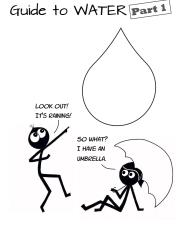


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SCIENCE MOM'S

matter-as a solid, liquid, and a gas SOLID WATER LIQUID WATER IS WHAT WE DRINK.

Water is the only thing on our planet that

exists naturally in all three states of

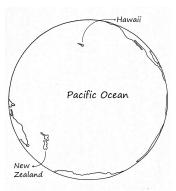
Gaseous water, or water vapor, is invisible. You can't see it, but it's in the air around you and we call it humidity. The more water vapor in the air, the more humid it is.

The only other things on earth that come close to existing in all three states of matter are mercury, acetic acid, and carbon dioxide. While all three states of matter are **possible** for each of these, they don't occur naturally. Water, on the other hand? It's everywhere

incredible properties.

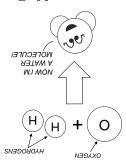
learn more about water's

Try these investigations to

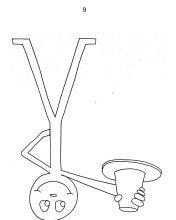


Oceans cover most of the surface of the earth, and about 70% of the planet is covered by another form of water: clouds.

That's why we call it ∏₂



If's 1 oxygen atom plus 2 hydrogens. WHAT EXACTLY IS WATER?



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c) Kemove hand and be amazed! (nwop

INVERT the cup (turn it upside b) Place one hand on the lid and the lid on top.

a) Pour water in the cup and place .poujajy

> cardstock or cardboard. · Plastic lid or a piece of

dno. Water

Materials:

# 1. Gravity Defying Lid

marine life and the earth's climate.

steadily circulates all the water in the oceans and strongly influences both

circulation in the oceans—a massive system of currents that slowly but

other hand, rises or "floats" on top. This phenomenon drives thermohaline

Cold water is more dense than warm water so it sinks. Warm water, on the

Cold deep currents

## 2. Magic Screen

## Materials:

- Water Lid
- Canning jar with a metal ring
- · A piece of screen or other mesh fabric

#### Method:

- a) Fill jar to rim and secure screen over the top.
- b) Cover with lid and flip over.
- c) Remove lid and observe.

No jar? No problem.

Use a cup and rubber band. But be sure the screen or ≤ mesh is FLAT and TIGHT across the rim of the cup



## HOW DOES IT WORK? Cohesion.

THAT MEANS WATER MOLECULES LIKE TO STICK TOGETHER! COOL SCIENCE WORDS

The water molecules in the jar like each other and the jar. Their attraction for each other and the container is strong enough that they effectively form a "lid" on the bottom of the jar, just like the plastic lid did in the first investigation. If air doesn't come in, the water can't go out. So the water stays inside-until you shake or tip the jar. If you do either of those things, then gravity wins.



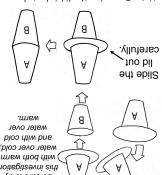




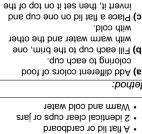
cnbs.

orner cup.

with two people: one to hold the cups steady while the other pulls out the



Note: Removing the lid is best done



csrdboard out from between the

d) Slowly, slide the flat lid or

- Warm and cold water
- z identical ciear cups or jars
  - · A flat lid or cardboard • Food coloring

Materials:

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B	A	A	X
B	C		D
F	E	A	D
E	G	Ð	X