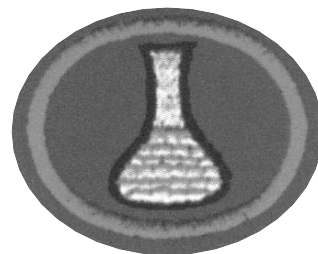


Chemistry



1. Define the following terms:
 - a. Elements
 - b. Compounds
 - c. Chemical symbols
 - d. Solutions
 - e. Atoms
 - f. Molecules
 - g. Periodic table
 - h. Combustion
 - i. Acid
 - j. Salt
 - k. Proton
 - l. Neutron
 - m. Electron
 - n. Distillation
 - o. Fractional distillation
 - p. Filtration
2. What gases extinguish life, and how? Explain the principle of one kind of chemical fire extinguisher.
3. Name two common sources of carbon monoxide. Why is it dangerous?
4. What are the states of matter?
5. Do five of the following, and explain the chemical action that takes place:
 - a. Try to light a sugar cube, first without and then with some ash applied to the cube, thus showing the action of a catalyst.
 - b. Place an ice cube in a glass of water, place a four-inch (10.2 cm) string on top of the glass and ice, then solve the problem of taking the ice cube out of the water without touching it.
 - c. With the use of water, turpentine, and soap, transfer a newspaper picture to a blank sheet of paper.
 - d. With the use of a candle and a piece of cardboard, demonstrate visually the three parts of a candle flame.
 - e. With a bowl of water, wooden match sticks, a lump of sugar, and small amount soap, demonstrate the action of sugar and soap on the floating match sticks.
 - f. Place a fresh egg in fresh water and then salt water, noting the difference.
 - g. Demonstrate that rust uses up oxygen with the use of steel wool, a pencil, a rubber band, a water glass, and a dish of water.
 - h. Demonstrate the colors produced when the following are burned: salt, copper, sulfate, and boric acid.
 - i. Make an invisible ink.
 - j. Show that washing soda or sodium carbonate contains water.

Skill Level 2

Original Honor 1937