Name _____ Date _____

Magnetometer Data Collection

Part 1. Complete the table below with the data your group gathers. Take 15 different measurements. It is ideal to take 2-3 measurements each day over 5-7 days or longer. Measure the distance from the reference point to the reflection mark in centimeters. Convert into degrees of deflection for a 1-meter distance by multiplying by 0.25 degrees for each centimeter of displacement. The measured change in reflection is evidence of magnetic field changes.

Data Collection	Date	Time	Distance (in centimeters)	Degrees of Deflection	Measured Change in Reflection
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Magnetometer Data Collection, continued

Part 2. Plot the data from Part 1 on the graph below. Determine the scale needed for the measurement data. Label the x axis with the reading number and the y axis with the measurement using either the Measured Change in Reflection or the Degrees of Deflection. Plot the points of the data and then connect the points to create a line plot.

Data Table