



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
1989 Volume VI: Crystals in Science, Math and Technology

Children Actively Investigating Rocks and Minerals

Guide for Curriculum Unit 89.06.03
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These units have been designed to make your “teaching assignments” in science easier. How? This is a science unit which is planned out for you with 1) lesson objectives, 2) strategies (a unified teaching plan for objective implementation), 3) classroom activities (I’ll try to include three, if appropriate for this age level). Also, there will be a reading list for you, as well as for your students, (both student and teacher will read the same books).

The first thing that you will notice about the Teacher’s Guide is that it is set up as “Journal Entries.” This will also coincide with the student’s “Journal Entries,” and both will coincide numerically: e.g., First Journal Entry-I for teacher and student, Second Journal Entry-II for teacher and student, etc. Also, you may do these journal entries at your own pace throughout the year. But do entries in consecutive order for continuity. You will notice that the First Journal Entry is just getting the student’s mind set to the fact that they are actually making a book to record what they’re finding. And these findings are based upon what they have seen through their own eyes—facts.

This is the student’s journal that will coincide with your Teacher’s Guide. Although I have set it up one way, you certainly do not have to follow this method. Please remember that I am also writing this unit to fulfill a requirement with the Yale-New Haven Teachers Institute and I have to follow a guideline. This scientific unit entitled “Children Investigating Rocks and Minerals—A Hands-On Investigation” is by one of the first elementary school teachers to have been invited to participate in this academically-challenging endeavor.

As an elementary teacher I hope that you will not be offended by the detailed, basic instructions that I will be putting into the beginning of each “Journal Entry,” but there are those who will be reading this unit who are far removed from the strict fundamental structure through discipline and organization, that is so inherent in our (elementary teachers) daily routine in order to train these young, often times untamed, minds. You will also observe that language, math and reading have been incorporated in these “Journal Entries.” As you, the elementary teacher know, we are always trying to overlap these core subject areas for continual reinforcement.

There is an important note to be made here: since we are dealing with scientific experiments, we will most likely be confronted with a few failures (both students and teachers). I personally find this to be a psychological plus, because in science you learn by your mistakes. This “fact” can also be carried over into the child’s classroom work. (He will find making mistakes in science more fun to correct and the rewards will be

seen more readily.) As we all know, how we overcome life's mistakes can often make or break a person, so make all mistakes take on a positive approach.

(Recommended for Earth Science classes, grades 3-5)

Key Words

Geology Crystals Science Minerals Earth Physical Measurements Metric System

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