

CHEMISTRY MERIT BADGE
Cub Run RECenter

The Chemistry Merit Badge is a single 4-hour class. There is a fair amount of prework that should be completed prior to class

Please bring:

- Blue card, pen, and pencil (Fill out your blue card in PEN not pencil)
- Boy Scout Merit Badge worksheet on Chemistry
- Lunch/snack and water bottle
- Prework (see below)
- ARRIVE ON TIME – EARLY IS BETTER!

Scouts need to do some work at home prior to class. If for some reason you cannot complete the work in time, we will sign partial cards. Assignments will be accepted at a later date at which time we will fully sign your blue card. We promise to help in anyway throughout the process.

PREWORK for the CHEMISTRY Merit Badge

Scouts should read the Boys Scout pamphlet/booklet on the Chemistry Merit Badge prior to class. The requirements listed below need to be done prior to class.

4. Do the following activity:

- a. Cut a round onion into small chunks. Separate the onion chunks into three equal portions. Leave the first portion raw. Cook the second portion of onion chunks until the pieces are translucent. Cook the third portion until the onions are caramelized, or brown in color. Taste each type of onion. Describe the taste of raw onion versus partially cooked onion versus caramelized onion. Explain what happens to molecules in the onion during the cooking process.

5. List the four classical divisions of chemistry.

7. Do ONE of the following activities:

- b. Visit a laboratory and talk to a practicing chemist. Ask what the chemist does, and what training and education are needed to work as a chemist.
- c. Using resources found at the library and in periodicals, books, and the Internet (with your parent's permission), learn about two different kinds of work done by chemists, chemical engineers, chemical technicians, or industrial chemists. For each of the jobs, find out the education and training requirements.
- d. Visit an industrial plant that makes chemical products or uses chemical processes and describe the processes used. What, if any, pollutants are produced and how they are handled.
- e. Visit a county farm agency or similar governmental agency and learn how chemistry is used to meet the needs of agriculture in your county.