



Name _____ Date _____ Class _____

Student Guide 4

Scoring Guide: Creating a Probe for an Unknown Planet

Purpose

You will create a probe to characterize an unknown world. When you create your probes, keep in mind the restrictions of the box.

Procedure

1. Brainstorming Ideas for your Probe

3	2	1
<input type="checkbox"/> Lists appropriate properties that could be observed with probes	<input type="checkbox"/> Lists some appropriate properties that could be observed with probes	<input type="checkbox"/> Does not list an appropriate properties for observation

2. Making the Probe

Draw a picture of the probe you are designing and list the materials you are using.

3		1
<input type="checkbox"/> Identifies an appropriate property for observation <input type="checkbox"/> Lists all the materials <input type="checkbox"/> Probe is well designed <input type="checkbox"/> Obtained teacher initials before proceeding.		<input type="checkbox"/> Identifies an inappropriate property for observation <input type="checkbox"/> Does not list all the materials <input type="checkbox"/> Does not have teacher initials

3. Test the Probe

4. Create a Scanning System

3	2	1
<input type="checkbox"/> Key is clear <input type="checkbox"/> Key makes sense with property being observed <input type="checkbox"/> Order to color choices <input type="checkbox"/> Range of properties is identified <input type="checkbox"/> Key shows the range	<input type="checkbox"/> Key is somewhat clear <input type="checkbox"/> Key makes sense with property being observed <input type="checkbox"/> Some order to color choices <input type="checkbox"/> Range needs more work <input type="checkbox"/> Key shows the range	<input type="checkbox"/> Key is unclear <input type="checkbox"/> Key may not make sense with property being observed <input type="checkbox"/> Color choice seem random <input type="checkbox"/> Key and map are disorganized <input type="checkbox"/> Range needs work



5. Scanning your World

3	2	1
<ul style="list-style-type: none"> <input type="checkbox"/> Scan is clear – easy to read <input type="checkbox"/> Scan is accurate – corresponds with the world <input type="checkbox"/> Uses the colors established in the key <input type="checkbox"/> Clearly shows range of properties 	<ul style="list-style-type: none"> <input type="checkbox"/> Scan is somewhat clear. <input type="checkbox"/> Scan is somewhat accurate. <input type="checkbox"/> Uses most of the colors established in the key <input type="checkbox"/> Shows range, but is difficult to read. 	<ul style="list-style-type: none"> <input type="checkbox"/> Scan is unclear. <input type="checkbox"/> Scan is not accurate <input type="checkbox"/> Does not use colors established in key <input type="checkbox"/> Range is not clear.

6. Analyze your Probe

3	2	1
<ul style="list-style-type: none"> <input type="checkbox"/> Describes an excellent level of understanding of the probe's effectiveness. <input type="checkbox"/> Includes the benefits and disadvantages of the probe. 	<ul style="list-style-type: none"> <input type="checkbox"/> Shows an appropriate level of understanding of probe's effectiveness. 	<ul style="list-style-type: none"> <input type="checkbox"/> Shows a minimal understanding of the probes effectiveness.