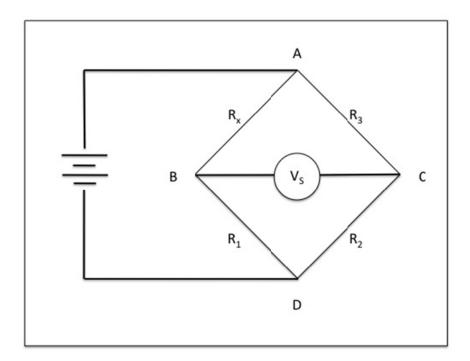
## Wheatstone Bridge

## **Procedure**

1) Measure the resistance of the three  $2.2k\Omega$  resistors. Insert them into the bridge between points A and C, B and D, and C and D respectively according to the following diagram.



- 2) Connect a variable resistor where  $R_x$  is located on the diagram.
- 3) Connect the voltmeter across  $R_x$ .
- 4) Adjust the variable resistor until the meter reads 0 on its most sensitive setting and record the resistance as  $R_x$ .
- 5) Calculate the expected value of  $R_x$  using  $R_x = R_3(R_1/R_2)$ .
- 6) Calculate the percent difference.

 $R_1 = \underline{\hspace{1cm}} R_2 = \underline{\hspace{1cm}} R_3 = \underline{\hspace{1cm}}$  Measured  $R_x = \underline{\hspace{1cm}}$ 

Calculated  $R_x =$ \_\_\_\_\_ Percent Difference = \_\_\_\_\_