

Name \_\_\_\_\_ Class Mineral \_\_\_\_\_

## SCIENTIFIC INQUIRY STUDY GUIDE

**Scientific Inquiry QUIZ will be on:**

**Wednesday, September 23 for Topazes**

**Thursday, September 24 for Sapphires, Amethysts, Diamonds and Rubies**

**\*\*\* This QUIZ will be short and easy if you are prepared! There will be less than 20 questions, all of which will be fill in the blank and multiple choice. It will serve as a quick check for me to see if you understand some basic concepts with which we started off the year.**

**The best way to prepare is to:**

- 1. Organize your binder so that all of your scientific inquiry notes and worksheets are neatly clipped into the science section of your binder. We took notes in class on scientific inquiry on a piece (or two) of binder paper titled “scientific inquiry notes.”**
- 2. Read over your notes and worksheets to remind yourself about what we have learned in class about scientific inquiry.**
- 3. Reread/skim pages 6-12 in the textbook on “what is science” and “scientific inquiry”.**
- 4. Be able to answer the questions below without looking at notes, worksheets, or the book for help.**

**STUDY QUESTIONS: In the parentheses, you will find references for answers to the questions. Page numbers are from the textbook.**

- 1. What is scientific inquiry and why do scientists use it? (pg. 8, science notes and class discussions)**
- 2. What are the steps of scientific inquiry? (science notes)**

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- 3. Do the steps always have to be completed in the same order? (science notes, class discussions, and science worksheets in your binder)**
- 4. How many variables should you have in a controlled experiment (like the life savor lab)? YOU DO NOT NEED TO KNOW  
“MANIPULATED VARIABLE” OR “RESPONDING VARIABLE”  
(pg. 9, science notes, and science worksheets in your binder)**
- 5. Why is it important for scientists to communicate results? (pg. 11, science notes and class discussions)**
- 6. If a scientist’s observations do NOT support their hypothesis, was their experiment a waste of time? (notes, science worksheets and class discussions)**
- 7. What are the characteristics of a good hypothesis? (notes, science worksheets and class discussions)**
- 8. What type of sentence should a hypothesis be written in? (notes, science worksheets and class discussions)**

While studying, I came up with the following questions I would like to ask Mrs. Myers to help me understand the material better: