Name	Period	Date	

# **Lesson 3: What is the Property of Hardness?**

## **Brain Building Broadcast: Hardness**

#### **Purpose**

Watch the video located at any one of the following addresses:

http://goo.gl/h38ii

http://vimeo.com/49793225

http://www.youtube.com/watch?v=EftjD\_JAmck&feature=g-all-u

Watch the video carefully and be sure that you understand the lesson. Re-watch any part of the video that is unclear to you. After watching the video carefully, answer the following questions:

#### **Word Wall Words**

The ability for one substance to scratch another substance is called \_\_\_\_\_\_.

#### Questions

1. Circle the correct bold words for each sentence:

In the video, Mr. Fischer explains the hardness lab from last year.

He explained that copper **scratches** / **does not scratch** zinc, iron, and magnesium.

That means that copper is the **hardest / softest** of the four metals.

- 2. Imagine you are conducting an experiment with <u>four minerals</u>. You perform the same scratch test that Mr. Fischer discusses only with the four minerals and make the following observations:
  - Quartz scratches sulfur, hematite, and calcite.
  - Hematite scratches calcite and sulfur.
  - Calcite cannot scratch quartz and hematite.
  - Sulfur cannot scratch quartz, hematite, and calcite

Apply what you know about hardness to list the following minerals in order of softest to hardest.

Softest Hardest



### **Your Progress:**

- Mastery
- Proficient
- Developing
- Beginning