

DRUMMER HOF adapted by Barbara Emberly

Drummer Hof is viewed by most children as having the best job of all - the firing of the cannon. Loud noises or explosions capture our attention and we want to know how they happen.

You can do a simple demonstration which is comparable to Drummer Hof's deed using a film canister and the magic of chemistry. Alka-seltzer[™] dissolved in water produces the gas, carbon dioxide. When this gas is trapped inside the film canister, pressure builds up and the film canister top explodes up and off.

MATERIALS: Alka-seltzer[™] tablets, film canister, water, plastic pipet (optional), teaspoon

ACTIVITY: Place 20 drops or one teaspoon of water in the bottom of the film canister. Add 1/4 Alka-seltzer[™] tablet and put top on film canister quickly. Set on desk or table away from students and wait (2 minutes). You should have younger students cover their ears. The top will be "fired off" into the air!

SOURCE: Operation Physics activity entitled "Alka-Bomb".

STANDARDS:

BSL: 1.1, 1.2, 1.3, 1.6, 1.7, 1.8, 3.1, 3.2, 4.5, 6.2, 9.1, 9.5, 9.7, 11.2, 12.1, 12.2 **NCTM:** 4d, 5a, 5b, 5c, 5d, 10a, 10c, 10d **SCS:** A1, B1, B2, D1, E1, E2, H2, H4, H5

Emberly, Barbara. <u>Drummer Hof</u>. Simon & Schuster, Inc., 1967. ISBN#0-671-66249-X.