


Name: _____

Date: _____

Student Exploration: Mineral Identification

Identifying minerals	<p><u>Get the Gizmo ready:</u></p> <ul style="list-style-type: none"> Click Next so that Sample D is showing. 	 <p>Penny: 3.5</p>
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Goal: Use a key to identify minerals.

- Collect data:** Use the information in the Mineral Identification key to select the most efficient order in which to perform the tests. Use the Gizmo to perform the smallest number of tests possible to identify Mineral **D** and **N** and fill in the data table with the results. Identify Mineral **D** and **N** by crossing out ALL the rows as you eliminate minerals that do not have the properties you observed in your tests.

Mineral	Crystal shape	Color/Luster	Density	Hardness	Streak	Fizzes in acid?
D						
N						
Kaolinite	Irregular	Brown/dull	2.6 g/mL	2	White	No
Calcite	Rhombus	White/glassy	2.7 g/mL	3	Colorless	Yes
Malachite	Irregular	Dark green	4.0 g/mL	4	Light green	No
Dolomite	Irregular	Yellow/dull	2.9 g/mL	4	Colorless	Yes
Fluorite	Irregular	Green/glassy	3.2 g/mL	4	Colorless	No
Magnetite	Irregular	Black/dull	5.2 g/mL	6	Gray	No
Graphite	Irregular	Gray/metallic	2.2 g/mL	2	Gray	No
Halite	Cubic	White/glassy	2.2 g/mL	3	Colorless	No
Silver	Irregular	Gray/metallic	10.5 g/mL	3	Gray	No
Talc	Irregular	White/dull	2.7 g/mL	1	White	No
Quartz	Irregular	Gray/glassy	2.6 g/mL	7	Colorless	No

- Analyze:** Why did you choose the tests in the order that you did?

- Form a conclusion:** Which properties were most useful for identifying minerals? Why?