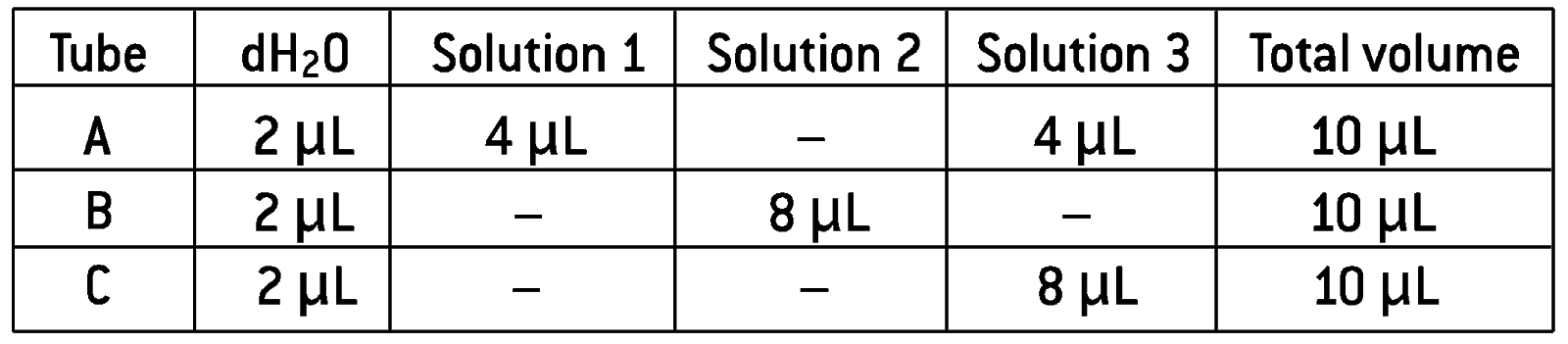
### ***ALTERNATE* Lab 1.2 Part B Separating Dyes using Gel Electrophoresis Protocol Using the *Mini One unit***

1. Place the gray or white plastic base piece into the black carriage unit. Put the clear gel tank into the carriage unit. Place a 0.8 or 1% agarose gel on the gel tray into the mini one tank in the correct orientation (wells open on top and near the “-” electrode).

2. Pour 1X SB Buffer into the gel tank until the gel is completely immersed. This will be approximately 130ml for the mini one tank.

3. Use a permanent marker to label three microfuge tubes A, B and C.

This table summarizes the contents of each tube.



4**.**Set the P-20 micropipette to 2 μL, add a clean tip and dispense dH2O into tubes A, B and C. Eject the tip into the plastic waste container.

5.Use a fresh tip and dispense 4 μL of Solution 1 into tube A. Discard the tip into the WASTE container.

6**.**Use a fresh tip and dispense 4 μL of Solution 3 into tube A. Discard the tip into the WASTE container.

7**.**Use a fresh tip and dispense 8 μL of Solution 2 into tube B. Discard the tip into the WASTE container.

8**.**Use a fresh tip and dispense 8 μL of Solution 3 into tube C. Discard the tip into the WASTE container.

9. To pool all reagents at the bottom of the tubes, close tubes and tap them on the bench several times *OR* centrifuge for five seconds.

**LAB TECHNIQUE**: Distribute the tube evenly in the rotor so their weight is balanced.

10. Pipet 10 μL from tube A into a well. Depress the plunger to the first stop and hold it there until pulling it out of the buffer. Load the samples as shown:

A B C



11. Change tip and repeat loading step 12 for tubes B and C into new wells. Write a gel map and note if anything unusual occurs in the notebook.

12. Place the amber lid on the gel tank. Press the power button to run. A green light will indicate that the unit is running. Make sure that tiny bubbles are coming off the negative electrode in the tank.

13. Run the gel until the colored bands separate. Turn off the power and place the gel onto the white laminated sheet. Draw and color the band pattern in the notebook.