APRIL FOOL'S DAY TRICKS:
GELATIN DRINK

MATERIALS:

Box of Flavored Gelatin	Measuring Cup
Water	Clear Cup
Flexible Straw	Stove or Microwave

VOCABULARY:

Polymer	Water	Dissolve	Matter
Solid	Liquid	Gas	Gelatin
Collagen	Amino Acids	Proteins	Bonds
Temperature	Atoms	Hydrogen	Molecules
Solution			

DIRECTIONS:

1. Work with an adult for this experiment as it involves using hot water and a stove/microwave.
2. Follow the directions on the box of gelatin to make the gelatin.
3. Pour the gelatin into a clear cup so it is 2/3 full.
4. Add a flexible straw.
5. Allow the gelatin to cool.
6. Offer someone a drink and hand them the gelatin in a cup.

THE STEAM BEHIND THE EXPERIMENT:

Gelatin is created by breaking down collagen which is found in all animals where its function is to bind cells together. Collagen is a very long chain of amino acids, the building blocks of proteins, that bonds to itself in a triple helix pattern.

Gelatin is long chains of hundreds of amino acids. At room temperature it is solid, but when you heat it up the bonds between the chains loosen, allowing them to slide and stretch apart. Gelatin also has a strong affinity for water. Hydrogen atoms that are attached to the side of the chains can bond with water molecules. When we heat up and mix our solution we are weakening the chains, then during the cooling process those hydrogen atoms form connections with the water molecules. This is called a hydrogen bond.

For this trick, you offer someone a drink but it is really gelatin that has been cooled in a cup with a straw in it.

MAKE IT AWESOME:

Try making an entire pitcher of gelatin for this tricl!

EXTENSIONS:

1. Leave your cup out in the sun. What happens?
2. What happens when you freeze your cup?
3. What happens when you change the amount of gelatin or water used in the experiment?
4. What other changes can you make to this experiment?

WEBSITES AND VIDEOS:

1. Gelatin Lenses Experiment: https://www.sciencefun.org/kidszone/experiments/jello-lenses/
2. The science behind gelatin: https://www.cnet.com/home/kitchen-and-household/appliance-science-the-firm-chemistry-of-gelatin/
3. Gelatin Streaking Experiment: https://babbledabbledo.com/science-art-activity-for-kids-gelatin-streaking/
4. Growing Mold with Gelatin Experiment: https://teachbesideme.com/growing-mold-science-experiment/
5. Make an Edible Gelatin Magnifying Glass: https://youtu.be/wfkAwq6UPx8

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