FIGURE C Gravity filtration

2. Put the funnel, stem first, into a filtration flask, or suspend it over a beaker by using an iron ring, as shown in Figure C.
3. Wet the filter paper with distilled water from a wash bottle. The paper should adhere to the sides of the funnel, and the torn corner should prevent air pockets from forming between the paper and the funnel.
4. Pour the mixture to be filtered down a stirring rod into the filter. The stirring rod directs the mixture into the funnel and reduces splashing.
5. Do not let the level of the mixture in the funnel rise above the edge of the filter paper.
6. Use a wash bottle to rinse all of the mixture from the beaker into the funnel.

VACUUM FILTRATION

1. Check the T attachment to the faucet. Turn on the water. Water should run without overflowing the sink or spitting while creating a vacuum. To test for a vacuum, cover the opening of the horizontal arm of the T with your thumb or index finger. If you feel your thumb being pulled inward, there is a vacuum. Note the number of turns of the knob that are needed to produce the flow of water that creates a vacuum.
2. Turn the water off. Attach the pressurized rubber tubing to the *horizontal* arm of the T. (You do not want water to run through the tubing.)
3. Attach the free end of the rubber tubing to the side arm of a filter flask. Check for a vacuum. Turn on the water so that it rushes out of the faucet (refer to step 1). Place the palm of your hand over the opening of the Erlenmeyer flask. You should feel the vacuum pull your hand inward. If you do not feel any pull or if the pull is weak, increase the flow of water. If increasing the flow of water fails to work, shut off the water and make sure your tubing connections are tight.
4. Insert the neck of a Büchner funnel into a one-hole rubber stopper until the stopper is about two-thirds to three-fourths up the neck of the funnel. Place the funnel stem into the Erlenmeyer flask so that the stopper rests in the mouth of the flask, as shown in Figure D.
5. Obtain a piece of round filter paper. Place it inside the Büchner funnel over the holes. Turn on the water as in step 1. Hold the filter flask with one hand, place the palm of your hand over the mouth of the funnel, and check for a vacuum.
6. Pour the mixture to be filtered into the funnel. Use a wash bottle to rinse all of the mixture from the beaker into the funnel.

FIGURE D Vacuum filtration