Name: _____ **Date:** _____

Beating the Motion Sensor Activity – Can You Trip It? Worksheet

Directions

Table 1. Complete the table as instructed below.

1. In the first column, write the name of each type of material in the row (as shown in the example material).
2. In the second, third and fourth columns, predict how each material will interact with light, heat and sound.
   - Predict what you think will happen to the material (transmit, reflect or absorb) for each of the following: *light, sound,* and *heat.*

Table 1. Before-Testing Analysis

Material	Predicted Outcomes *Before* Testing		
	Light	Heat	Sound
Kryptonite	Reflect	Reflect	Absorb

Name: _____ **Date:** _____

Table 2. Complete the table as instructed below.

1. In the first column, write the name of each type of material in the row, as shown in the example.
2. Complete your assessment of what actually happened to the material after testing, as compared to your Before Testing Analysis (Table 1).

Table 2. After-Testing Outcomes

Material	Actual Outcomes *After* Testing		
	Light	**Heat**	**Sound**
Kryptonite	The metal did reflect the light. My guess was right!	The metal transmitted the heat. My guess was wrong. I didn't think that heat would be "seen" through the metal, but maybe it's because it was so thin.	The metal reflected the sound. My guess was wrong, I thought it would absorb the sound because I don't hear a lot of noise in a metal car.