water over the acid so that they do not mix. Add enough water to fill the eudiometer to the brim.

7. Lower the magnesium coil into the water in the eudiometer tube to a depth of about 5 cm. Insert the rubber stopper into the open end of the eudiometer to hold the thread in place, as shown in Figure A on the previous page. The one-hole stopper should displace some water from the tube. This ensures that no air is left inside the tube.

8. Cover the hole of the stopper with your finger, and invert the eudiometer into the 400 mL beaker of water. Clamp the eudiometer tube into position on the ring stand, as shown in Figure B. The acid flows down the tube (why?) and reacts with the magnesium. Is the acid now more concentrated or dilute? Answers these questions and describe your observations in the place provided following the Data Table.

9. When the magnesium has disappeared entirely and the reaction has stopped, cover the stopper hole with a finger and carefully transfer the eudiometer tube to a 1000 mL graduated cylinder or other tall vessel that has been filled with water. Adjust the level of the eudiometer tube in the water as shown in Figure C. The levels of the liquid inside the eudiometer and the cylinder should be the same. Read the volume of hydrogen you collected as accurately as possible.

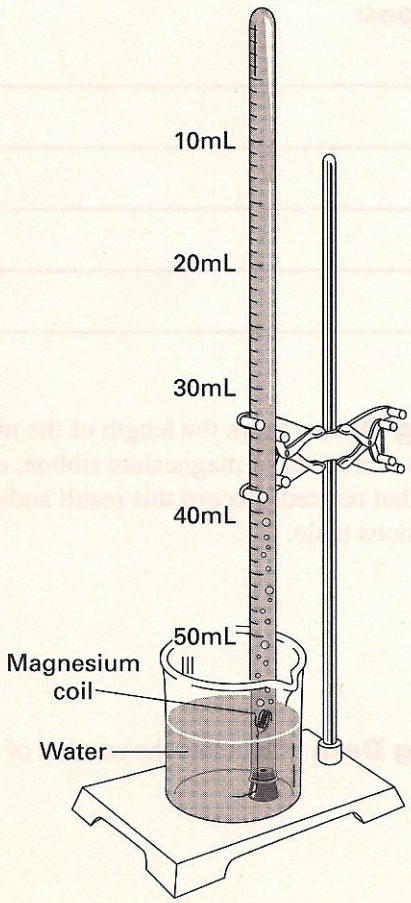

FIGURE B

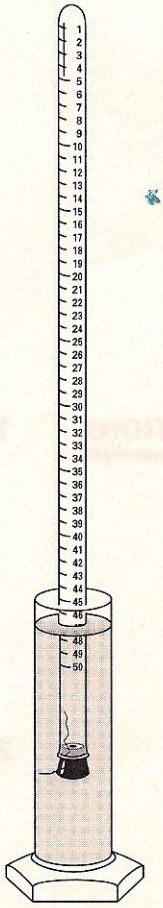

FIGURE C