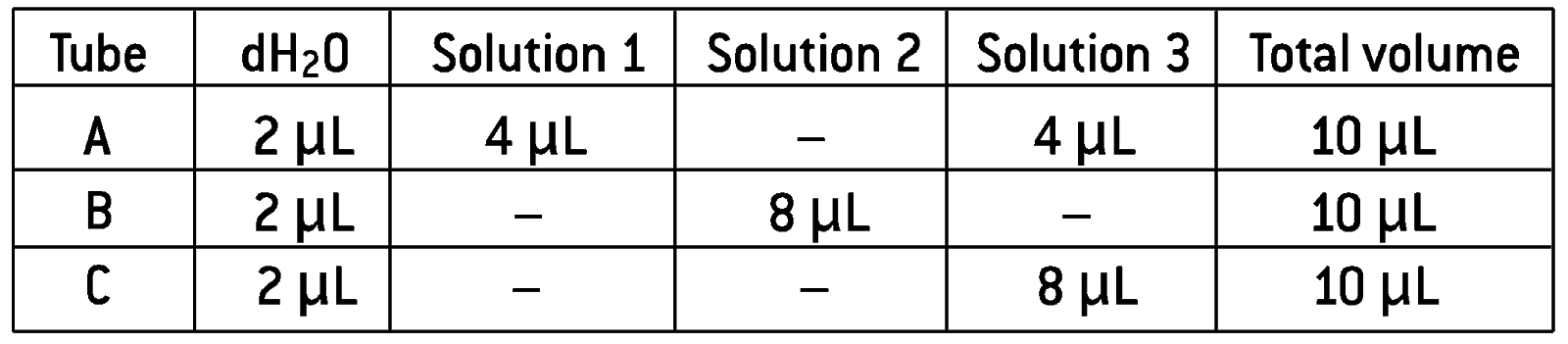
### ***Alternate* Lab 1.2 Part B Separating Dyes using Gel Electrophoresis Protocol**

### **Using the *Blue Gel box***

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

This table summarizes the contents of each tube.



2**.**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.

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

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

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

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

7. 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. Place a 0.8 or 1% agarose gel on the gel tray into the Blue Gel tank in the correct orientation (wells open on top and near the “-” electrode).

11. Pour 1X Buffer until the gel is completely immersed. This will be approximately 30ml for the Blue Gel tank.

12. 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



13. 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.

15. Place the amber lid on the gel tank. Press the power button to run. Make sure that tiny bubbles are coming off the negative electrode in the tank.

16. 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.