

DISCOVER Science at Home!

Can you bend water?

Materials:

One clean fine-tooth hair comb
(make sure it's not anti-static!)

A faucet with running water

Clean dry hair to comb

Procedure:

- 1.) Slowly turn on the faucet until a thin stream of water pours out.
- 2.) Make a prediction about what will happen when the comb is placed near the stream of water.
- 3.) Comb through hair with fifteen strokes.
- 4.) Turn comb vertically, and slowly bring it near the string of water without making contact with the water.
- 5.) Observe what effect the comb has on the water.

The Science Behind It:

Electrons collect on the comb as it is brushed through the hair, creating a negative charge. The water flowing from the faucet has a positive charge. When the negatively charged comb is brought near the positively charged water source, the water is attracted to the comb (the positive charge is attracted to the negative charge.) This attraction causes a bend in the water stream.

Questions to Investigate:

- What happens to the comb while you are combing your hair?
- What will happen to the water when the comb is placed near it?
- Was your hypothesis correct?
- What are electrons?
- What happens when you have a positive and a negative charge near each other?



Next Generation Science Standards

3-PS2-3. Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.