Prac: Series and Parallel Circuits

Name: _____

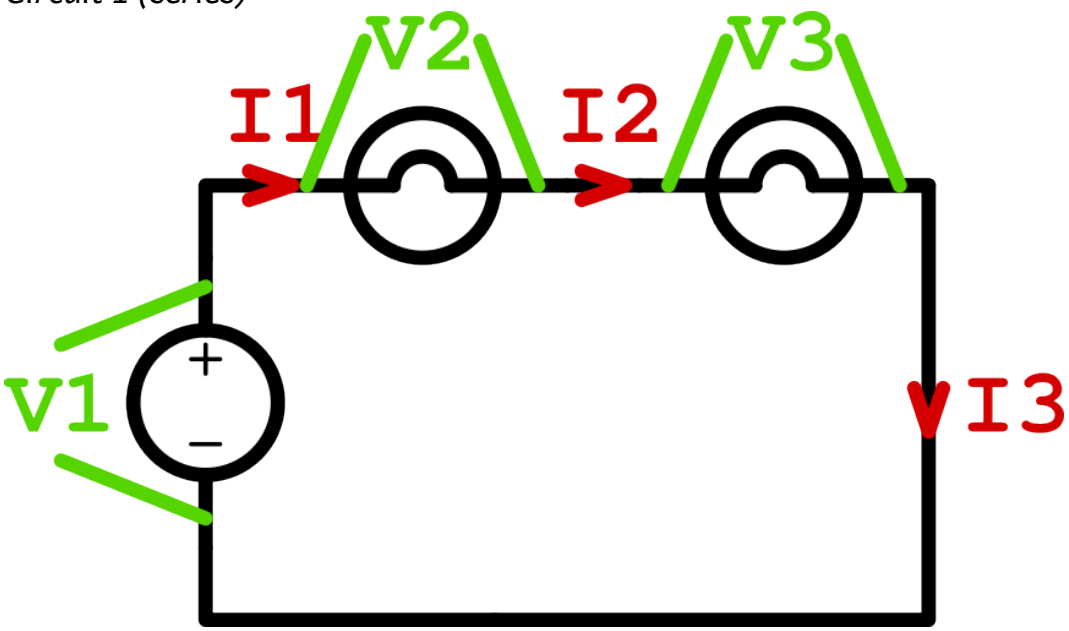
Aim: To measure and compare voltage and current in series and parallel circuits

Equipment and Materials: (E grade)
This is a list of things you needed to do the experiment

Method:
Write a numbered list of steps that were done in this prac (C grade)

Results: (D grade)

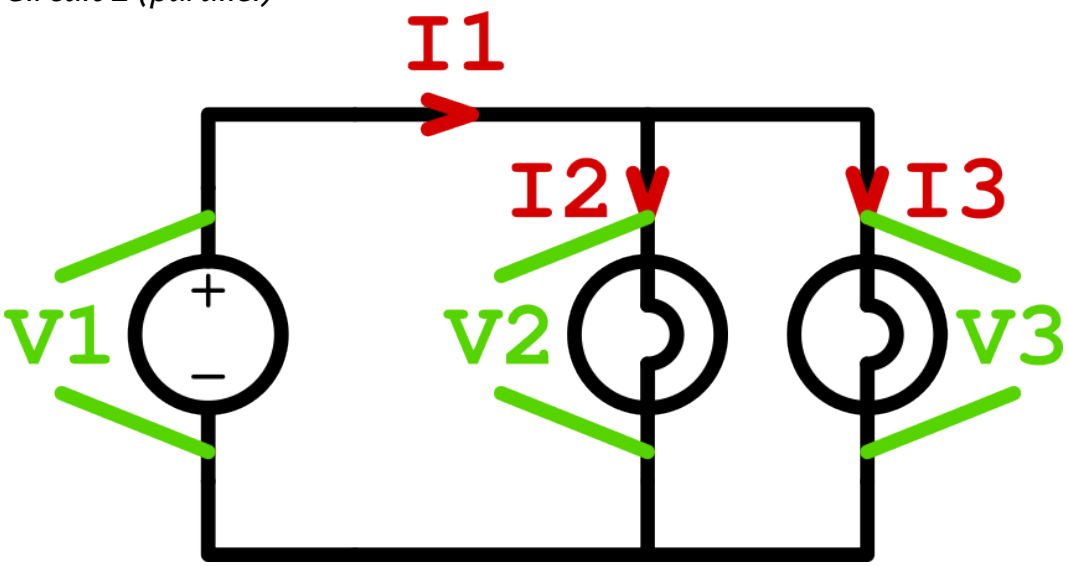
Circuit 1 (series)



Power pack voltage (V)	I1 (A)	I2 (A)	I3 (A)

Power pack voltage (V)	V1 (V)	V2 (V)	V3 (V)	V2 + V3 (V)

Circuit 2 (parallel)



Power pack voltage (V)	V1 (V)	V2 (V)	V3 (V)

Power pack voltage (V)	I1 (A)	I2 (A)	I3 (A)	I2 + I3 (A)

Discussion:

1. For the series circuit, compare I1, I2 and I3. What do you notice? (C grade)

2. For the series circuit, compare V1 with V2+V3. What do you notice? (C grade)

   Use Kirchhoff's Voltage Law (from activity E1-B) to explain this result (B grade)

3. For the parallel circuit, compare V1, V2 and V3. What do you notice? (C grade)

4. For the parallel circuit, compare I1 with I2+I3. What do you notice? (C grade)

   Use Kirchhoff's Current Law (from activity E1-B) to explain this result (B grade)

5. If the lamps were powered with a battery, do you think the series circuit or the parallel circuit would run down the battery faster? Justify your answer (A grade)

Conclusion (C grade)**:**

Write one sentence that tells what you learned about series and parallel circuits.