

### Period 3 Test questions

GEO #3 I can identify minerals by cleavage, crystal form, streak, luster, and hardness.

- What are three objects used to test mineral hardness. [Scratch with/on a penny, fingernail, glass, steel](#)
- How is cleavage identified? [The form of the mineral after being broken is flat...identified by breaking it.](#)
- How are gold and pyrite distinguished? [Pyrite streaks black, gold gold.](#)
- How is crystal form identified? [The mineral grew with flat crystal faces.](#)

GEO #4 I can measure the density of minerals or rocks.

- Calculate the density of this rock. [\(Photo of cylinder with 50 mL, photo of mass, photo of water + rock\) Procedure: density = mass ÷ volume...find volume by subtracting water volume from water+rock volume.](#)

GEO #5 I can identify silicates and carbonates by their elements and environment.

- Silicates have the two most abundant elements in Earth's crust which are:

A)iron and oxygen  
B)[oxygen and silicon](#)  
C)carbon and sulfur

- Most silicate minerals crystallize from magma as it cools.

[True](#)    False

- Carbonates are the \_\_\_\_\_ most common mineral group.

A) [second](#)  
B) Third  
C) Tenth  
D) None of these

- What are two carbonate rocks that are used in building and construction?

A) magnesium and calcium  
B) Magnesium and calcite  
C) Pyrite and calcium  
D) [Limestone and marble](#)

- Carbonates come from the ocean.

[True](#)    False

GEO #6 I can relate density of silicates and igneous rocks to iron and silica content.

•Is there more iron or silica in felsic rocks? [Silica](#)

•Why would the density of a felsic rock be lower than a mafic rock? [More silica and less iron.](#)

GEO #7

•If a volcano erupts and the magma cools in one week, the texture becomes:

- A) coarse-grained
- [B\) Fine-grained](#)
- C) Glassy
- D) Porphyritic

•When a volcano erupts and the lava goes in the air and cools instantly, the texture becomes:

- A) coarse-grained
- B) Fine-grained
- [C\) Glassy](#)
- D) Porphyritic

•An igneous rock that does NOT form crystals is :

- A) pyrite
- B) Andesite
- C) Rhyolite
- [D\) None of these](#)

•Fill in this table:

<b>Speed of cooling</b>	Fast	Slow
<b>Crystal size</b>	Small	Large
<b>texture</b>	Fine	Coarse

GEO#8 I can connect igneous rock color and texture to extrusive (volcanic) and intrusive (plutonic) structures.

•Pumice has a glassy texture because:

- [A\) it was shot in the air](#)
- B) it was in a lava flow
- C) It erupted in the desert
- D) It was deep in the crust

•Scoria is:

- A) fine

- B) Coarse
- C) Glassy
- D) Basaltic
- E) Both a and d
- F) Both c and d

•List the correlation between fine, coarse, and glassy textures and where/how they cool.

Glassy erupts in the air and cools instantly

Fine on the ground and over a short period of time.

Coarse is in the crust and cools over a long period of time.