Minsi Trails Council
2022 Lehigh District Cub Mobile Race

Attention All Cub Scout Packs!!! Come one, come all!!! Bring a friend to a fun filled Recruiting event.

WHEN: Saturday, Oct 8th, 2022

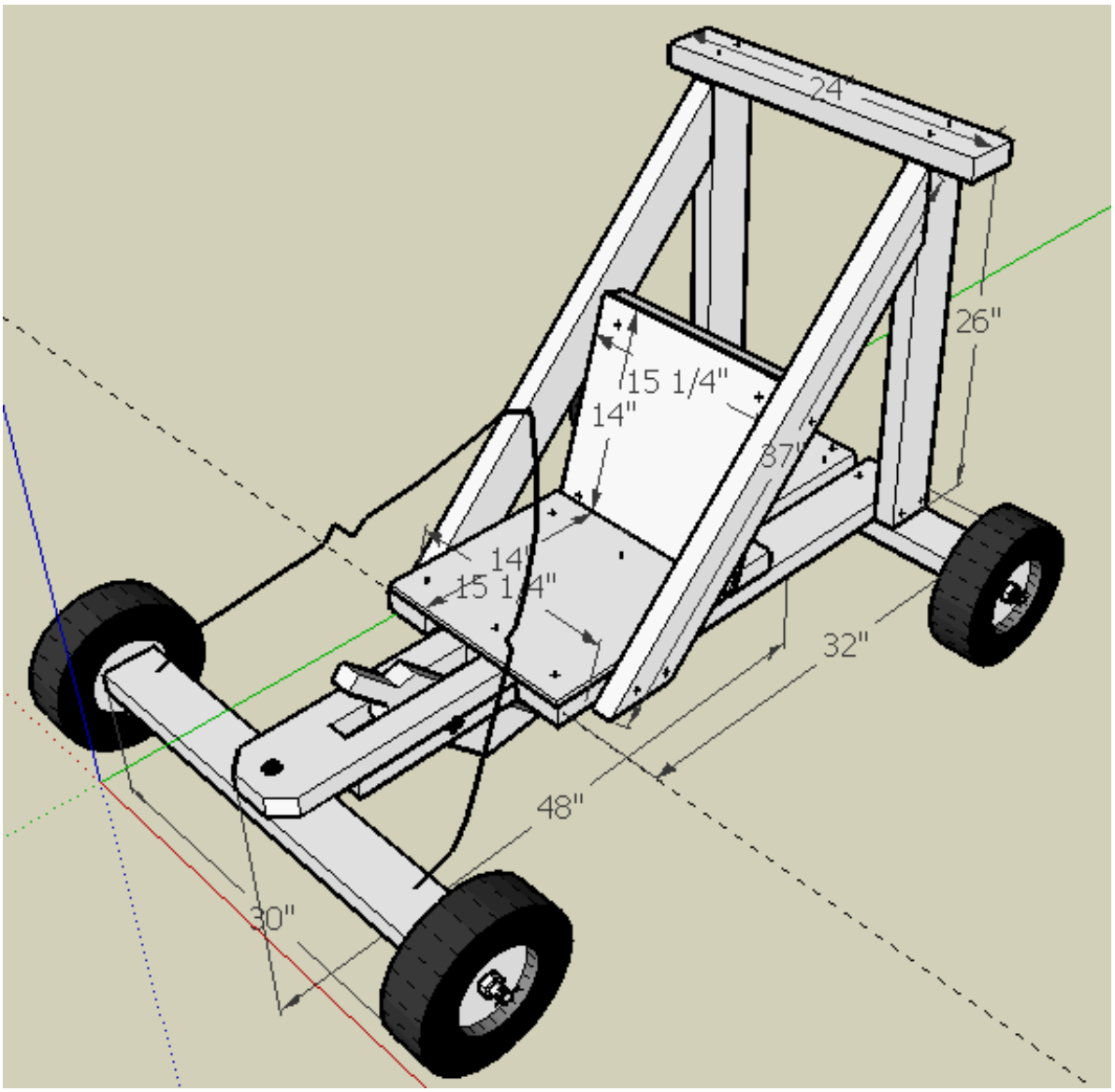
WHERE: Whitehall-Coplay Middle School

2930 Zephyr Blvd. Whitehall, PA 18052

Cubmobiles will be provided for this event. Please bring a friend to this event. Feel free to bring your own car if you want to. A copy of the cubmobile building instructions are attached to this flyer if your Pack would like to build your own as part of a way to complete the Bears Adventure "BALOO THE BUILDER" or the Webelos "BUILD IT" Elective.

However, the Cub mobile must be designed so that it can be pushed and all riders and pushers MUST WEAR A HELMET. NO EXCEPTIONS.

Registration will open soon.


24"
26"
15 1/4"
14"
37"
14"
15 1/4"
32"
48"
30"

Material List

Lumber:

Description	Size	Qty
Main Frame	2”x6”x48”	1
Seat frame	2”x4”x32”	2
Seat sides (diagonal)	2”x4”x37”	2
Axels	2”x4”x30”	2
Back (vertical)	2”x4”x26”	2
Push bar	2”x4”x24”	1
Seat backs	2” x 4” x 15 1⁄4”	2
Brake handle	2” x 4” x 18”	1
Brake brace	2” x 2” x 14”	2
Seat (bottom and back)	1⁄2” x 14” x 15 1⁄4”	2

Hardware:

Description	Qty
Wheels (5/8” axel)	4
12” x 5/8” all-thread	4
5/8” nut	4
5/8” washer	4
3/16” cotter pin	4
1⁄2” x 4” Carriage bolt	1
1⁄2” Locking nut	2
1⁄2” Washer	2
1⁄2” Fender washer	2
1⁄2” x 7” Carriage bolt	1
2 1⁄2” Wood screws	36
1 1⁄4” Wood screws	34
1⁄2” Conduit straps	12
4” Spring (brake)	1
6’ x 1⁄4” rope	1

Comments

This Cubmobile was designed for general Cub Scout use. It can 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.

The wheels were purchased at 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 1⁄4” 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 1⁄4” screws. All others use the 2 1⁄2” 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 1⁄2” fender washers between the 2 x 6 frame and the 2 x 4 axels. Then place the 1⁄2” washer next to the 1⁄2” 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.