Den Meeting 9



This meeting is outlined as a field trip.

Are you prepared?

Alternate approaches are possible. See the plan.

Webelos Den Meeting 9

Geologist

Preparation and Materials Needed

- ▶ Read the Geologist chapter in the *Webelos Handbook*.
- ▶ Make arrangements for a field trip to a landscaping contractor, stone quarry, concrete plant, geological site, geological laboratory, rock show, or rock shop. Arrange for drivers. This is the most interesting plan, but you can still complete the achievement using other requirements noted below. Identify any parents or other pack resources who are geologists or rock collectors and could be an activity badge counselor for this meeting.
 - Be sure any guest speaker knows how long the presentation should run, and that you've confirmed what can or should be covered that would be interesting and fun for the Scouts.
 - Show any guest speaker the Geologist chapter in the *Webelos Handbook*.
 - If you don't do this as a field trip, take a hard look at this meeting and the next, and determine how to make it fun and interesting, and how to allocate the requirements.
 - Getting a visitor to bring a rock and mineral collection is a terrific idea.
- ▶ If you are doing this as a field trip, inform Scouts and families about when and where to meet.
- ▶ Materials checklist (add to your den Cub tub of U.S./den flags, paper/pencils, other supplies):
 - Rock collections, books.
 - Plastic zipper bags, labeled with each boy's name, for each to collect his specimens.

Before the Meeting

- ► Review After the Meeting at the end of the previous den meeting plan for necessary preparation and materials.
- ▶ Make final preparations with assistance from any assistant den leader or other parent helper, den chief, and/or denner. Organize the space (seating, flags, advancement charts, activity materials, handouts, etc.). If you're snacking, organize space for that and the cleanup.

Gathering

- ► Have a gathering activity (games, puzzles, other) that will keep Scouts interested and busy and that others may join as they arrive. If the den desires, serve a healthy snack during this time.
- ▶ If you have background materials for the activity badge, Scouts may be interested in reviewing those.
- ▶ If you're on a field trip, as boys arrive, collect permission slips from parents who are not staying.
- ► Collect dues, record attendance and any advancement completed at home (a good job for an assistant den leader). Assign parents to meeting roles and hand out a meeting plan to each.

Opening

- ► Flag ceremony (rotate planning and leadership to complete **Webelos requirement 6**), with Pledge of Allegiance; maybe recite the Cub Scout Promise or sing a patriotic song; perhaps add a roll call, uniform recognition, or den yell.
- ▶ If you have a guest, give a formal introduction, including what the guest will do for you.

Business Items

- ▶ Remind the boys of appropriate behavior, including safety considerations, at the site of your visit.
- ▶ Use this time also to discuss participation in upcoming pack meetings or events as needed.
- Explain that today's meeting is to work on the **Geologist activity badge** and to learn about the science of geology, which deals with the study of rocks, volcanoes, geysers, earthquakes, and mountains.

Activities

- ► **Geologist Activity Badge:** Requirements are to do five of nine requirements. (This meeting plan does 1, 2, and 8, and the next meeting covers 4, 5, and 6.):
 - 1. Collect five geologic specimens that have important uses.
 - 2. Rocks and minerals are used in metals, glass, jewelry, road-building products, and fertilizer. Give examples of minerals used in these products.
 - 8. Take a field trip to a geological site, geological laboratory, or rock show. Discuss what you learned at your next Webelos den meeting.
 - As you hike, identify the geological product you walk on and see, including as used in building material of the different buildings you pass by and the streets and sidewalks

- you cross. Have each Scout keep a list, or if you've checked it out in advance, make a scavenger hunt list of what they might find on the hike.
- As you hike, collect rocks and minerals and then identify them (while on the hike, or when you return, or at the next meeting). Check local laws before allowing the boys to dig for rocks or minerals. In some states, laws prohibit digging rocks and other things from the ground.
- If your host is in the construction business, have the host talk about geologic materials used in home building, such as slate, brick, limestone, marble, cement, and gypsum.
- ► The other requirements for this activity badge that are not included in this meeting or in the next can be used in addition to, or in lieu of, the five selected:
 - 3. Make a scale of mineral hardness for objects found at home. Show how to use the scale by finding the relative hardness of three samples.
 - A clue to a mineral's identity is its hardness.
 - A hardness scratch test is simple enough to perform in the field. Many
 experienced rock collectors carry a hardness testing kit on their rock-hunting
 trips. Knowing the hardness of a mineral will not always tell you its identity, but
 it will help rule out some possibilities.
 - The kit can be made from materials found around the house or obtained inexpensively. (Note that the kit items are rated according to hardness, in relation to the mineral hardness scale in the Webelos Handbook.) One kit for the den should be sufficient. Include the following:
 - Tailor's chalk (softest; your fingernail is a hardness of 2)
 - Copper coin (3)
 - 12-penny iron nail (4 to 4½)
 - Knife with steel blade (about 5½)
 - Hard glass, such as window glass (6)
 - High-speed drill bit (6½)
 - Metal file (6½ to 7½)
 - High-speed masonry drill bit (8½)
 - Abrasive sharpening stone (9)
 - In using the hardness kit, test the mineral specimen on a flat surface. After you
 have made a test scratch, try to rub the mark away with your fingers. A true
 scratch will remain.
 - Use a magnifying glass to examine any doubtful marks.
 - 7. Describe what a fossil is. How is it used to tell how old a formation is? Find two examples of fossils in your area.
 - 9. While you are a Webelos Scout, earn the **Cub Scout Academics belt loop for Geology.** Requirements:
 - 1. Define geology.
 - 2. Collect a sample of igneous, sedimentary, and metamorphic rocks. Explain how each was formed.
 - 3. Explain the difference between a rock and a mineral.

Den Meeting 9

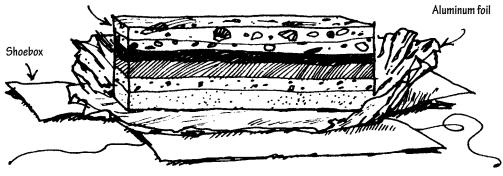


Den Meeting 9



- Here's a simulation to show how sedimentary layers are formed and what they look like.
 - Materials: Shoebox, aluminum foil, string, sand, pebbles, powdered clay, cement, plaster of paris, shells, and water.
 - Line the box with aluminum foil and tie string around the sides so the box won't break or bulge when you fill it. Fill the box halfway with water.
 - Put in a ½-inch-deep mixture of sand and cement and let it settle.

Cement and let it settle



- Then put in 1/2-inch layers of plaster of paris and clay. Let each layer settle.
- Mix pebbles and shells with a small amount of cement and make a layer of each.
- When the box is filled, let the "rock" harden for a few days.
- Cut away the box and you'll have a fair approximation of sedimentary layers.
- ▶ In the boys' Webelos Handbooks, sign the requirements met (and update your records).

Closing

- Award (or recognize) any advancement completed today; thank hosts, guests, helpers.
- ► Closing ceremony (rotate planning and leadership to complete **Webelos requirement 6**): Retire the colors; maybe with the Boy Scout Oath and/or Law, or the Law of the Pack and/or den yell. Den leader may add a den leader's minute comment.
- ► Remind the Webelos Scout who will plan and lead the next meeting's flag ceremony, and remind about home assignments (and include these in any family information letter or e-mail).
- ► Hand out or send family information letter.
- ► **Home Assignment:** Review the Geologist chapter in the Webelos Handbook.

After the Meeting

- ▶ If you've changed the sequence of den meetings, double-check to make sure you will still advance your boys appropriately and check with the Cubmaster to make sure you stay coordinated with the pack.
- ► Refreshments: If appropriate
- ► Cleanup: Recruit enough help to do a good job. Scouts always leave an area as clean, or cleaner, than they found it.