

# Construction Rules

1. The entire boat must be built using ONLY cardboard and duct tape. Supplies will NOT be provided.
2. NO pretreated cardboard allowed
3. NO wood, plastic or fiberglass
4. NO caulking compounds
5. The Crew Compartment CANNOT be enclosed for safety reasons. EVERY Crew Member MUST wear a life jacket.

## Participation Rules

1. Crew must be at least 2 patrol members.
2. Every crew member is REQUIRED to wear a personal flotation device.
3. Each crew member must be able to swim.
4. NO intentional boat crashing, pushing or paddling inside of the competitor's boat.

## Deciding Which Type of Boat to Build

- **Determine the shape of the boat:**

It can be a simple square or box type, a slanted style with one side slightly inclined, a V- shaped boat or a design of a raft boat, or a flat bottom. (Flat bottoms are simple!)

- **Things to Consider:**

- Simple is easier to build. The square type boat is the easiest among all shapes.
- A barge (flat-bottomed) shape adds to the floating capacity, but it limits the speed of your boat.
- The length of your cardboard boat will affect performance... for instance long boats go fast but are harder to turn whereas short boats are easy to turn.

## Cardboard Boat Design Suggestions

- **Consider size in terms of building and transporting:**

- Big enough to hold crew, small enough to carry.
- Consider total weight of all materials when wet.

- **Set the Design Goals**

- Fun, speed and appearance

- **Sketch out your design**

- Estimate the materials or plan how to use the materials you have.

## Building Your Boat

### Cardboard Preparation

- Draw out the basic shape, then cut it out.
- Cut cardboard into the height of the walls you want. It is easier to keep the wall in a strip, so you don't have to tape them together and risk more leaks.

### Assembly

- Line up the walls to the base.
- If you are going around a curve then mark it. Score the line and fold it so it goes around the curve.
- Keep doing this until you run out of cardboard and tape it down inside and out.

## Taping

- Tape all the sides on and any walls that need to be taped together.
- If the base of your boat is sticking out, cut it off before taping it.
- Tape the bottom so no water can get in, also tape the sides a little, you don't have to go up all the way.

## Reinforcing

- Reinforce the corners of your boat, both inside and out, with folded pieces of cardboard or cut-out box corners.
- The idea is that there shouldn't be any seams directly in the corners, and the wall pieces should be taped together into one continuous unit.

## Be creative and make your boat stand out!

