



Mission: Can changing temperature make molecules move?

Age: 5+
Materials: \$12

Time: 30 min
(Set-up: 5 min | Activity: 20 min | Clean-up: 5 min)

What you need:

Materials:

- 2 small covered boxes of the same size (a shoebox or something similar works well)
- 2 round balloons
- 2 cotton balls
- Mint flavor extract (or vanilla, almond, etc.)

Equipment:

- 1/4 tsp. measuring spoon
- Medicine dropper (optional)
- Hand balloon pump (optional)

What to do:

1. With the help of a grown-up, add about a quarter teaspoon of mint flavoring to each cotton ball using a measuring spoon or medicine dropper. Put one cotton ball inside each balloon, being careful not to get any extract on the outside of the balloon.
2. Blow up the balloons (using a pump makes it easier) just enough so that they still fit in the boxes and are the same size, then tie them off. Place one balloon inside each box and replace the cover.
3. Place one box somewhere warm and the other box somewhere cool. For example, go outside and try a sunny spot vs. a shady spot, or out on a counter vs. in the refrigerator. Wait 5-10 minutes, then collect the two boxes.
4. Open up each box separately and smell inside. Which box has a stronger scent? Why do you think there was a difference between the warmer and cooler boxes?

Clean-up:

Throw balloons with cotton balls in the trash. Recycle or reuse covered boxes for another purpose.