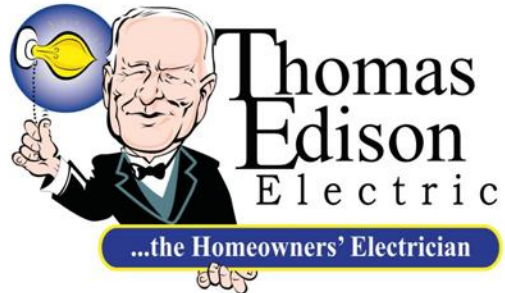


# KIDS ZONE EXPERIMENT



## BUILD A FILM CANISTER ROCKET

### YOU WILL NEED:

- One empty 35 mm plastic film canister and lid. These are getting harder to find but a store that develops film should have some. (the white canisters work better than the black one do.)
- One fizzing antacid tablet such as Alka-Seltzer
- Water
- Safety goggles

### WHAT TO DO:

1. Put on those safety goggles and head outside. The canister really flies so safety first.
2. Break the antacid tablet in half.
3. Remove the lid from the film canister and put a teaspoon (5 ml) of water into the canister. **Do the next two steps quickly.**
4. Drop the tablet half into the canister and snap the cap onto the canister. (make sure it snaps on tightly.)
5. Quickly put the canister on the ground **CAP SIDE DOWN** and **STEP BACK** at least 2 meters.
6. About 10 seconds later, you will hear a POP! And the film canister will launch into the air.  
**CAUTION:** if it does not launch, wait at least 30 seconds before examining the canister. Usually the cap is not on tight enough and the build up of gas leaked out.

### HOW DOES IT WORK:

When you add water it starts to dissolve the alka-seltzer tablet. This creates a gas called carbon dioxide. As the carbon dioxide is being released, it creates pressure inside the film canister. The more gas that is made, the more pressure builds up until the cap is blasted down and the rocket is blasted up. This system of thrust is how real rockets work. To control canister path, add fins and a nose cone made out of paper.

