Name: _____

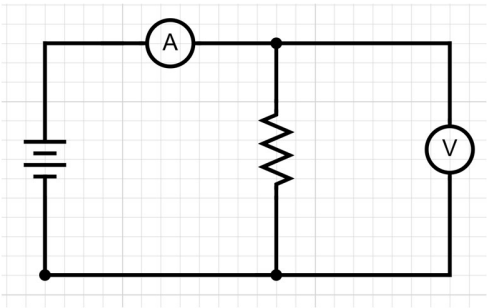
Class: _____

Due Date: _____

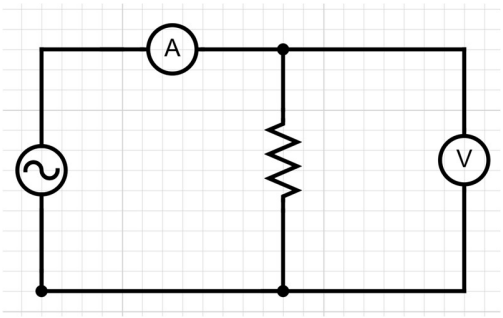
**Physics Topic 54 – Diodes and Diode Bridges**

**Answer the following questions.**

1. C: Use a pencil! Draw a *voltage vs. time* graph for a battery (a DC source), resistor, ammeter, and voltmeter in a circuit. The *current vs. time* graph takes on the same shape.

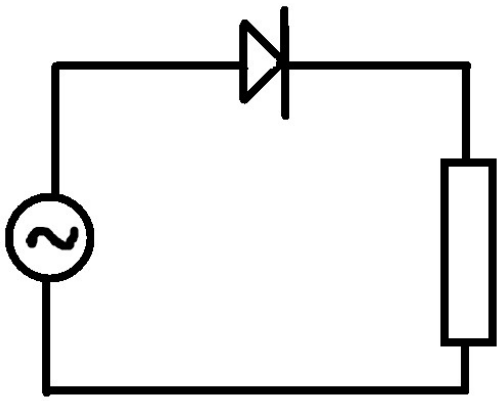


2. C: Use a pencil! Draw a *voltage vs. time* graph for an AC source, resistor, ammeter, and voltmeter in a circuit. The *current vs. time* graph takes on the same shape.



3. C: **Use a pencil!** What does a diode do? Draw the symbol of a diode.

4. C: **Use a pencil!** Draw a *voltage vs. time* graph for half wave rectification. The *current vs. time* graph takes on the same shape.



5. C: **Use a pencil!** What is a diode bridge rectifier? What does it do? Draw it.

6. C: **Use a pencil!** Draw a *voltage vs. time* graph for full wave rectification. The *current vs. time* graph takes on the same shape.

7. C: **Use a pencil!** What is the benefit of adding a capacitor in parallel with the diode bridge and resistor? Draw a curve of the *output voltage vs. time* with a diode bridge and capacitor. The *current vs. time* graph takes on the same shape.