Chemistry

1. De	efine the	e followii	ng terms:
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a.	Elements	i.	Acid
b.	Compounds	j.	Salt
c.	Chemical symbols	k.	Proton
d.	Solutions	l.	Neutron
e.	Atoms	m.	Electron
f.	Molecules	n.	Distillation

g. Periodic table **o.** Fractional distillation

h. Combustion **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

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