



Environment, Outdoors and Camping

Here are some challenge suggestions that other Rangers have done.

A good idea for exploring the world of physics and engineering is to try to build your own cardboard canoe. In this activity, your group will divide into teams to design, build and race boats built entirely out of cardboard and duct tape. Here's what you do:

1. Divide your group into teams and start by reading up on canoes and boat building. This will help your team get your boat across the pool!
2. Get some refrigerator or large furniture boxes. Appliance and furniture stores are a great source of cardboard.
3. Take your refrigerator boxes, some paddles (unless you want to make the creation of paddles part of the competition too) and lots of duct tape down to a local wading pool.
4. Start your competition. Set a time limit for designing and building the canoe (e.g., one hour). At the end of that time, everyone must be ready to race.
5. Start your race and see who can row their cardboard boat across the paddling pool.
6. Some may get stuck while others may sink halfway. A lucky few might make it to the other side.
7. Talk about your ideas and why they may or may not have worked.
8. Now make a boat as a group, using everything you know.
9. You might want to have prizes, and be creative. Don't just have a prize for first, second and third place. Have prizes for the most creative design, the largest boat or the most spectacular sinking!