UNIT: Lighting LESSON: Lighting Basics

COMPETENCIES:

1. Name the basic sources of natural light and describe the use and effect natural light has on the interior of the home.

2. Identify the sources of artificial light (incandescent, fluorescent, and halogen) and the effect of each.

3. Define the different types of lighting (general [direct/indirect, local [task/accent], and decorative) and identify their appropriate use.

OVERVIEW/SUMMARY:

Regardless of the amount of time and money invested in decorating a home, if the lighting is inadequate or poorly organized, the decor will not be as effective as it will be with well-planned lighting. Plans for lighting should take place during the design stage when window types and placement—along with the electrical design are being planned.

MOTIVATOR:

At the beginning of class turn off all artificial lighting, leaving only the natural light to illuminate the room. Have the students record their observations. Close off the natural light source and light the room with an incandescent, then halogen and finally fluorescent light sources. (You may need to bring an extension cord and walk around the room for each student to get the feeling different lighting provides). Have the students record their observations of each type of lighting and share their observations as you discuss each light source.

OPTIONS/SUPPLIES:

OPTION 1

DISCUSSION: Have a discussion about the feeling created by the four basic light sources (natural, incandescent, fluorescent and halogen), using the teacher information "LIGHTING". Compare observations and feelings other students have about these light sources by having students complete the worksheet "LIGHT SOURCES".

OPTION 2

PERSONAL LIGHT: Have the students list the natural and artificial light sources in their home, room by room. Have students evaluate the amount and type of light needed for various activities on the "PERSONAL LIGHT" worksheet.

OPTION 3

VIDEO PRESENTATION: Watch a video explaining the importance and use of lighting. One suggested video is "INTERIOR LIGHTING, Bringing Rooms to Life", #124VHS, Learning Seed, 330 Telser Road, Lake Zurich, IL 60047.

OPTION 4

GUEST SPEAKER: Have someone who works in a lighting related field talk to the class about lighting. Some suggestions are: a Utah Power and Light employee, a lighting store sales associate or designer, or a theatrical lighting technician.

LIGHTING BASICS

OPTION 5

CROSSWORD PUZZLE: Review terms not defined in the discussion and assignments, using the teacher information "LIGHTING TERMS", then have the students complete the "LIGHTING CROSSWORD PUZZLE".

RESOURCES:

- American Home Lighting Institute, "Lighting Your Life" R. Presser & Associates, New York, New York, 1986.
- Learning Seed "Interior Lighting, Bringing Rooms to Life", Learning Seed, 1990, 330 Telser Road, Lake Zurich, IL., 60047, 1990.
- Lewis, Evelyn L., Housing Decisions "The Finishing Touches" Goodheart-Willcox Company, Inc., South Holland, Illinois 1994.
- Sherwood, Ruth F. & Eubanks, Eddye. <u>Homes Today and Tomorrow</u>, Glencoe, Mission Hills, CA. 1990.

Brochure "Lighting Your Life", American Home Lighting Institute.