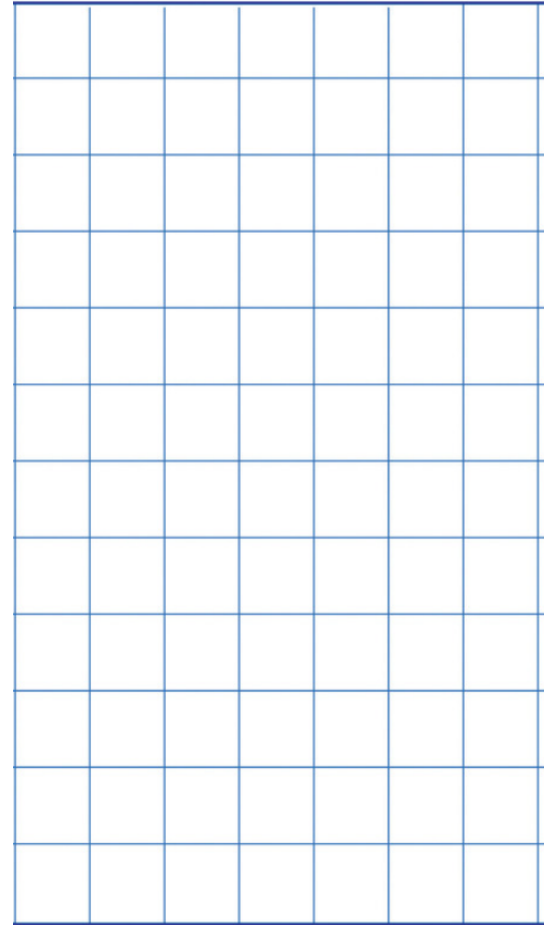


## Using a Multimeter and Graphing: Voltage and Math

1. Use a multimeter or a voltmeter or the online simulator at:  
[https://phet.colorado.edu/sims/html/circuit-construction-kit-dc/latest/circuit-construction-kit-dc\\_en.html](https://phet.colorado.edu/sims/html/circuit-construction-kit-dc/latest/circuit-construction-kit-dc_en.html)  
and determine the total voltage of 1, 2, and 3 of the same type of batteries.  
Place the results in the chart below.

# of Batteries (X)	Total Voltage (Y)
1	
2	
3	



2. Label the given coordinate plane and plot the points on the coordinate plane.
3. What do you notice about the data?
4. Use the graph to predict the voltage 4 \ batteries. What do you predict to be the total voltage for 4 batteries? \_\_\_\_\_

Use the multimeter and test your prediction.

What was the total voltage of the 4 batteries? \_\_\_\_\_ Were you correct? \_\_\_\_\_

5. Use the graph to predict the voltage of 7 batteries.  
What do you predict to be the total voltage for 7 batteries? \_\_\_\_\_

Use the multimeter and test your prediction.

What was the total voltage of the 7 batteries? \_\_\_\_\_ Were you correct? \_\_\_\_\_

6. Write the equation that models the data.