

Mineral ID Lab

Students-copy this chart onto your paper. Leave plenty of room!

	Color	Luster	Streak	Hardness	Cleavage	Specific Gravity	Other
1. <i>(leave room for mineral name later on)</i>							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							

(Now use this section during the lab to help you determine each mineral's properties.)

Luster- the way light interacts with the surface of the mineral

- *metallic/splendent, dull (no luster), bright, glassy/vitreous, pearly, silky (similar to pearly but stranded), resinous (ex.- amber), waxy*

Hardness: characterizes the scratch resistance of various minerals through the ability of a harder material to scratch a softer material. Follow these steps to calculate hardness:

I. Does your fingernail leave a scratch on your mineral?

- a. Yes- *record a hardness of "< 2.5" for your mineral*
- b. No- go to step II.

II. Will your mineral scratch a penny?

- a. Yes- it scratches a penny; go to step III.
- b. No- your mineral is softer than copper; *record a hardness of "2.6-2.9"*

III. Will an iron nail scratch your mineral?

- a. Yes-your mineral is softer than the nail; *record a hardness of "3.1 - 4.9"* (because it's harder than copper- 3.0 - but softer than iron- 5.0)
- b. No-your mineral is harder than the nail; go to step IV.

IV. Does your mineral scratch glass?

- a. Yes-your mineral is harder than glass; go to step V.
- b. No-your mineral is softer than glass; *record a hardness of "5.1 - 5.4"*

V. Does your mineral scratch a streak plate?

- a. Yes-your mineral is harder than the streak plate; *record a hardness of ">7"*
- b. No-your mineral is softer than the streak plate; *record a hardness of "5.6 - 6.9"*

Hardness Scale

2.5 Fingernail

3 Copper penny

5 Nail

5.5 Glass

7 Streak plate

Cleavage: the tendency of some minerals to split along definite structural planes.

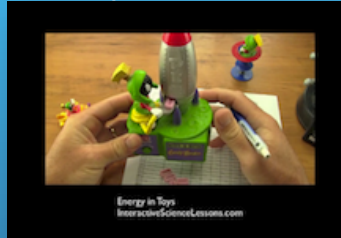
- *cubic, perfect angles, perfectly split into sheets, none*

Specific Gravity: a ratio that compares the mass of the mineral with the mass of water that same mineral displaces.

Formula: mass of mineral / mass of the water the mineral displaces

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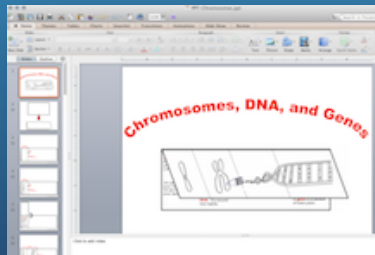
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