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Air Power for Transportation

Science Fair number: Q61

PURPOSE & HYPOTHESIS

I did this experiment because it looked cool and exciting. I thought it would be easy and fun. I think the bigger balloon the faster it would go. I am a 100% sure that the experiment will shall go perfectly and nothing wrong.

RESEARCH

I went to wikipedia and looked up air power for transportation. I also read from a science book I borrowed from my friend. My friend told me about science and she also told me about air power for transportation. I watched a science show on television called Bill Nye the science guy. And the last thing I searched on is Education.com.

MATERIALS

1. 3 Balloons of different sizes
2. Masking tape
3. 25 feet of thin fishing line (mono-filament line)
4. Plastic drinking straws (one for each balloon)
5. Some heavy books
6. A 25 foot tape measure
7. A pad of paper and pencil for writing measurements and observations

EXPERIMENT

1. blow up each balloon, holding the end closed with your fingers so it stays full
 2. have someone else tape a straw to the middle of the balloons.
 3. Let the air back out of the balloons.
4. Take the piece of fishing line and stretch it tight between the back of two chairs spaced about 20 feet apart.
5. Leave one end with a bow knot so that you can untie it easily.
6. Put some heavy books on the seats of the chairs to keep them from tipping over.
7. Untie the fishing line and push the line through one of the straws with the front of the balloon facing and bring the balloon and straw back to the other end (the starting line). Retie the string to the chair so the fishing line is tight.
8. Blow up the balloon as much as you can. Pinch off the end. Then let go of the balloon. Measure how far it went along the fishing line.
9. Try another balloon of different sizes, or try the same balloon blowing it 1/2 way full or 1/4 of the way full. Measure how far the balloon travels.

PHOTOS

You can add an additional 2 slides if you need more space for pictures or graphs.

Pictures and Videos Attached

ANALYSIS

The biggest Balloon travelled the least and popped, the smallest one went all the way and the medium balloon went the all the way as well. I did the experiment in the living room, I did it at the 26th January

Biggest balloon stopped at the least spot and travelled 0.1 seconds

Medium balloon went all the way in 1 second

Smallest balloon also went all the way but in 1 in a half hours

CONCLUSION

Because the big balloon popped the experiment all over again to know the truth.

REAL WORLD CONNECTION

This is how they make trains, this also adds to my understanding of science. Air power can also make energy, and in the old times I think the planes flew because of air power for transportation.

WORKS CITED

- . wikipedia.com
- . education.com
- . science show Bill Nye the science guy
- . One of Richard Dawkins books I borrowed
- . My friend told me few things about science