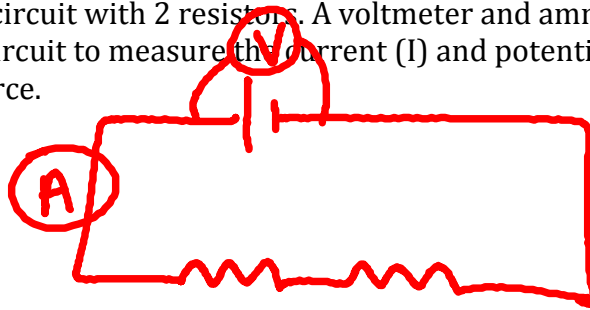


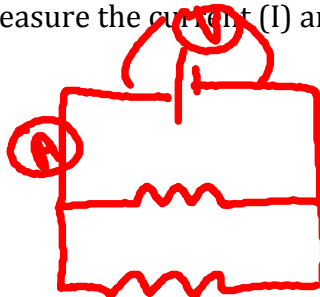
Name: _____

Review For Lab Exam

1. What two values can be measured in a circuit? I & V
2. What does an AMMETER measure? I
3. What does a VOLTMETER measure? V
4. Draw a series circuit with 2 resistors. A voltmeter and ammeter must be placed in the circuit to measure the current (I) and potential difference (V) at the power source.



5. Draw a parallel circuit with 2 resistors. A voltmeter and ammeter must be placed in the circuit to measure the current (I) and potential difference (V) at the power source.



6. Build a series circuit and set the power source at 2 V.
 - a) Record the current (I) value at the power source.
 - b) Record the potential difference (V) at the power source.
7. Build a parallel circuit and set the power source at 2 V.
 - a) Record the current (I) value at the power source.
 - b) Record the potential difference (V) at the power source.

8. Compare the variables below when you compare a series circuit vs a parallel circuit with the same 2 resistors used.

Factors/Circuits	Series	Parallel
Current intensity (A)	0.006	.03
Potential difference (V)	2	2
Resistance (V/I) (Ω)	333.33	66.67
Power (IV) (W)	.012	.06
Energy (IVt) (J) (use 1 hour)	43.2	216

9. Why are the current intensity values different for a series versus a parallel circuit?

Series 1 pathway which makes \uparrow resistance which will decrease the CI going through the circuit.

10. Explain why power and energy are higher in a parallel circuit.

Multiple pathways = less resistance
 \therefore there will be greater CI. $P = IV$ or $E = IVt$
 \uparrow high value \uparrow

11. Explain why power and energy are lower in a series circuit.

One pathway = \uparrow resistance = \downarrow CI

12. Explain how resistance plays a role in current intensity values.

\uparrow res = \downarrow CI
 \downarrow res = \uparrow CI

Parts of a lab report

Hypothesis:

If then
because

Materials:

Procedure:

- numbered
- verb first word
- use diagram *
- record results

Results:

TABLE
- Title, units + variable

Conclusion: 5 SEPARATE parts

- Repeat aim /1
- Repeat hyp /2
- Right or wrong /1
- explain results
pw, res + CI + V
- 2 sources of error