

CLOUD CHAMBER DESIGNS

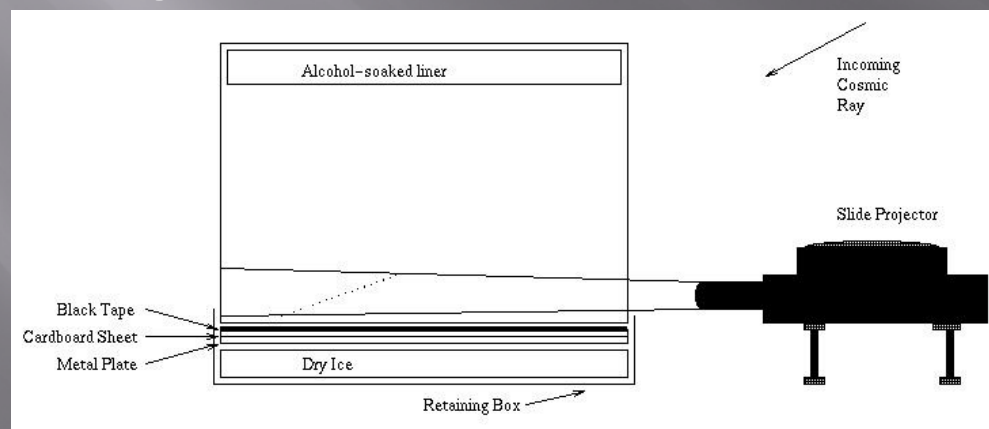
By Lora Beard

Cornell University

Materials: Dry ice, isopropyl alcohol, slide projector and various common materials.

Advantages:

- ❑ Very detailed
- ❑ Troubleshooting section
- ❑ A few suggestions for additional experiments (using magnets or multiple plates)
- ❑ Tight seal over the top of the container

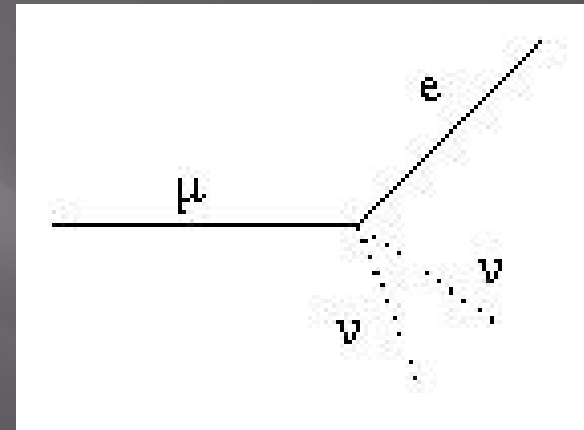


Cornell University

The cloud chamber appears to have been a summer project for the REU Program at Cornell University. There were also several other more complicated/slightly more expensive figures available on the page as well.

Disadvantages:

- ▣ Unclear on type of container
- ▣ Expense? I'm unsure what materials are available in a high school.



Cup or “Canteen” Cloud Chamber

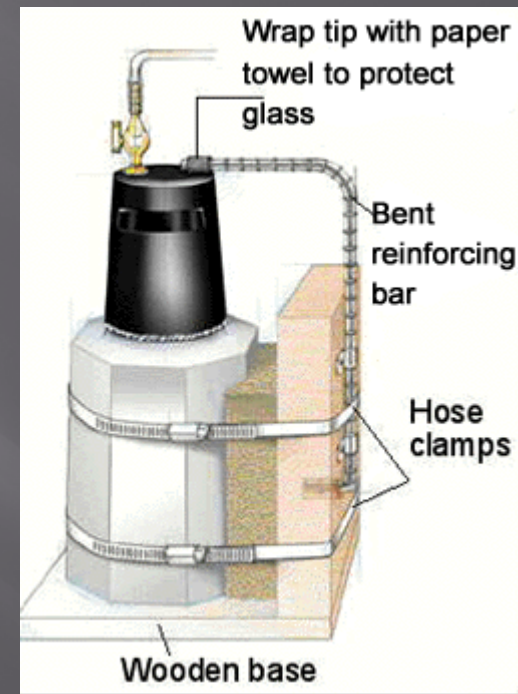
- Materials: Vinegar, alcohol, steel bar, glass, clamps, canteen, ink, etc.

Advantages:

- Claims to be under \$30
- Very different method to test (generator/piston)

Disadvantages:

- Author admitted it was unreliable



Petri Dish Cloud Chamber

Youtube Video from JeffersonLab

Materials:

- ▣ Petri dish, stick-back felt, dry ice black construction paper, and radiation sample.

Advantages:

- ▣ Simple
- ▣ Cheap
- ▣ Online example



<<http://www.youtube.com/watch?v=pewTySxfTQk>>.

Simplest Design

Materials:

- ▣ Clear plastic cup, aluminum, dry ice, 99.9% pure anhydrous isopropyl alcohol.

Questions:

- ▣ Type of tape used
- ▣ Visibility of trails

