



5th Grade Webelos Scouts



Fifth-Grade Webelos Den Meeting #5

Scientist activity badge (partial), Science belt loop

Preparation and materials needed:

- Make and confirm arrangements for a field trip to work with an educator at a science museum, children's museum, or high school to complete the Scientist activity badge and Science belt loop. Provide the educator with a copy of the requirements well in advance.
- Submit a Local Tour Permit Application to your council service center two weeks before the field trip. (The Local Tour Permit Application can be found at www.scouting.org/CubScouts/CubScoutingForms/forms and on the CD in the Resources folder on the main menu.)
- If you do not have access to a museum, consider inviting a science teacher or parents who have science qualifications. The guest could be asked to discuss the scientific method. Also encourage the guest to come up with a few science experiments.
- Scientist activity badge requirements 1–3 could be incorporated into the den meeting with copies of Bernoulli's principle, Pascal's law, and Newton's first law of motion. Short experiments could be performed.

Note: Each boy should conduct the chosen experiment(s) on an individual basis, coming up with his own hypothesis before conducting the experiment. This is not intended to be a group project merely observed by the Webelos Scout.

- For Scientist activity badge requirement 10, have jam jars available at the meeting with craft sticks and string. While the scientific laws and principles are discussed and experiments are being performed, the water could be prepared with sugar. The Webelos Scout should take home the jar with plastic wrap over it secured with a rubber band, and bring the jar back at the next den meeting to show how big the crystals grew.
- Bring a U.S. flag and the den flag.
- Prepare permission slips for a hike at den meeting #6.

Gathering:

- Collect permission slips for this field trip as boys arrive.
- Snack, if allowed at the museum or field-trip location.
- Collect den dues.
- Record attendance.

Opening ceremony:

- A Webelos Scout should plan and lead the flag ceremony.
- Recite the Pledge of Allegiance, the Cub Scout Promise, Law of the Pack, Scout Oath, and/or Scout Law.

Advancement:

Scientist activity badge requirements (completed at science museum):

1. Read Bernoulli's principle. Show how it works.
2. Read Pascal's law. Tell about some inventions that use Pascal's law.
3. Read Newton's first law of motion. Show in three different ways how inertia works.
4. While you are a Webelos Scout, earn the Cub Scout Academics belt loop for Science (see below).
5. Show the effects of atmospheric pressure.
6. Show the effects of air pressure.
7. Show the effects of water pressure. This may be combined with atmospheric pressure or with air pressure.
9. Explain what causes fog. Show how this works.
10. Explain how crystals are formed. Make some.
11. Explain how you use your center of gravity to keep your balance. Show three different balancing tricks.
12. Show in three different ways how your eyes work together, and show what is meant by an optical illusion.

Science belt loop requirements:

- Explain the scientific method to your adult partner.
- Use the scientific method in a simple science project. Explain the results to an adult. (If you are unable to plan a simple science project that can be conducted during the den meeting, then assign this as work to be completed at home.)
- Visit a museum, a laboratory, an observatory, a zoo, an aquarium, or other facility that employs scientists. Talk to a scientist about his or her work.

Closing:

- Hand out family information letter. Include directions for growing crystals and explain that boys must report back at the next meeting. Ask parents to review with their Webelos Scouts requirement 2 for the Arrow of Light Award. Boys will be asked to demonstrate their knowledge during next week's hike. (A sample family information letter can be found at www.scouting.org/CubScouts/Resources and on the CD in the Resources folder on the main menu.)
- Hand out permission slips for the hike at den meeting #6.

Next Up:

- For den meeting #6, identify a suitable trail for a day hike with the Webelos den.
- Submit a Local Tour Permit Application to your council service center two weeks before the day hike.
- Bring a U.S. flag and the den flag.
- Bring rope for tying the joining knot (Arrow of Light Award requirement 2).
- Prepare permission slips for a trip to the library at den meeting #7.

REMINDER: Schedule a visit to a Boy Scout troop meeting or Boy Scout-oriented outdoor activity (Arrow of Light Award requirement 4). After visiting at least one Boy Scout troop meeting and one Boy Scout-oriented outdoor activity, each Webelos Scout should identify a Boy Scout troop that he thinks he might like to join, visit it with his parent or guardian, and have a conference with the Scoutmaster (Arrow of Light Award requirement 6).