1. Using the figure below, determine the equivalent resistance \( R_{eq} \) and its uncertainty \( \Delta R_{eq} \).

![Diagram of DC Circuits]

2. What is the equation for a weighted average? What is the uncertainty of a weighted average? When should a weighted average be used instead of an unweighted one?

3. You will use a multimeter as an voltmeter, ohmmeter, and ammeter. What will each of these measure? Is a voltmeter connected in series or in parallel with your circuit? Is an ammeter connected in series or in parallel with your circuit?

4. What is the value of uncertainty for a measurement taken with the multimeter?

5. What is the purpose of connecting a charged object to ground?

6. A resistor is labelled with the code 1000\( F \). Determine its resistance making sure to convert the tolerance from a percentage to a value in \( \Omega \).