

Rain Gutter Regatta

The Raingutter Regatta is similar to the Pinewood Derby or the Space Derby except that the models are miniature sail boats. Although the seas are only 10-foot lengths of raingutter filled with water, and the ships a mere 6 inches long, the race is a very exciting event. Each boy builds his own boat with supervision and help from parents or other family members. He also provides the wind for the sail with his own lung power. The regatta boat kit, available from your Leader, has a pre-shaped balsa hull, metal keel and plastic sail. The hulls are sanded and shaped, and are colorfully painted. Hull and sail can be decorated with decals. The boats race in pairs on raingutter courses propelled by the boys blowing into the sails. The races can also be run as a team relay event.

Reference:

Refer to the design in the Cub Scout Leader How-To Book, pages 9-47 through 9-49, ISBN 0-8395-3832-4.

Raingutter Regatta Boat Specifications:

Hull: No longer than 7" or shorter than 6 1/2"

Mast: 6 1/2" from deck to top

Keel: Supplied in kit

Rudder: Supplied in kit

Sail: Supplied in kit

"How to"

The actually "race" will be divided into age categories: Wolf, Bear and Webelos. Each age group will race amongst themselves. The race will involve two lanes of "rain gutters". The boys are to blow air on the boats in order to advance them through the water. Hands are only to be used to upright a turned over ship, and are not to be used to advance the boat. In addition, boys should not use their faces, lips, hats, nose or other bodily parts to move the boat - just the air in their lungs!

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The regatta boat kit, available from your leader, has a pre-shaped balsa hull, metal keel and plastic sail. The hulls are sanded and shaped, and are colorfully painted. Hull and sail can be decorated with decal kits. The boats race in pairs on raingutter courses propelled by the boys blowing into the sails with a drink straw.

Raingutters:

Have a spare raingutter on hand.

Pre-test all raingutters for leaks. Have some crimping tools on-hand (such as vice grips) to seal last-minute leaks.

Keep caulk on hand. Do not use 100% silicone on wet surface since it dissolves in water.

Clamp the ends of the raingutters down so that they do not get knocked over!

Cleanup (for indoor activities):

Have mops handy!

Have plenty of towels handy!

Use a Wet-Dry Shop Vac to remove the water! This is the best hint I can **provide!**

Hints:

The best "sailing" boat is a raw un-finished boat with the mast and sail stuck on! It does not look pretty, but ...

For the reason above, try to incorporate a design category or weighting into the judging categories. Try to keep the bottom as flat as possible; that is as close to the original flat bottom as possible.

Have a waiting deck: Try bringing a small plastic pool or sandbox to fill with water that is called the "marina" where the boys can test their boats. It is not how hard you blow but how straight you blow that makes the difference. More keel(s) or a more heavily weighted single keel is needed for top heavy boat; such as if you were to put some form of cabin on the deck! The bottom edge of the sail needed to be about 1/2 inch above the deck of the boat. If the sail was too low the corners rubbed against the gutter or dipped in the water. If the sail was too high the boat was top heavy and tended to tip over. The boats sailed best if they were balanced with more weight to the rear. This elevated the bow of the boat, and when they were blown, they ran almost even. The keels needed to be placed about 3/4 of an inch behind the mast. Don't follow the instructions in the kit. The rudder should be placed touching the keel. Blow evenly with the straw at a point about 1 inch from the bottom of the sail. Blowing the boat down one edge of the gutter rather than letting it "tack" back and forth seemed to be the fastest. Use "Krylon" spray paint -- it dries in about one minute on the balsa wood hulls. Try to learn how to make double elimination brackets for odd numbers of boats before the race.