BALLOON MAGIC STEM ACTIVITY

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NC Society of Hispanic Professionals
"Promoting Education among Hispanic Youth"

MATERIALS:

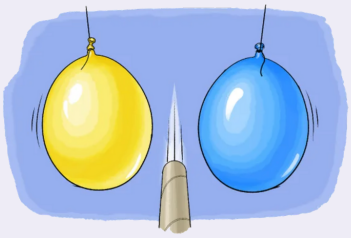
- Two balloons of the same size
- String (about 60 cm length)
- Scissors
- Tape
- A door frame
- Paper towel tube

LEARNING OUTCOMES:

- Students will reinforce their knowledge of air pressure
- Students will be introduced to Bernoulli's principle

PROCEDURE:

1. Hang two balloons on a door frame with string.
2. Make sure that the balloons are still. Then blow into the paper towel tube very slowly. Try to produce a steady air flow.



3. Finally, repeat step 2, but this time blow through the tube as hard as you can, producing a steady air flow.

Pictures from: https://www.scientificamerican.com/article/balloon-magic-with-bernoullis-principle/

WHAT THIS MEANS:

Did you notice that both balloons magically moved towards each other without being touched at all? The effect which you observed is a demonstration of Bernoulli's principle.

By blowing air forcefully between the balloons, you created an area of low pressure. The air pressure between the balloons decreased in comparison to the air pressure around the rest of the balloons. Because higher pressure pushes towards lower pressure, the balloons were pushed towards each other.

GLOSSARY:

- Air pressure: weight of air molecules pressing down on the earth
- Bernoulli's principle: states that as air moves around an object, it creates different pressures on that object

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- https://youtu.be/l_kIbu1kOwo

Spanish

- https://youtu.be/BW0UmTEMMAc

Source: https://www.sciencebuddies.org/stem-activities/bernoulli#:~:text=The%20effect%20which%20you%20observed,and%20both%20balloons%20are%20still.

For additional information please visit www.theNCSHP.org
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