



EDUCATION OUTREACH PROGRAMS

PROMOTING SCIENCE, TECHNOLOGY, ENGINEERING & MATH EDUCATION IN NEW MEXICO!

## SAMPLE RESEARCH PROJECT ABSTRACT

Advertisers are always touting more powerful and longer lasting batteries. But which batteries really do last longer, and is battery life impacted by the speed of the current drain? This projects looks at which AA battery maintains its voltage for the longest period of time in low, medium, and high current drain devices. The batteries were tested in a CD player (low drain device), a flashlight (medium drain device), and a camera flash (high drain device) by measuring the battery voltage (dependent variable) at different time intervals (independent variable) for each of the battery types in each of the devices. My hypothesis was that Energizer would last the longest in all of the devices tested. The experimental results supported my hypothesis by showing that the Energizer performs with increasing superiority, the higher the current drain of the device. The experiment also showed that the heavy-duty non-alkaline batteries do not maintain their voltage as long as either alkaline battery at any level of current drain.

