

SCIENCE PUZZLERS, TWISTERS & TEASERS

Rocks: Mineral Mixtures

Cooking Up Classifications

1. You've entered your geological kitchen. Now you are ready to whip up some recipes involving rocks. Along with the more "usual" ingredients, your cupboards hold the following: calcite, quartz, and feldspar. Decide which recipes you have the proper ingredients for. If you can't make something, explain why not.

Can you make . . .

a. limestone pie? _____

b. granite casserole? _____

c. quartz cookies? _____

Name that Rock Star

2. Read the biographical sketches of the rock stars in the band below. They have changed a lot through their musical careers. Make up new names for them based on what type of rock they have become.

Sedimentary Sam the String Strummer

I melted and cooled. That was so cool I did it some more. Then I weathered and eroded until the heat and pressure got to me. For now, I cannot quite get out of the heat and pressure cycle.

a. _____

Matilda the Metamorphic Musician

I was a pretty hot rock, but the pressure got to me. So, I melted and cooled for a while in between stints of weathering and eroding. Then I went into a long heat and pressure cycle. But today, I am content just melting and cooling.

b. _____

Sonya the Silly Sedimentary Singer

I wasn't sure whether or not I liked eroding. So, I went into melting and cooling mode. It was cool being igneous for a while. But since I had never been heated and pressured, I figured I'd give that a try. I'm not sick of it yet.

c. _____

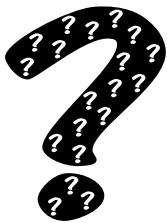
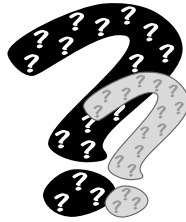
Rocks: Mineral Mixtures, continued

Rocky Riddles

3. Solve the following riddles about rocks.

- a. Finer than conglomerate
Coarser than siltstone

I am _____

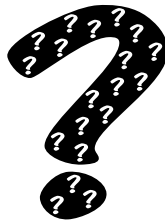


- b. After phyllite
Before gneiss

I am _____

- c. Coarse-grained igneous
But not granite

I am _____



- d. Farther down than chlorite
Heated to temperatures less than garnet

I am _____

Excuse the Interruption

4. Rock formations are hidden in the letters below. Can you unearth them? Fill in the blanks with the hidden terms.

(Hint: They cut through rock formations.)

RDOICKKEFPOLRUMTAOTNIOBNARTOHCOKLFIOTRH MATION

