Name: _____

Period:_____

HW Unit 9:5—Voltage, Current, Resistance
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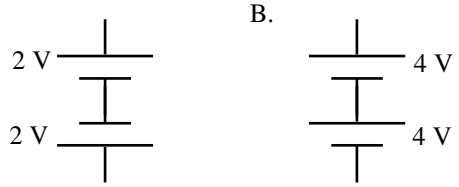
A-day: Due Wed., 3/28 (Assig: 3/26)
B-day: Due Thurs., 3/29 (Assig: 3/27)

1. Resistance is measured in what units?
2. Current is measured in what units?
3. Voltage is measured in what units?
4. Which has more current a big river or small stream?
5. Which uses more current, a bright or dim light?
6. Which uses more current, a loud or soft radio?
7. Which gives more voltage a big or small water pump?
8. Which gives more voltage a 1.5V or 9V battery?
9. Which is has more voltage, water coming from the top of a mountain or coming from the top of a table?
10. Which will have *less* resistance: an insulator or a conductor?
11. Which is a better *conductor*: 200 Ω or 10 Ω.
12. From my water demo.
    A. Which hose had the most resistance: the big or small hose?
    B. Which hose had the most current flowing: big or small?
    C. When I lifted up the bucket, did the water flow more or less?
    D. When I lifted the bucket, it was an example of more voltage, more current, or more resistance?
13. Find the total voltage of the following:

A. B.



14. Do batteries use or create voltage?

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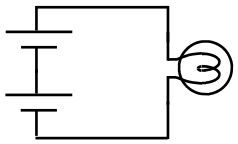
15. Do resistors use or create voltage?
16. A 24 V battery pushes thru a 6 Ω resistor. Find the current.
    Variables Equation Solve
17. If 6 A are flowing thru a 8 Ω resistor. Find the voltage.
    Variables Equation Solve
18. Mark where this circuit has high, medium, and low voltage.



19. Control, Experimental, or Responsive Variable?
    A. ___ What you are studying in the experiment.
    B. ____ There are many of these in a good experiment.
    C. ____ What happens in the experiment.
    D. ___ Only one of these in a good experiment.
20. When we were studying how voltage affected current:
    A. Give two control variables.
    B. What was our experimental variable?
    C. What was our responsive variable?
21. When we were studying resistance:
    A. What was our responsive variable?
    B. What was our control variables?
    C. What was our experimental variable?

Get your conclusion statements in.