

CALIFORNIA STATE SCIENCE FAIR 2005 PROJECT SUMMARY

Name(s)
Matthew P. Terze

Project Number

J0733

Project Title

Linear Accelerator

Abstract

Objectives/Goals

The object is to find if I can make a model of a linear accelerator that shows the basic principals of a linear accelerator.

Methods/Materials

Tape four 12mm ceramic cube magnets 7 cm apart on a ruler in a straight line from left to right. To the right of each magnet place two steel marbles. From the left side roll one marble towards the first magnet. Watch and record.

Results

The model worked by using chain reaction to demonstrate how a linear accelerator accelerates particles.

Conclusions/Discussion

My conclusion is that I can make a model that demonstrates how a linear accelerator works. I also was able to research linear accelerators.

Summary Statement

I made a model of a linear accelerator.

Help Received

My father purchased the ceramic magnets I used in my model.