



Personal Pull Toy

for ages 7 and up

Start with the chassis (the wheels and framework of a vehicle), then make your toy unique by building a creative body with recycled odds and ends.



What you need for the chassis:

- LOW TEMP hot glue gun & glue sticks
- 2 paper pulp egg carton lids (or similar size sturdy base)
- 2 disposable chopsticks
- 1 straw (not bendable), cut into 2 equal pieces
- 4 matching plastic or cardboard lids for wheels with hole cut in center *
- 4 small caps (from markers, toothpaste, etc.)
- 1 paperclip & string/yarn (for pull)
- Scissors
- Box cutter or razor blade (for adults only)

To finish:

- Assorted recycled items & decorative bits (we used a paper towel roll, egg carton crate & empty tea box)
- Construction paper (optional)
- Tempera paint (optional)

* Thick plastic tennis ball container tops or cardboard soup lids are ideal wheels. Yogurt lids are a little thin. (Wheels need to be stiff enough to support the weight of the toy, but be soft enough that a hole can be cut through.) Parents need to prep the lids by cutting small holes or "X"s at the center with a box knife or razor blade.

Glue Gun Safety!

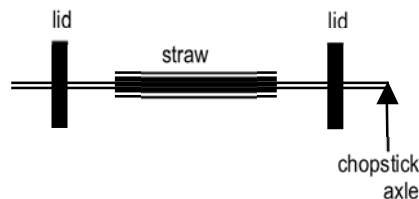
Before starting the project, review the rules of safe glue gun use:

- Be aware of where your glue gun is at all times.
- NEVER touch the metal tip.
- Dispense the glue by aiming at the larger object and pulling the trigger, then place the smaller object on top, being careful not to touch the glue.
- Slowly count to ten to let it cool and form a bond.

Only low-temp glue guns should be used, and parents should closely supervise. Keep a small bowl of cold water handy – if the child does get glue on their finger, immediately immersing it in water reduces the risk of a burn.

Chassis Step 1: Assemble the axles. (Axles are the rods that attach to the wheels.)

Assemble two axles (don't glue yet!) by threading the chopstick through the half straw. Make sure the chopstick can rotate freely inside the straw. Push the chopstick through the holes in the lids, placing one lid on each end with the straw in the middle. Leave about 1 inch of chopstick on the outside edge of the lid.



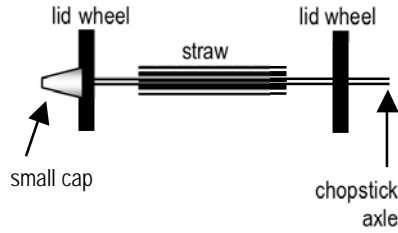
at home

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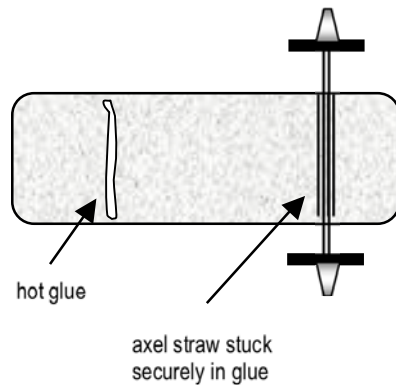
Chassis Step 2: Glue the axles and wheels together.



Fill one of the small caps with hot glue, and then fit it securely onto the outside end of the chopstick, pushing the lid wheel flat against the cap. Hold for 20 seconds. (It takes longer to set because of the amount of glue.) Check that the cap is stuck tightly to the lid wheel. Add more glue if necessary. Repeat process with the other three wheels.

Chassis Step 3: Attaching the axles to the chassis.

Glue the two egg carton lids together, one stacked inside the other. (This adds strength to your frame.) Using the topside of the doubled egg carton lid, squirt a strip of hot glue down, about two inches in from the end. Stick the straw part of the axle in the glue. (The chopstick should still turn freely.) Glue the other axle to the other end. Your chassis is complete!



Step 4: Personalize your pull toy. Be creative!

On the topside of your chassis, use empty boxes, toilet paper tubes, whatever you can find, to decorate your toy and turn it into a creature, car or fantasy vehicle. Try to find lightweight items. Glue down these sculptural shapes with your glue gun to secure. Use paint and paper to add details such as arms, feathers, windows etc. Be creative, being careful not to add too much weight. Poke the paperclip through the front end, tie on a string and you are ready to pull!



