Name: _____ Date: _____

UBSP **Quiz 2**
Summer 2019

Motion & Electricity

1. Provide **units** for the following physical measurements:

a) Velocity: _____m/s_____

b) Acceleration: _____m/s^2_____

C) Voltage: _____Volts_____

D) Current: _____Amps_____

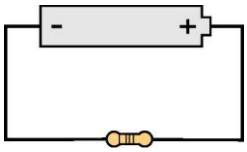
E) Resistance: _____Ohms_____

2. Explain what a is a conductor and an insulator and give an example of each
a) Conductor: A conductor is a material where electrons can move freely

b) Insulator: Material where electron's motion is restricted

3. Constant speed in a constant direction is? Constant velocity

4. **Bonus** — There is a resistor and a battery and a multimeter in the white basket. Create the circuit below.



What type of circuit is this?

_____Series_____

By u sing the multimeter, measure the resistance of the resistor and voltage of the battery

Resistance: _____11.8 KΩ_____

Voltage: _____~6.0 volts_____

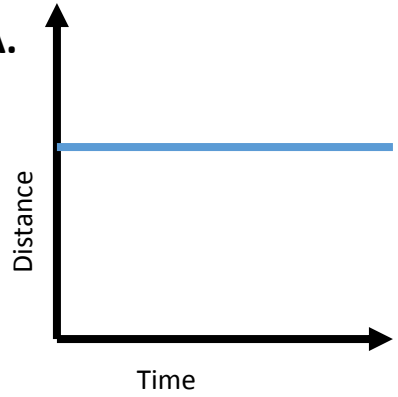
Now, by using Ohm's law (I=V/R), calculate the current of your circuit (show your work)

Current: _____~0.5 mAmps_____

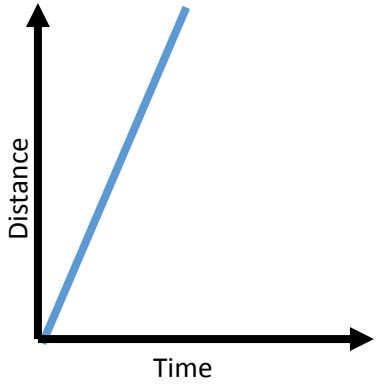
5. The graphs below *are **position graphs** of a student doing the motion lab. What can you tell me about her/his velocity?* **(10 points)**

Position Graphs

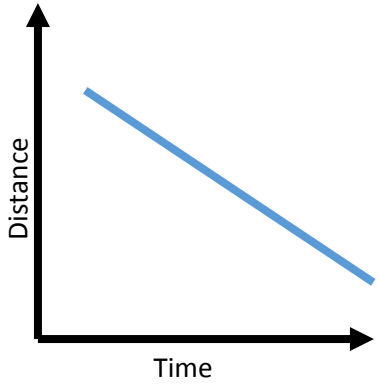
A.



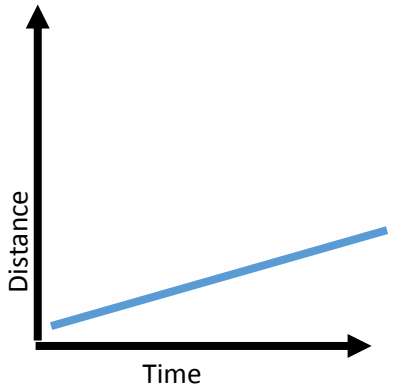
B.



C.



D.



Velocity is zero, the student is at rest.	**Velocity is positive, steady and higher than on graph D.**	**Velocity is negative and steady.**	**Velocity is positive and steady.**