Antigravity Water

Section: Forces & Interactions

Name: _____ Date: _____

Inquiry Question

Write down what you'll be learning today! What do you want to understand?

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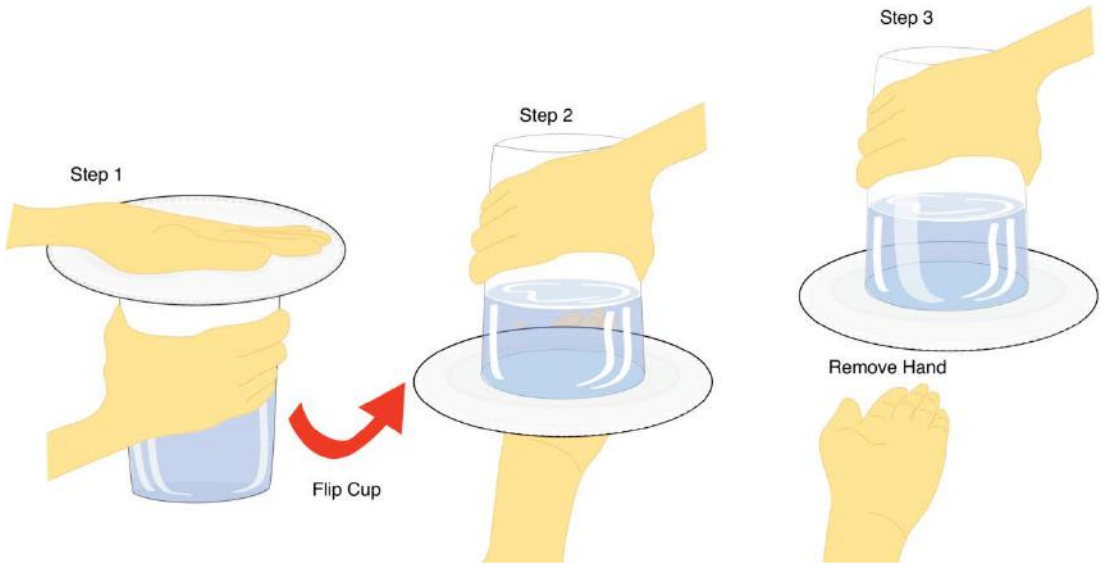
Procedure

1. Fill a cup roughly halfway with water
2. Wet the rim of the cup slightly by dipping your finger in water and running around the cup's edge
3. Place the plate over the cup so it covers the entire rim
4. Place one hand on the plate and hold it against the cup's rim, and place your other hand on the cup
5. Keep your hands in place and carefully invert the cup while holding the plate against the rim (which is now facing down). If you are using a plastic cup, be careful to not squeeze it in this process!
6. Without squeezing the cup, hold the cup in place and slowly remove your hand from the plate.



Observations, Data Collection & Analysis

Write down your observations below.

1. Describe the physical properties of water.

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2. Describe some chemical properties of water.

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3. Draw a water molecule. What do you know about this molecule and its behavior?

4. When you initially invert the cup, what do you notice? Does any water escape? Does any air get into the cup? Are there any other observations you can note?

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5. What do you predict will happen when you remove your hand from the bottom of the cup? Will the water fall or stay in place?

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6. What happens in you squeeze the cup after you have removed your hand? Does that change whether the water falls or not?

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7. Explain your results. Why do you think the water remained in the cup or fell from the cup?

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8. What do you think will happen if you remove the plate while the cup is still upside down? Why?

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