

Rocks and Minerals: Suggestions for Collecting Work Samples

We are fortunate that our science curriculum is very inquiry oriented. At each grade level there are many opportunities built-in for students to do inquiry. Often all that is necessary is remove some of the teacher direction and structure, but supply students with available materials. We have identified opportunities for inquiry work samples in in Rocks and Minerals. Although these activities provide an opportunity for students to **demonstrate all four components** of inquiry, they can also be used to give students practice on individual components.

Lesson	Lesson Title	Description
2, 3	<ul style="list-style-type: none">• Observing Rocks: How Are They the Same and Different?• Learning More About Rocks	<ul style="list-style-type: none">• After completing these two activities students could plan and conduct an investigation about rocks they collect themselves
10	<ul style="list-style-type: none">• Exploring the Hardness of Minerals	<ul style="list-style-type: none">• Activity 10 can be modified to be more open-ended. Students could be challenged to develop a hardness scale for minerals. Follow the procedures as written through step At that point ask students to design an investigation to find out about the hardness of the 12 minerals. You could provide students with the “Scientific Inquiry Report Form” to guide the process.
12	<ul style="list-style-type: none">• Describing the Shape of Minerals Activity	<ul style="list-style-type: none">• Lesson 12 has an extension activity about growing crystals that lends itself to students designing an investigation. We can send you the materials to do the investigation. Possibilities include comparing sugar and salt, cooling fast vs. slow etc.