

Can You Bend Water?

Supplies:

- Kitchen faucet
- Inflated balloon (or a plastic comb)
- your own hair (or a dry microfiber towel)

Directions:

- 1. Turn on the kitchen faucet to get a narrow, continuous stream of water.
- 2. Rub the inflated balloon on your hair or comb your hair using the plastic comb a few times.
- 3. Place the balloon near, but not touching, the stream of water.
- 4. Observe how the water bends towards the balloon or comb.

STE(A)M Subject(s):

Static Electricity: Atoms

*Leaders/Parents Note: Atoms are extremely small particles that make up every object. You cannot see them without a microscope. The balloon is made up of many atoms and so is your hair.

Every atom contains positive and negative charge(s). Only negative charges are free to move. When rubbed against the hair, the balloon picks up extra negative charges from your hair making it negatively charged.

Opposite charges attract. When you bring the balloon close to the water stream, the negative charge attracts the positive parts in the water atoms. The attraction pulls the water towards the balloon as it is flowing and makes the stream bend!

Related Badge(s) or Journey(s):

(B) Home Scientist

Additional Resources:

Bending Water: http://www.sciencekids.co.nz/experiments/bendingwater.html

Static Electricity: http://www.ducksters.com/science/static_electricity.php

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