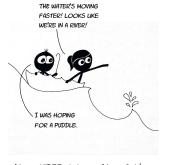
SCIENCE MOM'S Guide to WATER Part 2



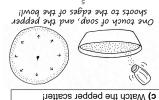
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2. Soap Boat





- surface of the water. b) Add a touch of soap to the wirn pepper.
- s) Place water in bowl and sprinkle :роц;әм
 - Water
 - · Concentrated dish soap · Cronnd black pepper · Bowl or plate
 - Materials:

Pepper Scatter

A touch of soap at the edge disrupts the surface tension, and a second later the pin sinks! IT'S LIKE MAGIC!

3. Floating Pin Materials:

- · A small pin or needle
- · Bowl or cup
- · Concentrated dish soap Water

Method:

a) Fill bowl or cup with water and carefully place pin on surface. Hint: tweezers may help. The pin must be flat with the surface of the water. It will sink if it comes in at an angle.

> MONDER WHAT IT IS? 601 10 BE A WORD FOR IT.

NEGATIVE CHARGE, THERE'S

THE OTHER HALF HAS A

OF WATER IS POSITIVE AND THAT'S SO COOL THAT PART

- b) Add a touch of soap.
- c) Watch the pin sink!

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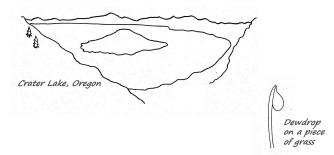
POLARITY! CALLED

SII

negative sides. form between the positive and negative (-). Hydrogen bonds (\heartsuit) molecule is part positive (+) and part Positive loves negative. Each water Because opposites attract!

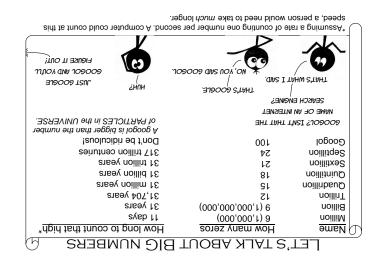
want to be by each other? But Why do water molecules

Think of a big lake versus a dewdrop. Pretty big difference in size, right?



The dewdrop is SUPER small compared to the lake. But a water molecule (the smallest bit of water you can have) is MUCH smaller than a dewdrop.

A single drop of water has more than 1,000,000,000,000,000,000,000 water molecules! That huge number with 21 zeros is called a sextillion, and it is a TRILLION TIMES BIGGER than one billion.



4. Floating Paperclip

Materials:

- Paper clip
- · Tissue paper or paper towel
- Cup or bowl
- Water

Method:

- a) Fill the cup with water and gently place a piece of tissue paper on the surface.
- b) Carefully place a dry paperclip on the tissue.
- c) The tissue should sink. If it doesn't, give it a gentle push downward

Tip: be sure that the cup and water are not soapy.

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creating a dome of water on the coin

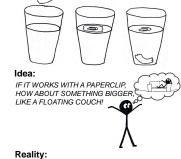
:JamsuA

water spills off the side?

ono tit noy nas soin belone the

drops of water :uoizsano

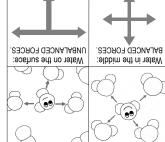
A lot! The molecules on the surface pull in,



THE SURFACE TENSION OF WATER IS ONLY 72 DYNES PER CENTIMETER!



10



or make a dome of water on a coin. which helps raindrops stay together an the surface bond more tightly to their n water molecules like each other more

HOM DOES IL MOKKS



allows us to fill cups above the brim, eighbors. This creates surface tension, than they like air, so the molecules on

"Noiznal aorhuz

$\mathbf B$	A	A	X
B	C		D
F	E	I	D
E	G	Ð	X