

The Cardboard Boat Regatta



June 14, 2019

5:30–7:30 pm

\$5 per person

South Sioux City Outdoor Pool



The Cardboard Boat Regatta

Construction Materials & Rules:

- The entire boat must be built from cardboard. Duct Tape may be used to reinforce seams.
- Pre-treated cardboard such as waxed cardboard is allowed.
- No caulking compounds, two-part/mixed adhesives, glues, epoxy mixtures or coatings.
- Paint can be used for waterproofing and decorating. No painting is allowed on the day of the event.
- All painted cardboard must be fully cured prior to boat launch.
- Decorations and costumes are allowed and encouraged, provided they are not used as structural or flotation elements.
- No boat building supplies are provided.
- Participants may only enter & compete with 1 boat.
- No wood, plastic, rubber, inflatable devices, Styrofoam, or fiberglass on any boat.
- No electrical, gasoline, benzene, propane, other chemical or electrical propulsion systems are permitted.
- Canoe or kayak type paddles only. No boat oars. (Bring your own paddles).
- No surfboard or paddle-board style boat is allowed.
- The crew compartment cannot be enclosed so as to interfere with escape.

Boat Classifications:

- Guppy; ages 11 and under
- Dolphin; ages 12-17
- Whale; ages 18 and over

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Participant Rules:

- Each boat must have 1 or 2 passengers.
- During competition, crew must be in the boat, not towing it, or holding it between their legs, swimming, or allowing the life jacket to provide the flotation of the vessel.
- Throwing water on another boat is reason for disqualification, unless said water comes from the incidental splash of a paddle.
- Contestants are expected to maintain the decorum and dignity expected of a yachtsmen!
- Discarded boats must be disposed of in designated trash receptacle or your personal vehicle. Any sunken remains must be completely removed from the water by the crew (or adult helpers).
- This is a fun event! Any behavior that is deemed to be detrimental to the event or other participants will result in disqualification.

Race Competition:

- Yachtsmen will check-in with YMCA staff upon arrival at the outdoor pool. The winner of each heat will move on to the final race.

Awards:

- **First, Second and Third Place Awards** will given for the top three boats in each division. A cardboard boat must complete the length of the pool to qualify as a "finisher". Swimming crewmembers pushing a boat (or some portion of it) through the water is not considered "racing". The boat (or some portion of it) must be maneuvered and propelled by at least one paddling crewmember.
- **Spirit Award** - Awarded by the judges based on creativity, showmanship and team spirit for each division. Costumes & props are encouraged!
- **The Titanic Award** - Awarded to the crew in each division, who in the opinion of the judges, was the most spectacular in the way the ship went down!

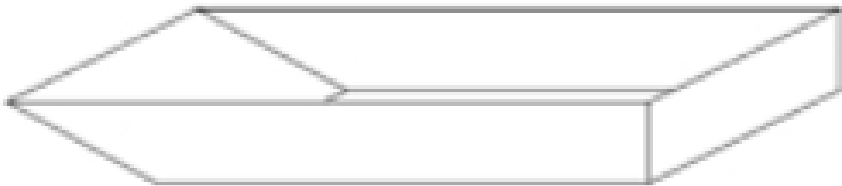
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Types of Boats



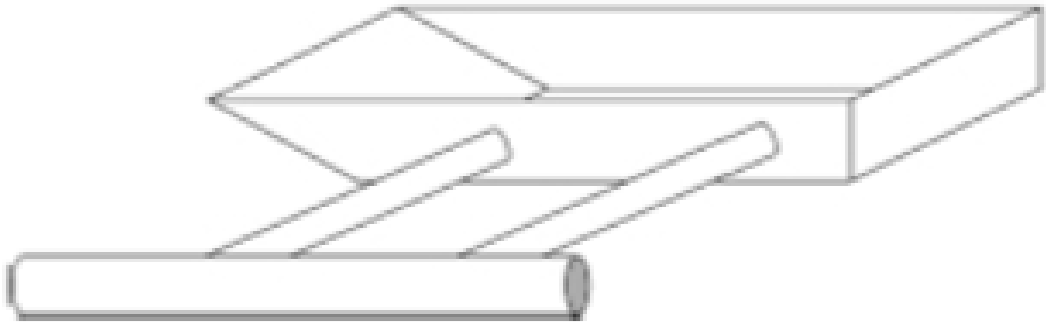
Simple Box



Slanted Box



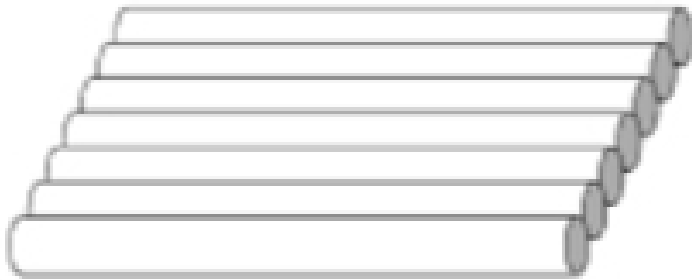
V-Shaped Box



Outrigger Design



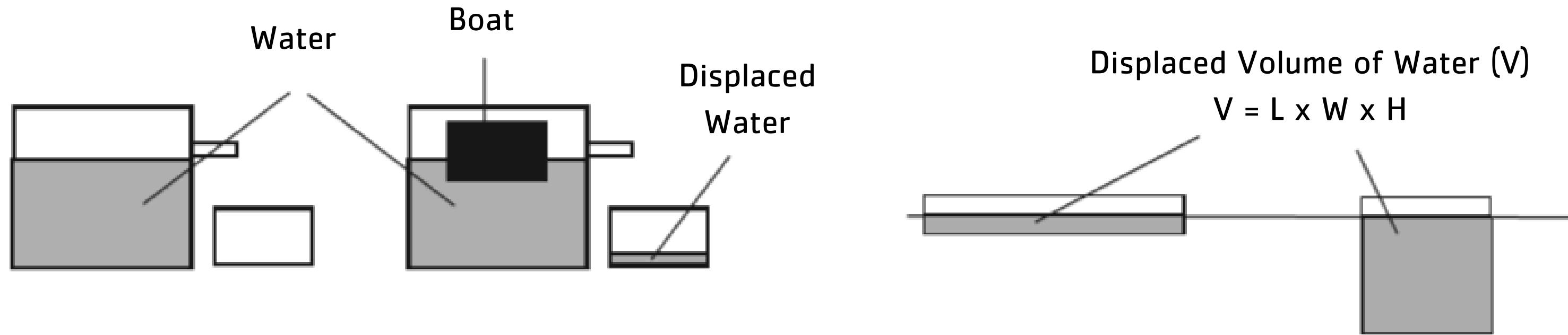
Pontoon Design



Raft Design

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"How Much Will You Sink?" - Displacement



Weight of Water = 62.4 pounds/cubic-foot

$$\text{Water Displaced (ft}^3\text{)} = \frac{\text{Weight-of-boat \& people(lbs)}}{62.4 \text{ lbs/ ft}^3}$$

Depth (ft) boat sinks

Example:

Box boat: 3 ft x 6ft, 1 ft tall(high)

Boat Volume: 3' x 6' x 1' = 18 ft³

Boat displacement: 18 ft³ x 62.4 lbs/ft³ = 1123.2 lbs
(which equates to 93.6 lbs per inch of boat height)