

THE WATER'S MOVING
FASTER! LOOKS LIKE
WE'RE IN A RIVER!



SCIENCE MOM

JENNYBALLIF.COM

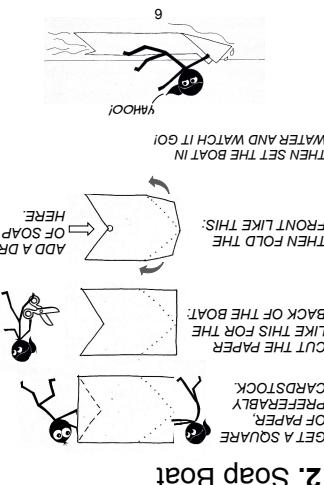
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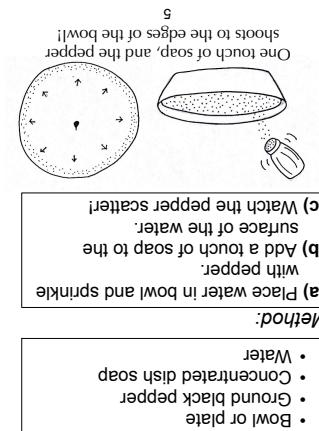
SCIENCE MOM'S Guide to WATER, Part 2

SO WHAT HAPPENS
NOW? WHERE DOES
ALL THE WATER GO
AFTER IT RAINS?

WHO KNOWS? WE
COULD END UP IN A
PUDDLE, GROUND
WATER, OR A RIVER!



2. Soap Boat



1. Pepper Scatter

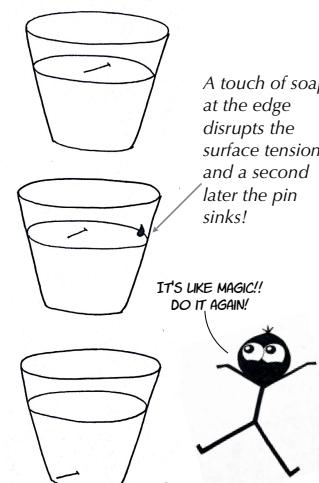
3. Floating Pin

Materials:

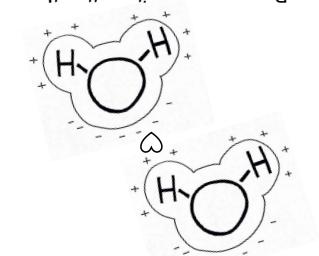
- A small pin or needle
- Bowl or cup
- Concentrated dish soap
- Water

Method:

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



Because opposite attract! Positive loves negative. Each water molecule is part positive (+) and part negative (-). Hydrogen bonds (H_2O) form between the positive and negative sides.



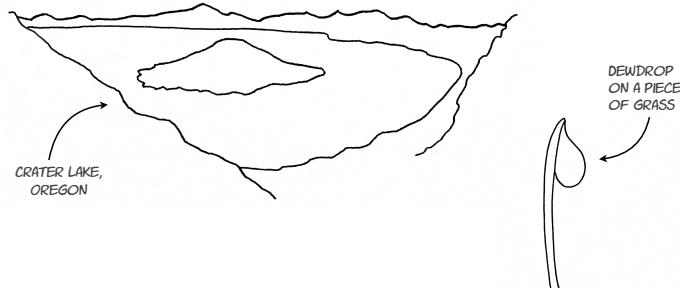
Want to be by each other? But WHY do water molecules



IT'S COOL TO BE A WORD FOR IT.
THE OTHER HALF HAS A
NEUTRAL CHARGE THEREFORE,
OF WATER IS POSITIVE AND
THAT'S SO COOL THAT PART
I WONDER WHAT IT GOT TO BE A WORD FOR IT.

GOT TO BE A WORD FOR IT.

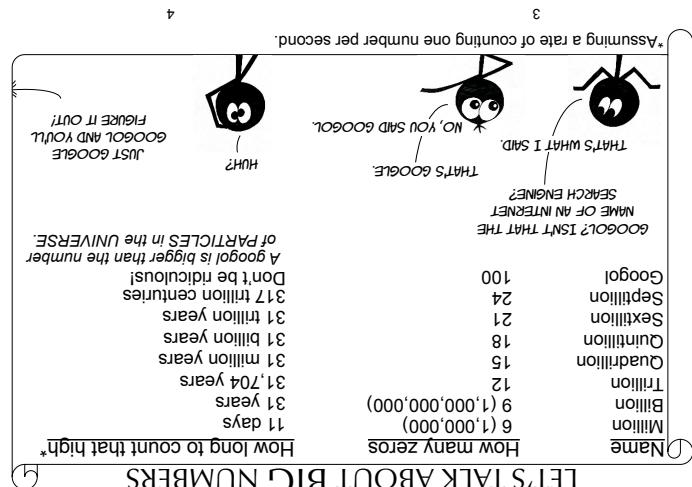
Think of a big lake versus a dewdrop. Pretty big difference in size, right?



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 water molecules! That huge number with 21 zeros is called a sextillion, and it is a TRILLION TIMES BIGGER than one billion.

1

2



3

4

4. Floating Paperclip

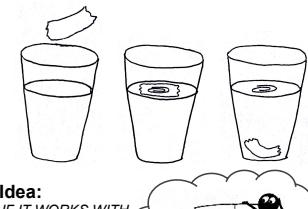
Materials:

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

Method:

- Fill the cup with water and gently place a piece of tissue paper on the surface.
- Carefully place a dry paperclip on the tissue.
- 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.



Idea:
IF IT WORKS WITH
A PAPERCLIP,
HOW ABOUT
SOMETHING
BIGGER, LIKE A
FLOATING COUCH!

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



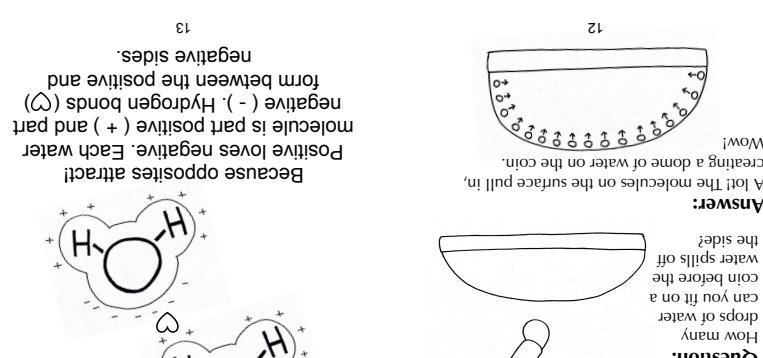
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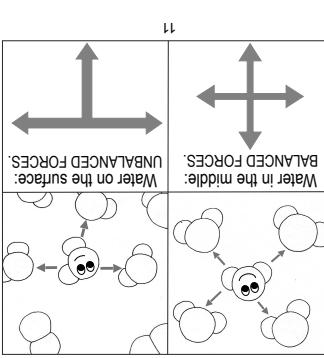


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B

A

A

X

B

C

C

D

F

E

E

D

E

G

G

X