

## Geologist Activity Badge Outline -- Outdoor Group

The Geologist Activity Badge is recommended to be presented in a one month format, as outlined in the Webelos Program Helps booklet. This example outline presents the Badge in four weekly meetings. The goal of this outline is to complete as many requirements as possible in the four weeks. The latter part of this outline is pretty thin, so you may wish to supplement this badge with a little work on something else.

In order to complete the requirements, a field trip must be taken to someplace where rock collecting can be done. Plan this trip and alert the parents ahead of time. Make sure to telephone the parents a couple days before the field trip, which will help attendance. Deal with any transportation problems ahead of time. While this is a Den outing, it does not require one parent per Scout -- only enough to drive.

You will need a rock and mineral finder book for the field trip. If you have several copies that would be better -- some Scouts can carry them too. Have envelopes available or some method to gather the samples and identify them properly.

Use the Webelos book in the meeting. Have the Scouts read sections from the book. Use all the resources you have available, such as the Program Helps and the Webelos Den Activities Book. Make sure you sign off their books each meeting.

### Week 1

#### Requirements to be fulfilled:

##### **Do Five of These:**

1. Rocks and minerals are used in metals, glass, jewelry, road-building products, and fertilizer. Give examples
2. Collect five geologic specimens that have important uses.

#### Discussion :

1. Read the introduction and requirements on pages 177 - 178. Discuss the requirements and how they will be worked on in and outside the Den.
2. Read pages 178 - 181 on What Our Earth is Made Of, and the types of rock. Talk about examples of rocks and minerals used in metals, glass, jewelry, road-building products, and fertilizer. Have the Scouts open their binders to a clean sheet of paper and write down the examples.
3. Read pages 183 - 185 on Collecting Samples. Work out ahead of time what method you will use with the Scouts to collect and display their samples. You might use egg cartons, you might glue the samples to a board, or make a sectional box. Do something simple. The point here is to learn about rocks by collecting samples and identifying them -- this is not a Craftsman badge project. Bring in a rock finder book. Show the Scouts how the book works and what information is contained in it.
3. Plan your field trip. Pick a location for your outing that will have a lot of rock types. A forest is probably not a good place for this trip. Is there a quarry in your area? Or even just a large cut into a hill side will do very well.

#### Homework:

1. Go on your field trip.

### Week 2

#### Requirements to be fulfilled:

3. Make a scale of mineral hardness using things found at home. Show how to use the scale by finding the relative hardness of three samples.
4. List some of the geologic materials used in building your home.

**Discussion :**

1. Bring the rock samples into the Den meeting. Complete any part of the collection presentation that was not completed on the field trip. Plan to bring these collections to the next Pack meeting.
2. Read page 186 on Hardness Scale for Minerals.
3. Read page 186 on Geologic Materials Used in House Construction.  
Have the Scouts open their binders to a blank sheet of paper. Discuss the materials presented in the chart on page 186. Can they think of any others? How about the sand or gravel used on roofs.

**Homework:**

**Week 3**

**Requirements to be fulfilled:**

5. Make a drawing that shows the cause of a volcano, a geyser, or an earthquake.

**Discussion :**

1. Read pages 187 - 190 on Volcanoes, Geysers and Earthquakes.  
Provide a large piece of paper for each Scout. Bring colored pencils or markers so that they can draw and color their posters. Talk through how each one is formed and have the Scouts draw each and label them appropriately.  
Volcanoes: Talk about heat below the mantle, cracks in the mantle, magma pushing upward, spewing out as a volcano. Talk about the different kinds of volcanoes and different kinds of things spewed out of volcanoes.  
Geysers: Talk about water hitting the hot magma and what happens. Where are there geysers close to you?  
Earthquakes: Talk about tectonic plates. Talk about the different kinds of plate motions that make earthquakes. Talk about the fault zones near to us. Can you get a fault zone map to show the Scouts?

This would be a very good time to take a field trip to the USGS.

**Homework:**

1. Is your house prepared to withstand a moderate earthquake? Talk to your parents about what needs to be done. Is your family prepared to survive a severe earthquake that might destroy your house? Do you have food, water and camping gear located somewhere safe?

**Week 4**

**Requirements to be fulfilled:**

6. Explain one way in which mountains are formed.

**Discussion :**

1. Read pages 190 - 193 on How Mountains were Formed.  
Discuss the various ways in which mountains are made. How were the mountains formed that are nearest to you? You may have to do a little research to find out.

# Geologist Activity Badge Den Leaders Record

List Boy's Names

Date: \_\_\_\_\_  
 \_\_\_\_\_  
 Month/Year

Requirements

**Do Five of These:**

1. Rocks and minerals are used in metals, glass, jewelry, road-building products, and fertilizer. Give examples											
2. Collect five geologic specimens that have important uses.											
3. Make a scale of mineral hardness using things found at home. Show how to use the scale by finding the relative hardness of three samples.											
4. List some of the geologic materials used in building your home.											
5. Make a drawing that shows the cause of a volcano, a geyser, or an earthquake.											
6. Explain one way in which mountains are formed.											
<b>Date Completed</b>											
<b>Awarded</b>											