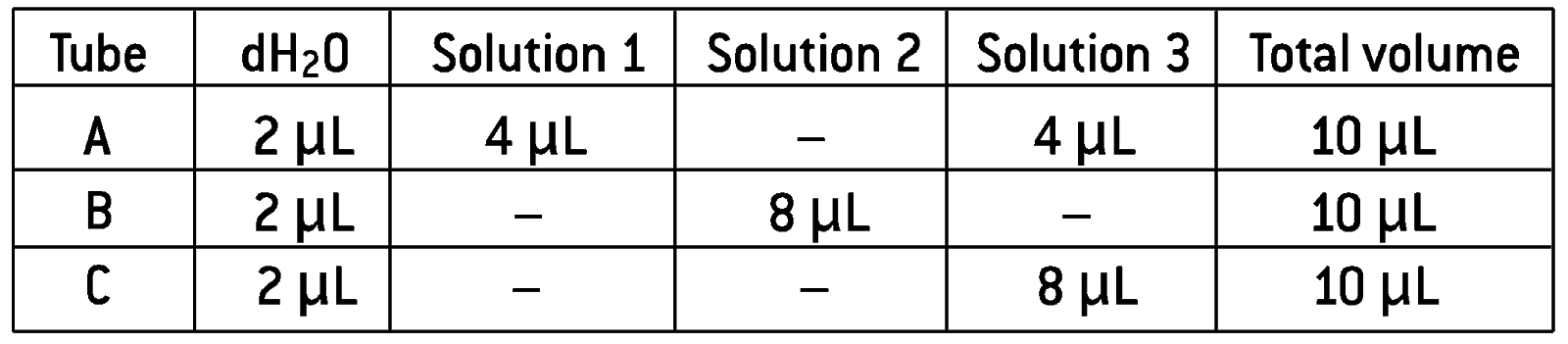
### ***ALTERNATE* Lab 1.2 Part B Separating Dyes using Gel Electrophoresis Protocol Using the**

### ***OWL 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 fresh tip and dispense 2µL 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. 

8. Place a 0.8 or 1% agarose gel on the gel tray into the OWL 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.

9. Pour 1X SB Buffer until the gel is completely immersed. This will be approximately 300ml for the OWL tank.

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. Carefully place the lid completely on the gel tank making sure that the electrodes on the box clip into the lid. Plug the electrodes into their respective ports on the power supply (red into red and black into black).

13. Turn on the power supply, set the Voltage to 135v and press “RUN”. The time may also be set to 20 minutes on some power supplies.

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