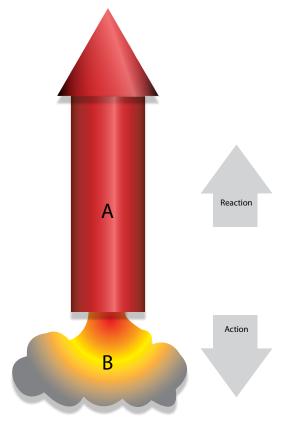
CC Cycle 2 Rockets

Lincoln Northeast

Purpose: Newton's Third law of motion: For every action, there is an equal and opposite reaction. This results in propulsion of the rocket.



Hypothesis: As pressure inside the rocket builds and is released down through the nozzle of the rocket, the rocket will move upward.

Materials: pop bottle 16.9 or 20 oz, rubber stopper, 2oz. vinegar, 4 oz. water, 2 spoonfuls baking soda, 3 craft sticks, 2 rubber bands, charging papers

Procedure:

- 1.) Stretch rubber bands around bottle. 2.) Place 3 craft sticks under rubber bands so they are held and provide a tripod base for the bottle(rocket) to stand upside down so that the cap of the bottle does not touch the ground. 3.) Pour water/vinegar solution into rocket(bottle).
- 4.)Cap bottle with original cap. 5.) Lay out charging paper flat and pour 2 spoonfuls of baking soda in a line down the middle. 6.) Fold in the two sides and bottom, then roll up the rest of the way. 7.) Proceed to Launch area. 8.) Remove cap, then quickly insert the baking soda charge and push rubber stopper into bottle as hard as you can. 9.) Shake the bottle, place cap down resting on the craft sticks and back away.

Results:

Conclusion:

Flight of a Model Rocket Worksheet Altitude = Velocity = Acceleration = Altitude = Velocity = Acceleration = Apogee Coasting **Ejection** Burnout Parachute Ascent Descent Altitude = Velocity = Velocity = Acceleration = Acceleration Fill in the description Launch for each phase of flight Recovery