NEW BERLIN SOAP BOX DERBY SUGGESTED BILL OF MATERIALS

(Revised 04/28/2014)

This bill of materials is for <u>suggestion only</u>. It is not intended to be complete, only to get you started. **Refer to the <u>OFFICIAL RACECAR SPECIFICATIONS</u>**

for minimum car building requirements.

To avoid the disappointment of a broken car on race day, for cars built 2011 and after it is required that steering and brake systems and other functional components be attached to the car by through-bolting, rather than with screws or nails.

FRAME / AXLES

- > 5/8" plywood or 3/4" OSB (oriented strand board) for floor
- 1-1/2" X 3-1/2" wood for axles, 2 pieces, each 30" long ("two-by-four")
- ➤ 1/2" bolts, nuts, washers for attaching axles
- > 5/16" bolts, nuts, lock washers for attaching wheel brackets

STEERING

- > 3/4" inside diameter copper or steel pipe for steering shaft
- > 1/16" diameter woven steel wire, not plastic coated. ("aircraft cable")
- > Turnbuckles with lock nuts
- > Eye bolts, nuts, washers for attaching cable system to axles
- Swivel pulleys or brake line
- Cable clamps

BRAKE

- Copper pipe, elbows, tees
- Mounting brackets and bolts, nuts, washers
- Heavy duty return spring
- Heavy rubber pad or discarded tire

BODY

- Body covering to suit your design
- Paint
- Car numbers, 3 sets, 4" MINIMUM SIZE
- Sponsor name letters, 2 sets, 2" MINIMUM SIZE

MISCELLANEOUS

- > Adhesives, glues, etc.
- Other hardware as your design may require
- IMAGINATION, INGENUITY, AND CHILDREN'S PARTICIPATION