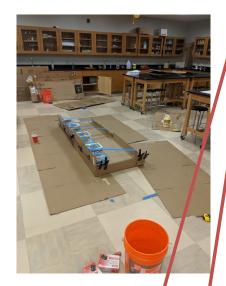
Simple Guide to Building a Cardboard Canoe

Materials needed

- Cardboard
- Wood glue (tight bond 2 or 3)
- Duct tape
- Polyurethane (water based)
- Optional: Latex paint



Phase 1: build the skeleton canoe

Note: all cardboard should be held in place with **wood glue** at this stage. Have plenty of books to help weigh down the cardboard as the glue dries.

Step one: clean away any staples or tape from cardboard. Cut boxes down so they lay flat

Step two: Build a floor to the canoe make it at least two layers thick using wood glue to adhere the layers. Cross the grain of the cardboard to build strength. Flat bottom canoes are the most stable and easiest to make.

Step three: Add walls to the canoe. You may want to make a pointed bow . Walls should be between 12-20 inches high. Too tall and it is hard to paddle over them

Step four: Add strength this can be done by adding a covered top in areas the participants are not sitting. Think sit in kayak instead of open canoe. Cardboard can also be folded in V shapes and glued in for rigidity.

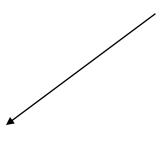
Step Five add any cardboard designs onto the side of the cardboard.



Phase two: Paint and Water Proofing

Here you need to decide if you want to paint your canoe. Paint is not necessary for water proofing but looks good. Your decision will effect the order of the next steps.

Note: you do not want to put polyurethane directly over duct tape as it can



Painting

Step One: use duck tape to cover all the seems of your cardboard this is to make sure water does not get into your sheets along the edges.

Step two: Paint at least two coats of latex paint over your cardboard.

Step three: Cover every surface in your canoe with polyurethane. Note the drying time is long so plan ahead. You will need between 2 and 4 coats of polyurethane to ensure your boat stays watertight.

Not painting

Step One: Cover every surface in your canoe with polyurethane. Note the drying time is long so plan ahead. You will need between 2 and 4 coats of polyurethane to ensure your boat stays watertight.

Step two: Once the polyurethane is fully dry, use duck tape to cover all the seems of your cardboard this is to make sure water does not get into your sheets along the edges.





Add any extra decorations you want to spruce up your canoe. Decorations may not assist in the flotation of your canoe decorations may not have sharp edges or metal. Our Race stuff should be safe helping pull out your canoe at the end of the day.

