

NAME _____

MINERAL POWERPOINT PROJECT

We just finished doing a physical analysis of fifteen mineral samples. Often, this is where the mineral study ends. But just like in "Galileo was Right" we have to look at these things in context. Our "context" is going to be the three major rock types - igneous, sedimentary and metamorphic. It's also important to understand the other "context" for these samples - our everyday lives. I want you to put together a short PowerPoint and present it to your team mates in your block. Friday we will go to the computer lab in the Media Center, and Monday we will be in the computer lab on the third floor of the B Wing. I've created a model for you to follow. The link can be found at <http://www.scienceofsand.info/sand/lessons/rockcycle/rockcycle.htm> then click on Week of 12/12, then click on "PowerPoint Presentation," and, if you have PowerPoint 2003 or newer it should open. Please feel free to use it as a guide. It's the minimum that's required. Of course you are always welcome to do more! You will present your project on either Tuesday or Wednesday of the week before Winter Vacation. As a minimum, the following information should be shown:

SLIDE #1

Include the name of your mineral, and list the names of the people in your group. I added a graphic showing a picture of the mineral. I found mine at <http://webmineral.com/> This is the Minerology Database homepage. By scrolling down "Mineral Images," and clicking on the first letter of your mineral's name, it will take you to a listing of all the mineral contained in their files starting with that letter. The list can be huge! They are listed alphabetically, so use some common sense. Don't click on each page looking for it if the second letter is near the middle of the alphabet. Click on a middle page!

SLIDE #2

Give the chemical formula of the mineral. For some of you this will be easy. The formula may be a single element. For others, the task will be difficult. After recording the formula, list each individual element in the molecule, and how many of each can be found there.

Standard rules:

- Each capital letter begins a new element. If an element has two letters in its symbol, the second letter *must be* lower case.
- If only the symbol is given with no number (subscript) after it, the number of atoms is "one." In the formula CO₂ there would be one atom of "C" carbon.

- If the symbol is given with a number (subscript) after it, the number of atoms is that number. In the formula CO_2 there would be two atoms of "O" oxygen.
- If the symbol is given enclosed in a parentheses and there is a subscript after the parentheses or a number before the parenthesis, everything inside the parentheses is multiplied by that number. In the formula $(\text{OH})_2$ there would be two atoms of "O" oxygen and "H" hydrogen. The same would be true if it were $2(\text{OH})$.

I'll be around to help with this.

You also should include a diagram of the molecule. Unfortunately the diagram shown on <http://webmineral.com/> can't be copied. I used a capture program to get mine. Do a search on something like Wikipedia for this where you can do a simple "copy and paste."

SLIDE #3

Describe how the mineral is formed. This can be really simple or *very* complicated. Your textbook is a great place to start. Wikipedia and <http://webmineral.com/> also are good choices. Wikipedia will be easier to understand.

SLIDE #4

List where it can be found. Hint: this is not "in the ground." I'm looking for locations here. If possible, try to get answers in the United States. If not, that's okay too. Include images here if you can.

SLIDE #5

List the uses of the mineral. In some cases this may as basic as "rock forming mineral," or "major source of _____." In some cases the results are amazing!

SLIDE #6

The last formal slide should be any interesting (neat) facts you discovered about the mineral during your research.

SLIDE #7

Include an annotated resource list. This should include the source, as well as what you found there.

