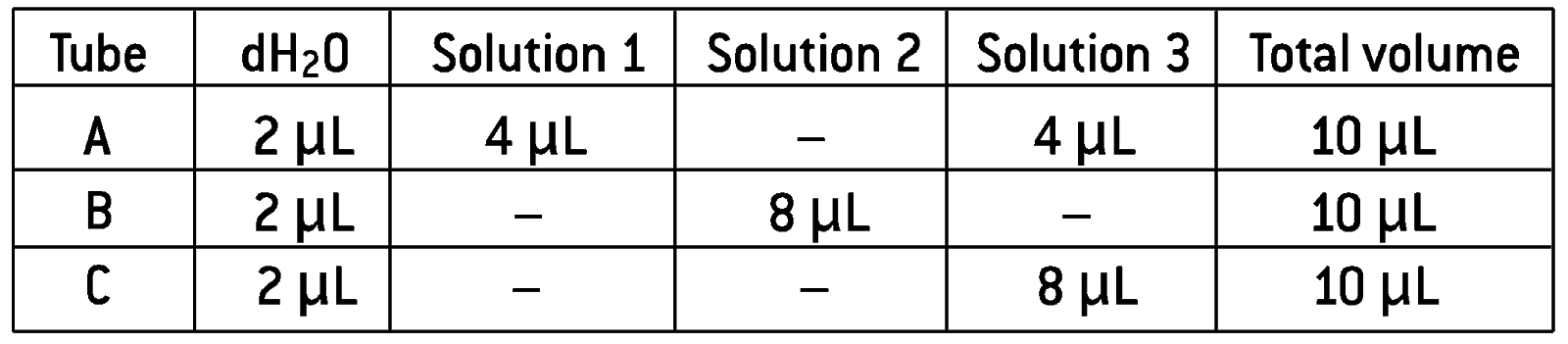
### ***ALTERNATE* Lab 1.2 Part B Separating Dyes using Gel Electrophoresis Protocol**

### **Using the Enduro Gel XL 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.

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 Enduro gel tank in the correct orientation (wells open on top and near the Black “-” electrode). Place the gel tank in an easily accessible location near the power supply as it cannot be moved once the samples are loaded into the wells.

11. Pour 1X SB Buffer until the gel is completely immersed. This will be approximately 300ml for the Enduro 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 lid on the gel tank. Insert the gel tank electrodes into the power supply and attach the power cord to the power supply. Turn the unit on. Press MODE SELECT until the green light indicates Volt and use the arrow keys to set the voltage to 130-140. Press MODE SELECT until the green light indicates Time and set it to 30minutes. Press RUN. Make sure that tiny bubbles are coming off the black/negative electrode in the tank.

16. Run the gel until the colored bands separate. Draw and color the band pattern in the notebook.