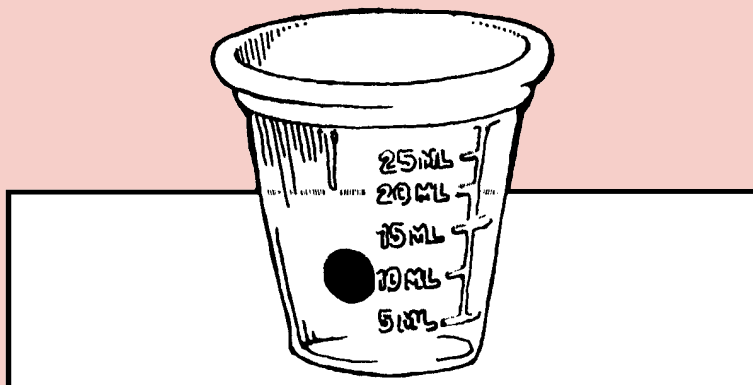


Student Instructions for Doing the Water Mixtures Test

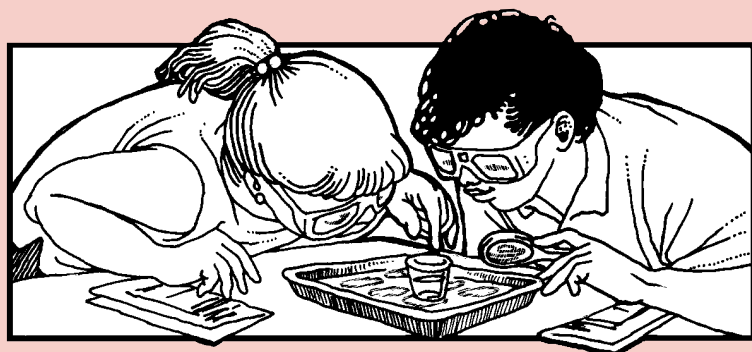
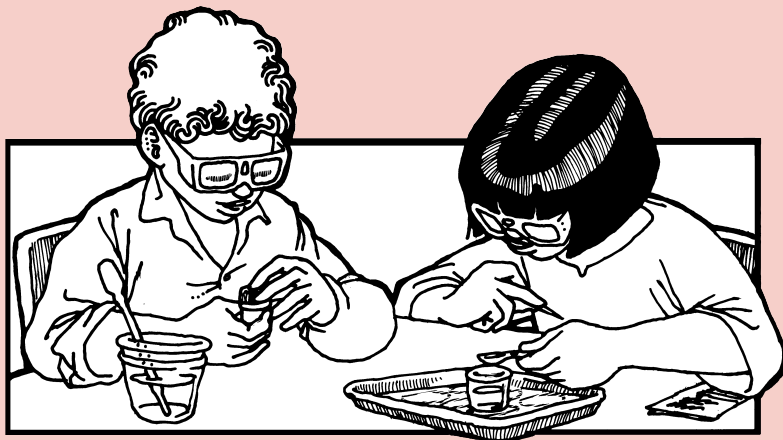
1. Find the 10-ml line on one small cup and put the red dot next to the line. Then color-code the other four cups.



2. Put the red cup on the red circle on the tray. Your teacher will show you how to fill the plastic dropper by squeezing the bulb, placing it in the large cup of water, and releasing the bulb.

3. Fill your plastic dropper. Hold it right over the small cup and squeeze the bulb. Repeat this until the water comes up to the 10-ml line on the cup. To make sure the water level is right, have your partner view the cup at eye level as you add the water.

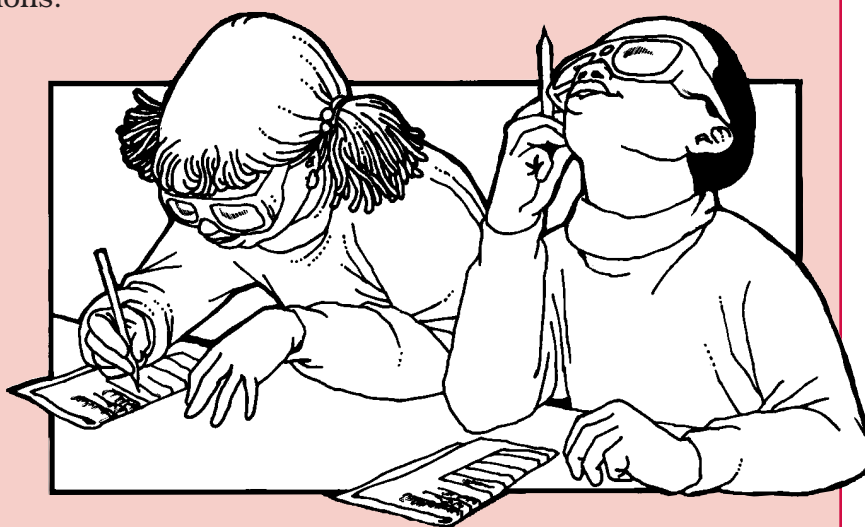




4. Using your red measuring spoon, add one measure of the red unknown to the cup. Stir the mixture with a toothpick for 30 seconds.
5. Add two more measures of the red unknown **one at a time**. After each measure, stir again for 30 seconds. (You now have added a total of three measures.)
6. Observe the mixture you have just made.
7. Let the cup sit on the tray. Repeat Steps 2 through 6 for the four other unknowns. Switch jobs with your partner so that you each get a chance to use the dropper.

8. Record on **Record Sheet 4-A** short answers to the following questions:

- Where is the unknown in the water? Can you still see it?
- What does the water mixture look like? Compare it with the plain water left in your large cup. Has it changed? If so, how?
- How does stirring affect the way the mixture looks?



Student Instructions for Filtering the Water Mixtures

1. With your partner, use a pencil to write your names near the top of each filter. Under your names, label one filter red, one orange, one green, one blue, and one yellow. Then color-code the dishes by placing one dot on the side of each dish.



2. Carefully move the small cups from the tray to your desk. Make sure to keep the cups away from the edge of the desk and away from your arm.



3. Put the red dish on the tray. Pick up the red filter and use both hands to hold it open directly over the dish.

4. Have your partner stir the water mixture in the red cup once with the toothpick and then slowly pour it into the filter. Observe what happens.



5. Wait until no more liquid is dripping out of the filter. Leave the dish undisturbed on the test mat. Put the filter near the tray on your desk.
6. Repeat Steps 3 through 5 for each mixture.