



Name _____ Date _____ Class _____

Student Guide 2 Magnetic Forces of the Unknown

Purpose:

Scientists use probes to detect forces for characterization. In this activity you will identify forces using a magnet probe on your observation box. Afterward, you'll continue analyzing the structure of the object you cannot see.

2. Using your Magnet Probe and Creating a Scan

3	2	1
<input type="checkbox"/> Recording system makes sense <input type="checkbox"/> Includes a key	<input type="checkbox"/> Recording system does not make sense <input type="checkbox"/> Does not include a key	<input type="checkbox"/> Recording system does not make sense <input type="checkbox"/> May or may not include a key

3. Recording data – Scan

3	2	1
<input type="checkbox"/> Accurately shows if there is a magnetic force for each square <input type="checkbox"/> Accurate <input type="checkbox"/> Easy to read <input type="checkbox"/> Obtained teacher's initials	<input type="checkbox"/> Scan is somewhat clear. <input type="checkbox"/> Scan is somewhat accurate. <input type="checkbox"/> Difficult to read. <input type="checkbox"/> Obtained teacher's initials	<input type="checkbox"/> Missed many magnetic forces <input type="checkbox"/> Difficult to read or Incorrect.

4. Analyzing your Data

3	2	1
<input type="checkbox"/> Well defined observations of the structure <input type="checkbox"/> Bases description of the structure thoroughly citing data from the magnet probe and identified inferred observations i.e. feeling if the box is heavy etc. <input type="checkbox"/> Writes in a scientific manner May include some questions about the structure that show logical reasoning	<input type="checkbox"/> Bases description of the structure citing some data from the height probe <input type="checkbox"/> Bases most of the description on mass of the box. <input type="checkbox"/> May include questions about the structure <input type="checkbox"/> Writes in common language	<input type="checkbox"/> Uses very little data from the magnet probe to describe structure <input type="checkbox"/> Bases the description on how the box felt <input type="checkbox"/> Description if difficult to understand.



Analyze your Measuring

3. Is there any way you could have improved your magnet probe or improve how you recorded the force you felt?

3	2	1
<input type="checkbox"/> Describes an excellent level of understanding of the probe's effectiveness. Includes the benefits and disadvantages of the probe.	<input type="checkbox"/> Shows an appropriate level of understanding of probe's effectiveness.	<input type="checkbox"/> Shows a minimal understanding of the probes effectiveness.