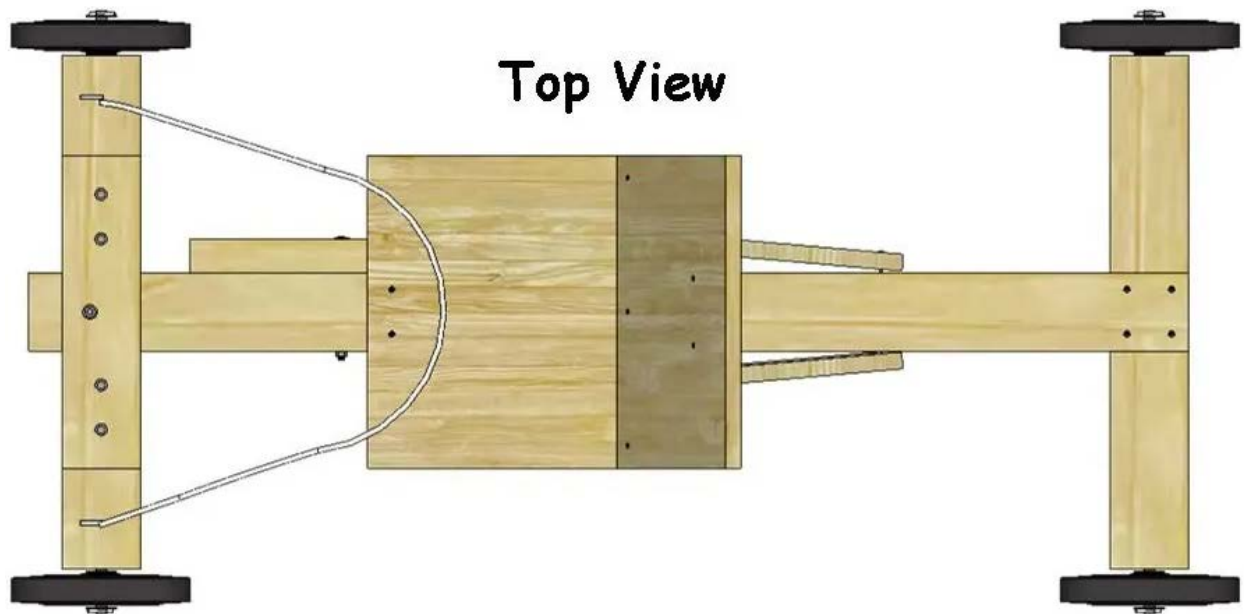


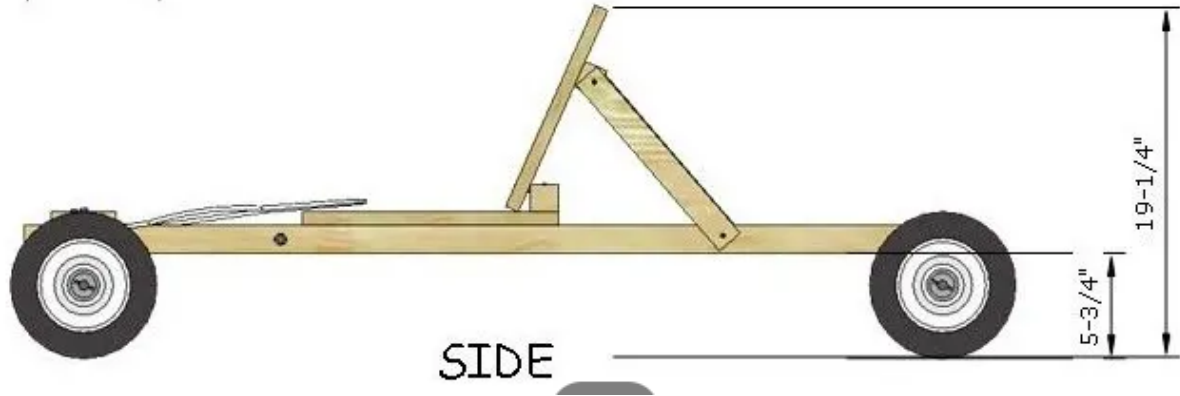
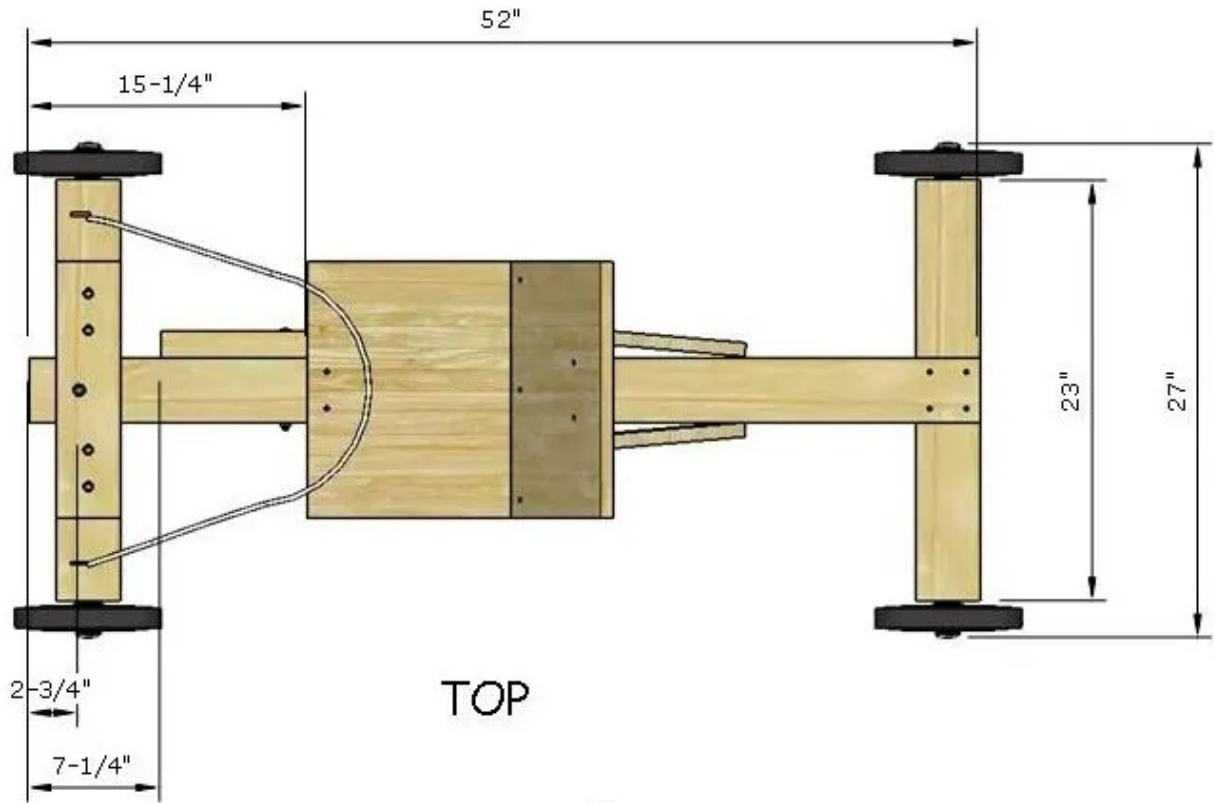


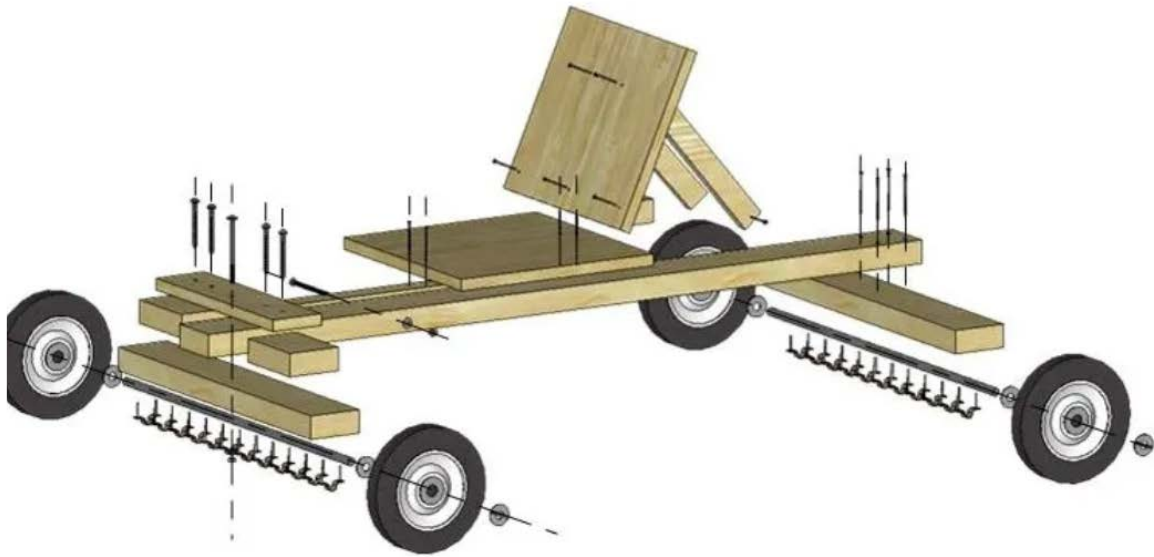
Soap Box Derby

This file can be found at <https://www.instructables.com/Soap-Box-Derby-Car-Overview/>

You will need to add a seat belt and a pusher.







Refer to these drawings if you have questions or need more clarification. It shows all the components that are in the assembly.

Step 2: Gather Needed Supplies and Hardware Reference Sheet

Tools Required:

The following tools will be needed to construct this kit.

- Safety Glasses
- Work Gloves
- Tape Measure
- Pencil
- Drill
- Drill & Screw Bits
- Socket Set
- Adjustable Wrench
- Pliers

Notes:

Components:

The following components are included in the kit. You will have extra hardware left after you complete the kit

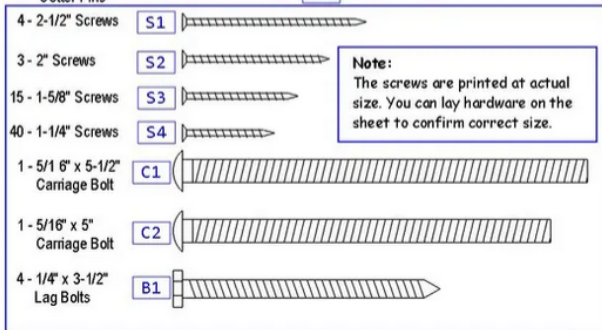
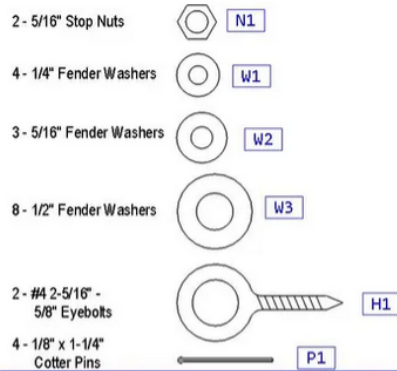
Wood Parts

2 - 2"x4" @ 23"	1 - 3/4" Plywood @ 12"x14"
2 - 2"x4" @ 5"	1 - 2"x2" @ 5"
1 - 2"x4" @ 52"	1 - 2"x2" @ 14"
1 - 1"x4" @ 14"	1 - 2"x2" @ 21"
1 - 3/4" Plywood @ 14"x14"	2 - 1"x2" @ 12"

Hardware

4 - 1/4" x 3-1/2" Lag Bolts	20 - 1/2" Copper Pipe Holders
4 - 1/4" Fender Washers	40 - 1-1/4" Screws
1 - 5/16" x 5" Carriage Bolt	8 - 1/2" Fender Washers
1 - 5/16" x 5-1/2" Carriage Bolt	4 - 1/8" x 1-1/4" Cotter Pins
3 - 5/16" Fender Washers	2 - 1/2" x 28" Steel Axles
2 - 5/16" Stop Nuts	4 - Wheels
4 - 2-1/2" Screws	2 - #4 2-5/16" - 5/8" Eyebolts
3 - 2" Screws	1 - Section of Rope
15 - 1-5/8" Screws	

Hardware Reference Sheet



Note:
The screws are printed at actual size. You can lay hardware on the sheet to confirm correct size.

Preparation Step (Most Important)

The most important step of these instructions is safety. Please wear appropriate safety gear when needed. Safety glasses will protect your eyes when drilling and work gloves will protect your hands. When using power tools, follow all safety guidelines in the owners manual. Children should be assisted by an adult when building this kit.

These instructions are written for a builder of average skill. You can change and customize you car in anyway that you like.

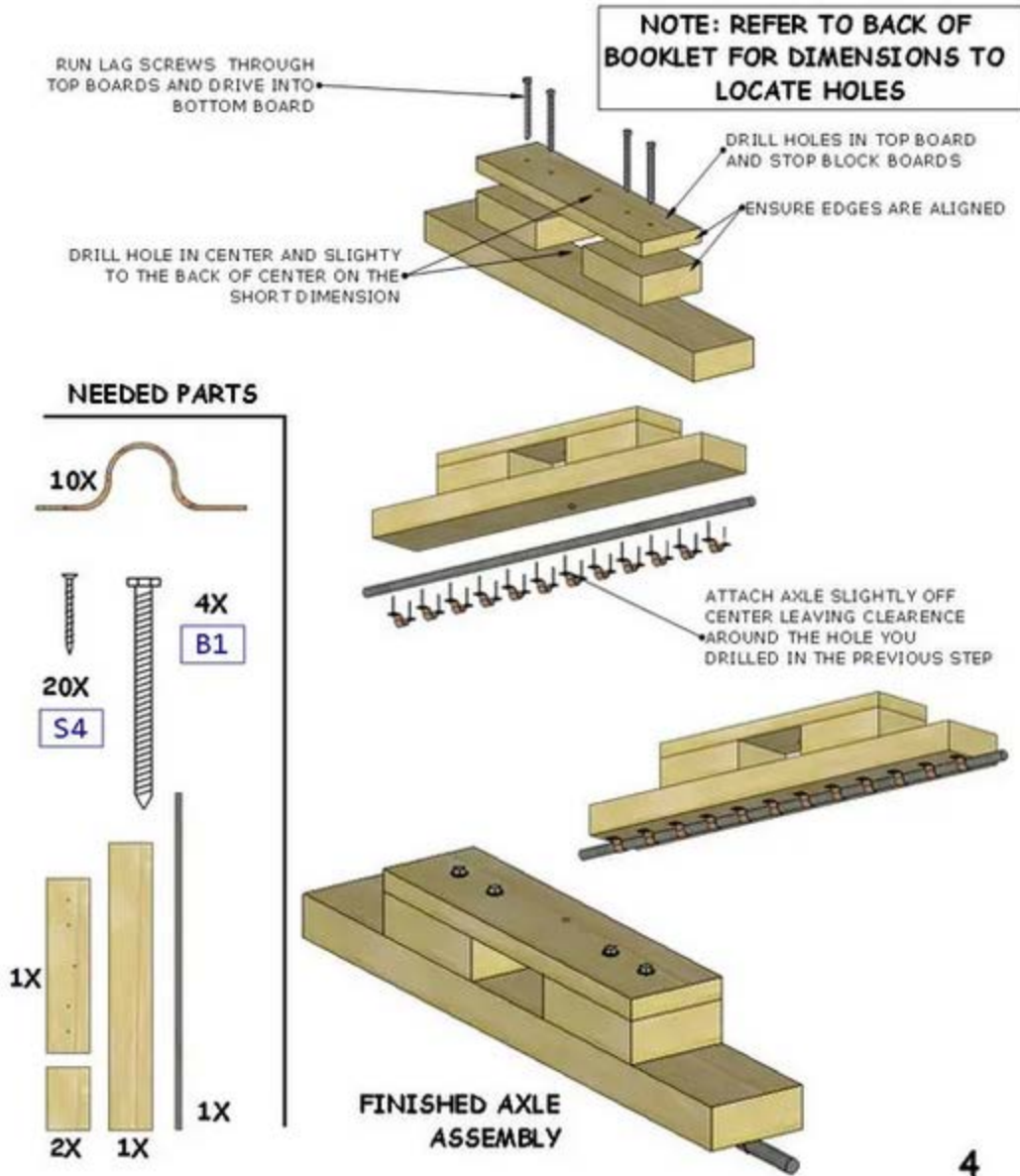
Shopping Step

Gather all your needed supplies. You can just print these off and use as a shopping list. Any Home Improvement store will sell these items with the exception of the wheels, they may be harder to find, but you can substitute other wheels if you'd like.

Step 3: Step #1 Building the Front Axle Assembly

Step #1

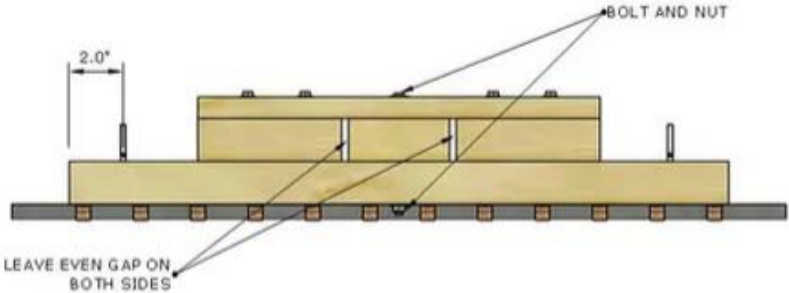
In this step you will be assembling the front axle assembly.



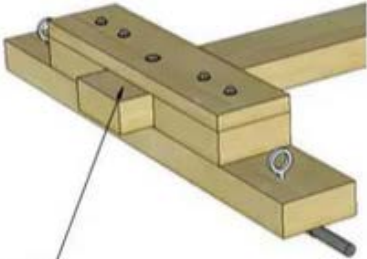
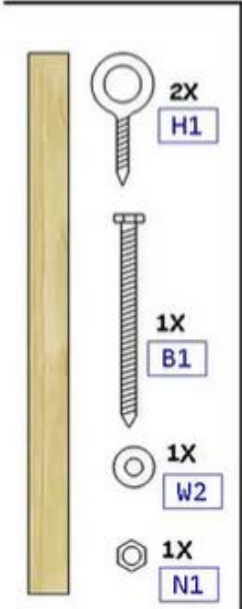
Step 4: Step #2 Attaching Front Axle Assembly to Frame

Step #2

In this step you will be attaching the front axle assembly to the frame board and the eye hooks to the axle.



NEEDED PARTS

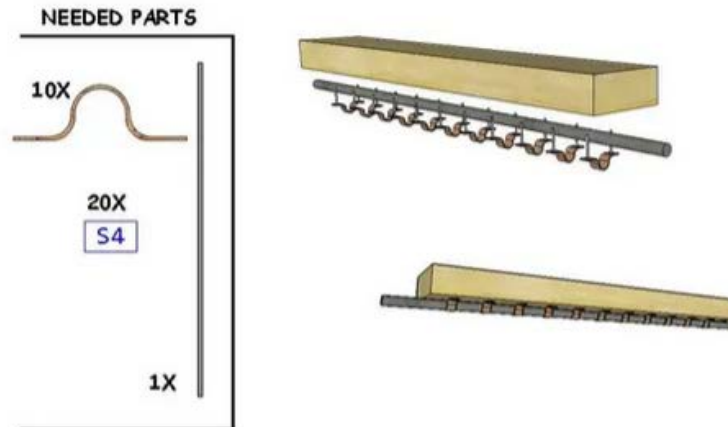


NOTE: TO DRILL HOLE THROUGH FRAME BOARD. SLIDE BOARD IN AXLE ASSEMBLY AND ALIGN WHERE YOU WANT IT. CLAMP IT DOWN TO AND DRILL HOLE.

Step 5: Step #3 & #4 Building and Attaching Rear Axle Assembly

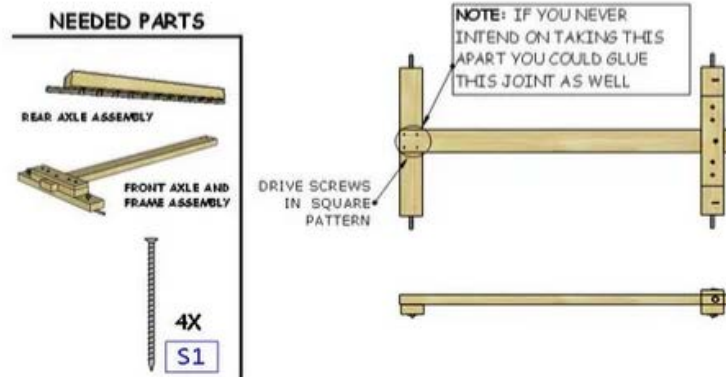
Step #3

In this step you will be creating the rear axle assembly.



Step #4

In this step you will be attaching the rear axle assembly to the frame board.



Step 6: Step #5 Attaching the Seat

Step #5

In this step you will be building the seat on the frame.

**** FOLLOW STEPS IN ORDER****

4 SCREW THIS BOARD AT THE DESIRED ANGLE TO THE 2X2 BLOCK ON BASE BOTTOM

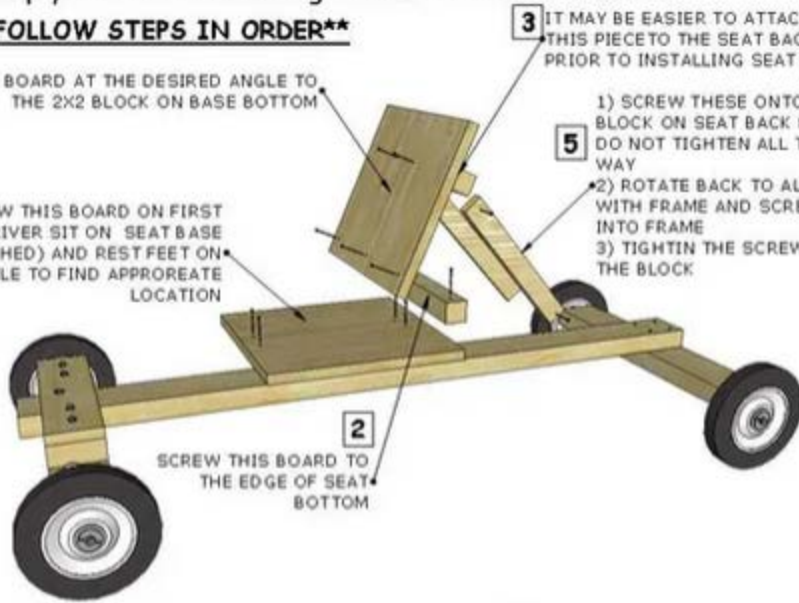
1 SCREW THIS BOARD ON FIRST HAVE DRIVER SIT ON SEAT BASE (UNATTACHED) AND REST FEET ON FRONT AXLE TO FIND APPROPRIATE LOCATION

3 IT MAY BE EASIER TO ATTACH THIS PIECE TO THE SEAT BACK PRIOR TO INSTALLING SEAT BACK

5 1) SCREW THESE ONTO BLOCK ON SEAT BACK BUT DO NOT TIGHTEN ALL THE WAY

2) ROTATE BACK TO ALIGN WITH FRAME AND SCREW INTO FRAME
3) TIGHTEN THE SCREW ON THE BLOCK

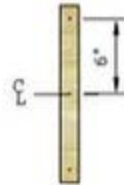
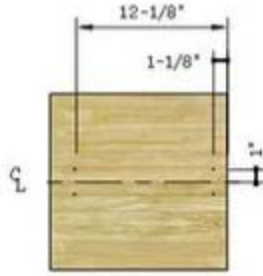
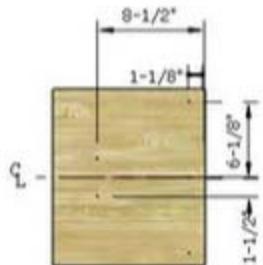
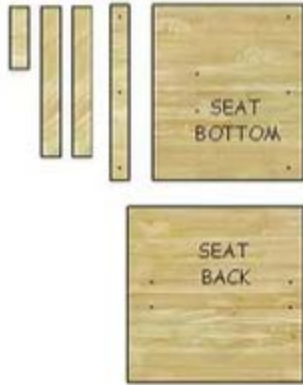
2 SCREW THIS BOARD TO THE EDGE OF SEAT BOTTOM



NEEDED PARTS

3X S4

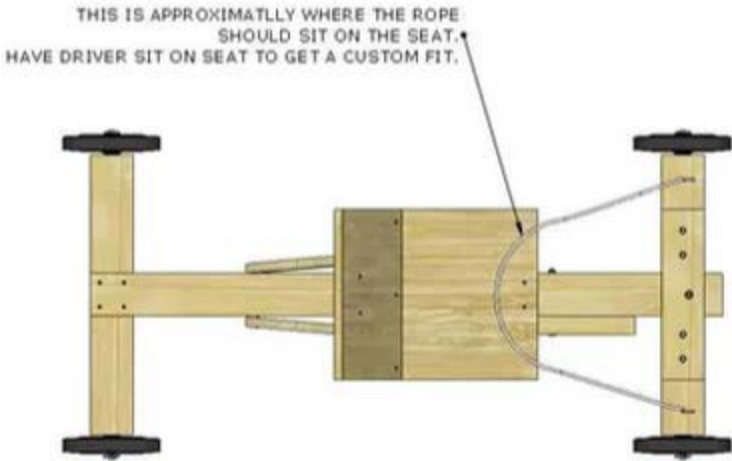
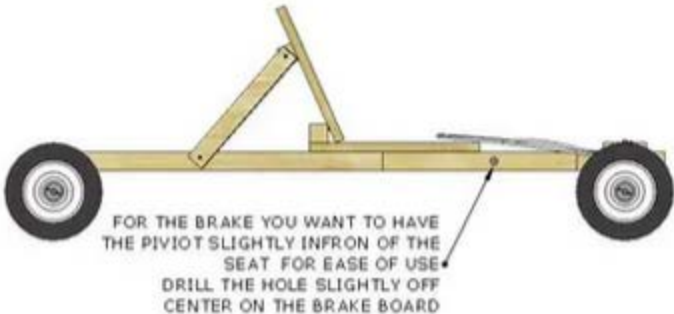
13X S3



Step 7: Installing Brake and Steering Rope

Step #6

In this step you will be attaching the steering rope, brake and the wheels.



REFER TO FOLLOWING PAGE FOR WHEEL INSTALL