Childproof or Not?

Type
Social Science, Human Behavior

Grade
5th – 8th grades

Difficulty of Project
Moderate

Cost
Less than $20.00

Safety Issues
None

Material Availability
Gather 3 empty childproof containers each with a different way of opening

Approximate Time Required to Complete the Project
May take up to 5 days to collect the data; one day to prepare the science fair display

Objective
To determine whether childproof containers are really childproof

Materials and Equipment
- 3 empty childproof containers (each must have a different way of opening)
- Stopwatch

Background Information
Childproof containers have been developed to prevent young children from harming themselves by taking too much medicine or coming into contact with harmful substances. Unfortunately, many childproof containers are not really childproof.

In this investigation, different childproof containers are tested to see how childproof they really are.

Terms, Concepts, and Questions to Start Background Research
Terms

childproof: not able to be opened by a child

Concepts

Childproof containers were invented to keep children from being accidentally poisoned by medicine and toxic household products.

Research Questions

- What were childproof containers invented to prevent?
- How do childproof containers work?
- Are child proof containers really childproof?
- Can a young child learn how to open a childproof container?

Experimental Procedure

1. Gather the childproof containers. Be sure the containers are empty and have been thoroughly cleaned.
2. Select five subjects who are all four years old. Most school science projects require permission slips for all subjects used in science investigations. Be sure to get all the necessary forms signed.
3. Show one of the subjects one of the three containers. Tell the subject that he or she has one minute to try and open the container. Use the stopwatch to time one minute. Record the results.
4. Repeat Step 3 with the other childproof containers.
5. Next, show the subject how to open the first childproof container. Then give the subject one more minute to try and open the container. Use the stopwatch to time one minute. Record the results.
6. Repeat Step 5 with the other childproof containers.
7. Repeat Steps 3 – 6 with each of the subjects.

Bibliography

Articles


“Poison Prevention Tips” at http://www.alapoisoncenter.org/poison_tips.htm