They are great all-purpose wheels that work well on grass and parking lots. There are faster wheels available on the internet for races, but they cost quite a bit more.

The axels are 5/8" x 12" all-thread available at both Lowes and Home Depot. (*If you use different wheels, you may have to use different axels*)

Use 3 metal conduit straps to hold each axel to the 2 x 4 using the 1 ¼" screws. I sawed a dado down the center of both wooden axels to keep the axels straight. The threaded axels keep the axels in place.

The plywood seat is also held in place using the 1 ¼" screws. All others use the 2 ½" screws.

All screws were countersunk to keep the heads flush with the wood surface.

Place the 5/8" washer between the wheel and the wooden axel.

Place the two ½" fender washers between the 2 x 6 frame and the 2 x 4 axels. Then place the ½" washer next to the ½" locking nut.

The 37" diagonal seat sides are cut to a 45-degree angle on both ends.

A seat belt may be added if needed.

Use a spring to hold the brake lever up. Also, you can place a strip of a rubber on the bottom brake lever to keep it from wearing down too fast.

Lastly, have fun and may the best car win! We hope to see your Cub Scout Pack at Lime Rock!