# Home Repairs Merit Badge Counselor: Mr. Bob Koch September 2004

## **Requirement #1:**

Discuss general precautions related to home repairs. Name at least 10 safe practices that every repairer should exercise.

## **Safety First: General Precautions**

Appropriate safety gear is as important as good tools. The responsible home-repairer should always wear appropriate safety gear – including safety glasses, masks, heavy gloves, and even ear protection – when needed. A heavy=duty safety light will ensure that you always have enough light for your project.

# **General Working Tips**

- Always have enough lighting for the job
- Keep long hair pulled back and avoid wearing jewelry or loose clothing when working with power tools or machinery with moving parts
- Keep your work area clean and free of clutter
- Choose the right ladder for the job. Lean the top of the ladder against something solid and place the ladder at the proper angle (one foot away from the wall for every four feet of working ladder height) with the base on firm, level ground. When climbing, face the ladder and use both hands- don't carry anything in your hands. Don't overreach when you are on a ladder, as it may tip and fall. Never stand on the top two rungs of a ladder
- Never drop tools or other objects from a height lower them with a rope.
- Always wear safety glasses when working with dust, heat, flying objects, or power tools
- Wear a disposable mask when working with odorous materials, dusts, or mists. Use a special respirator when working with toxic substances.
- Store containers of flammable and volatile liquids, such as paint thinner and gasoline, carefully. Keep the containers tightly closed and away from heat or flames. Don't use power tools near flammable or volatile liquids; sparks from the tools could ignite the vapors, even at a distance.
- Make sure to have working smoke detectors and fully charged fire extinguishers in the garage and workshop, as well as in the kitchen. They should be listed with Underwriters Laboratories, a safety testing and certification organization.

#### **Asbestos Hazards**

Asbestos is a mineral fiber that has been used for may years in some building construction materials for insulation and as a fire-retardant. It is most commonly found in older homes, in pipe and furnace insulation materials, asbestos shingles, millboard, textured paints and other coating materials, and floor tiles. Many remodeling activities can release airborne asbestos fibers, which can cause serious lung and breathing diseases. Therefore, when planning a project that involves any of these materials, you should have them checked to see whether they may contain asbestos. IT the do, have the work done by someone who is specially trained to work with asbestos. Contact the Environmental Protection Agency.

### **Working with Tools**

- Avoid working with power tools when you are tired or taking any medication
- Always read the tool manufacturer's instructions, especially warnings, before using a tool
- Never carry sharp objects in your pockets; put them in a utility belt with secure pockets and holders
- Make sure your power tools are in good condition, and don't disable safety guards on power tools. When possible plug power tools into outlets protected with ground fault circuit interrupters (GFCI's)
- Always work away from your body; that is, never point a sharp object, such as a screwdriver or a chisel, toward you as you are working.
- Never support a work piece with your leg or other body part when sawing or using a power tool
- Keep your hands and fingers away from the business end of blades, cutters, and bits
- It's best to cut small pieces of wood or pipe off of a larger piece. If you must work with small pieces, clamp them to a steady work surface when sawing or drilling; use a holder or pusher when working on a table saw or miter
- Always remove the key from a drill chuck before starting the drill