## Dark Skies Rangers Program

## Construction of the Planetarium Box

- 1) Construct the white 4-inch x 4-inch box into a cube by folding the flaps in. To do this, tuck in the flaps on the lid. The lid is the top side of the box that has punched out holes representing stars in Orion and surrounding constellations. On the bottom of the box (the other end of the box), tuck the flaps into the slots, making sure they lie flat.
- 2) Using the electrical tape, seal all three sides on the top of the cube (the side with the star holes punched out). Seal as tightly as possible to avoid any light leaks at the edges of the cube. Avoid covering the stars on the lid with tape, if possible.
- 3) Seal up the bottom of the box wherever there are seams in the folding. Make sure to put enough electrical tape not to allow any light to escape. Avoid covering the big hole on the bottom of the box with tape.
- 4) Test the planetarium box. In a very dark room, take the reflector off of the mini-flashlight, place bulb just inside the hole on the bottom of the box. Turn on the flashlight. Make sure no excess light escapes other than through the punched out holes at the top of the box.
- 5) You are done! Enjoy using the planetarium box in the "light shielding demonstration." Instructions for that are on the CD entitled Activities for the Dark Skies Rangers Program.















