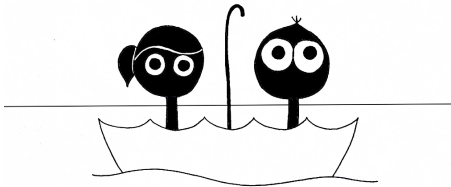
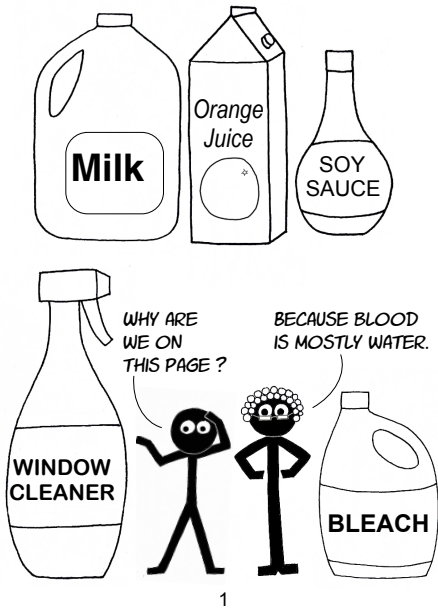


SCIENCE MOM'S Guide to WATER, Part 5



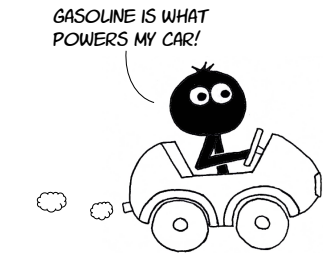
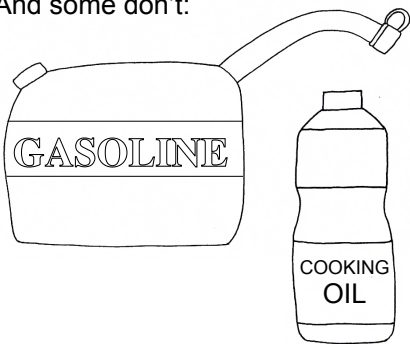
The water was salty.
They had reached the
OCEAN.

Some liquids have water in them:



1

And some don't:

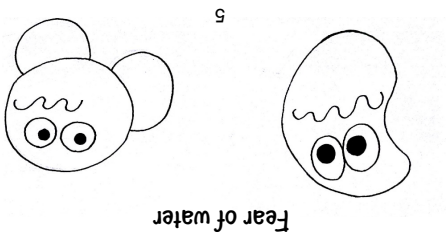


2

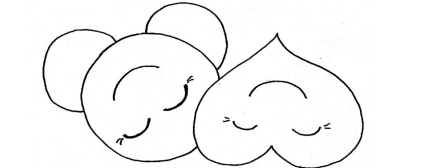
If you mix water with something hydrophobic, they won't stay mixed. (Unless you make an emulsion, like with homogenized milk.)



If you mix water with something hydrophilic, it makes a SOLUTION - it mixes so well that it won't come unmixed on its own.



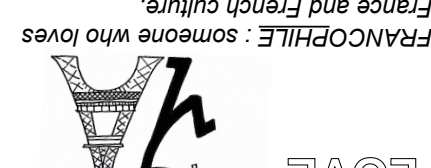
Hydrophobic



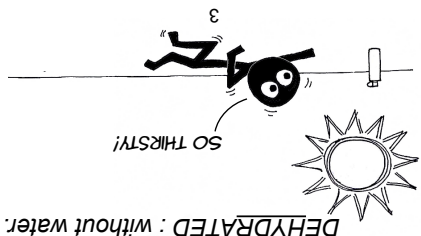
Hydrophilic



Phobia = FEAR



Philia = LOVE



Hydro = WATER



Hydro = WATER

1. Ocean in a bottle

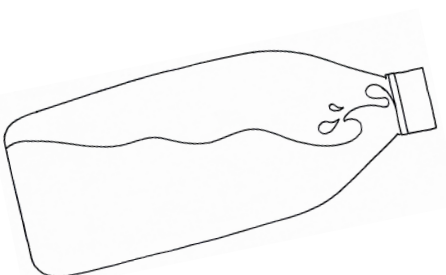
Materials:

- Water
- Oil
- Plastic or glass bottle with lid
- Food coloring

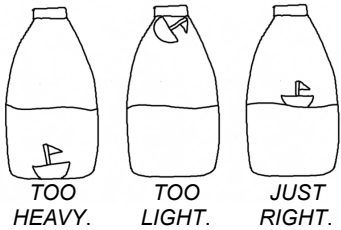
Method:

- Pour water and oil into a bottle.
- Add food coloring and shake the bottle gently to color the water.
- Tip the bottle from side to side to observe waves and the beautiful movement of the liquids.

To make a small boat, use plastic pony beads as the body of the boat, a small piece of a toothpick as the mast, and thin plastic or tinfoil for the sail. Carefully assemble with hot glue.



It may take a bit of experimenting to build the right boat:



8

2. Lava Lamp

Materials:

- Water
- Food coloring
- Plastic bottle
- Oil
- Alka-Seltzer or other effervescent antacid tablet

Method:

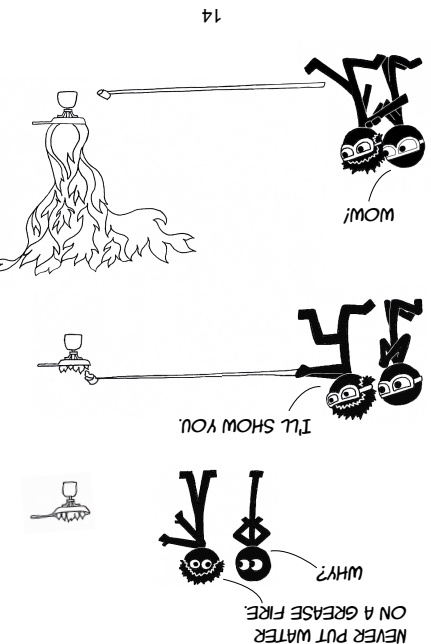
- Place three times as much oil as water into a plastic bottle.
- Color the water with food coloring.
- Add the antacid tablet and watch the beautiful show of color and movement as the water is carried up.

WARNING:
DO NOT PUT THE LID ON THE BOTTLE.

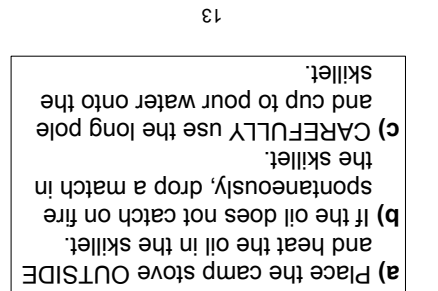
9



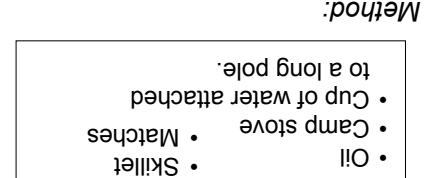
10



14

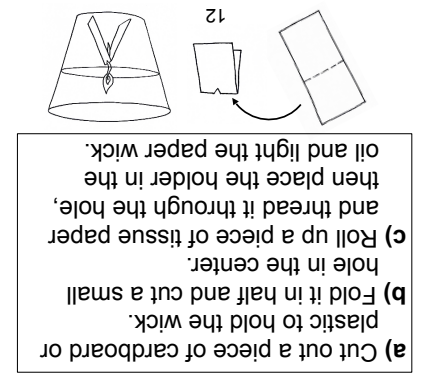


13

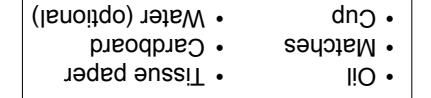


WARNING! DO NOT DO THIS EXPERIMENT INSIDE! ONLY DO THIS INVESTIGATION IF YOU HAVE ADULT PERMISSION AND ADULT SUPERVISION!

4. Grease Fire Explosion



12



WARNING! DO NOT DO THIS INVESTIGATION IF YOU HAVE ADULT PERMISSION AND SUPERVISION.

3. Oil lamp



11

B	A	A	X
B	C	C	D
F	E	E	D
E	G	G	X