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Clamp the eudiometer into position on the ring stand. The acid flows down the tube (less dense) and reacts with the magnesium. The acid is more dilute.

8. When the magnesium has disappeared entirely and the reaction has stopped, cover the stopper with your finger and carefully transfer the eudiometer to a 1000mL graduated cylinder or other tall vessel filled with water. Adjust the level of the eudiometer so that the height of the liquid in the 2 vessels match. Read the volume of hydrogen as accurately as possible.

9. Record the temperature of the room and atmospheric pressure.

10. Find a table of water-vapor pressures and determine the vapor pressure of the water at the temperature of the room.

## Data:

Temperature: 21.5 °C

Pressure: 29.00 inHg

Water-vapor pressure: 19.25 mmHg

Mass of Mg: 0.04g

Volume of hydrogen gas: 44.85 mL

## Observations:

Nothing happens when adding magnesium to water. You can see the HCl move downwards when inverting the eudiometer. Took a minute or 2 before the HCl reached the magnesium and started reacting. Started bubbling more as time went on. Started to create an air pocket at the top (bottom) of the tube. There are bubbles coming out of the stopper.

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