

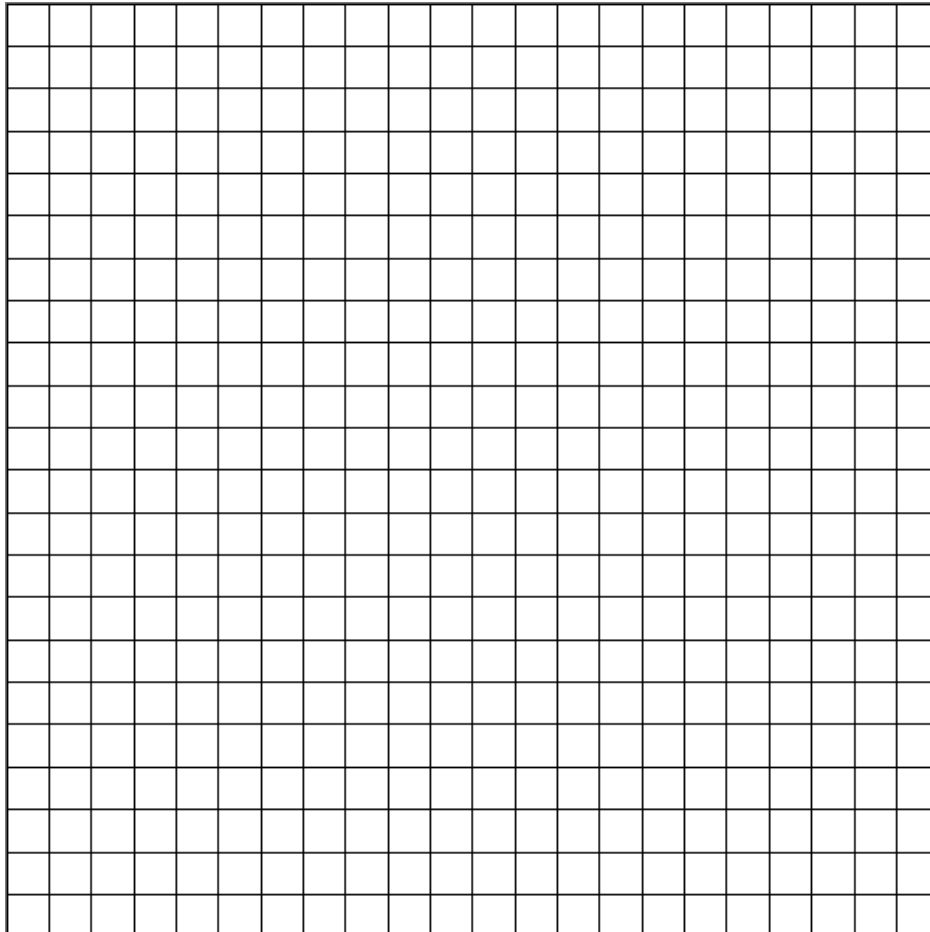
Name: \_\_\_\_\_ Date: \_\_\_\_\_

## The Science of Spring Force Activity – It's Spring Time Worksheet

**Data Collection Table**

Trial	Weight W (kg)	Gravity g (m/s <sup>2</sup> )	Force F = W × g (N)	Initial position d <sub>i</sub> (m)	Final position, d <sub>f</sub> (m)	Displacement D = d <sub>f</sub> - d <sub>i</sub> (m)
Sample	2 kg	9.81 m/s <sup>2</sup>	19.62 N	0.19 m	0.29 m	0.1 m
1		9.81 m/s <sup>2</sup>				
2		9.81 m/s <sup>2</sup>				
3		9.81 m/s <sup>2</sup>				
4		9.81 m/s <sup>2</sup>				

**Slope Graph**



Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Analysis

1. Calculate the slope of your line. What does the slope tell you about your spring?  
(Consider the units of slope).

2. Write an equation to describe your data in the form of  $y = mx + b$ .