



ENGINEERING PROJECT:

Different Machines to Power a Car

This project is a corkboard toy car launcher. This project demonstrates the idea of stored energy. Energy is stored in the rubber band when you pull it back, and transferred to the car when you release it. You can also create a ramp to give the car lift.

MATERIALS NEEDED:

- 12 inch x 12 inch Corkboard
- 2 Push Pins
- 1 Long rubber band
- 1 Paperclip
- 1 Toy car
- Masking Tape

GO DISCOVER:

- 1. Push pushpins into corkboard such that the rubber band fits loosely over both of them
- 2. Bend paperclip such that it can be used as a hook
- 3. Use masking tape to attach paperclip to the top of the toy car
- 4. Place the car in front of the rubber band and slide back until the hook attaches to the rubber band
- 5. Pull back the car and release to launch it.
- 6. Tilt the corkboard up to create a simple machine, a ramp, in order to give the car lift

AND FOR EVEN MORE FUN:

Below are more projects that show how different machines can be used to power a car.

- Mousetrap Cars: http://www.instructables.com/id/Mouse-Trap-car/
- Balloon Cars: http://www-tc.pbskids.org/designsquad/pdf/parentseducators/4wheelcar-english.pdf
- Puff Cars: http://pbskids.org/zoom/activities/sci/puffmobile.html