### **Lab 1.2 Part B Separating Dyes using Gel Electrophoresis Protocol Using the OWL gel box**

1. 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/negative 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.

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

3. Set the P-20 micropipette to 10 μL, and using a fresh tip draw up 10µl of S1.

4. Dispense the S1 into one of the wells being careful to lower the pipette tip just inside the buffer but not in the well. Depress the plunger to the first stop and hold it there until pulling it out of the buffer.

5. Change the tip and load 10µl of S2 into a second well.

6. Change the tip and load 10µl of S3 into a third well. Be sure to draw a gel map in your notebook.

S1 S2 S3



7. 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).

8. 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. 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.