

Mineral Lab : Identifying Minerals

NAME: _____ Block: _____ Partner: _____

In this lab you will conduct physical mineral tests, with use of your ESRT to help you IDENTIFY various minerals.

A mineral is soft if it has a hardness less than _____, and hard if it can scratch _____ with a hardness equal or greater than _____.

In order to estimate hardnesses less than 5, you can use your fingernail to scratch the mineral. If your fingernail scratches it, it has a hardness less than 2.5. If a mineral scratches the porcelain plate and does not leave behind a streak (not even white), it means it has a hardness of 7 or greater. Use these tips to help identify the mineral!

Sample	Hard or Soft?	Visual Color	Streak Color, white, or no streak	Luster (Metallic or Non)	Cleavage or Fracture? (C or F)	NAME OF MINERAL*	Check here if this mineral is a silicate (USE COMPOSITION)
A							
B							
C							
D							
E							
F							
G							
H							
I							
J							
K							
L							
M							
N							
O							

Question: You are a sandpaper manufacturer in NYS, which of these minerals would you be interested in mining for?

Name: _____

Date: _____

Mineral Identification Lab

1. Describe what is meant by "luster" when identifying minerals.
2. Explain how in a laboratory experiment one would test for "streak".
3. Contrast the differences between a mineral sample with "Cleavage" and one with "fracture".
4. Discuss why color is not the most useful tool in identifying minerals.
5. List all of the silicate minerals found on page 16 of the earth science reference tables.
6. Describe the proper safety precautions for testing the hardness of a mineral.

7. Which two minerals on this list could your fingernail scratch?

8. List and describe your 3 favorite minerals in this lab.

