

Appendix BB

BOX OVEN AND SOLAR COOKING



The Box Oven

The cardboard boxes typically used to hold 10 reams of 8½×11 or 8½×14 paper will make very nice box ovens. Line the inside of the box and lid with aluminum foil. Use a sponge to dab some glue around the inside and the cover to hold the foil in place. Make two holes in the cover to let the combustion gases out, and make a few holes around the sides near the bottom to let oxygen in. Make a tray to hold the charcoal using one or two metal pie plates. You can either make feet for a single

pie plate using nuts and bolts, or bolt two pie plates together bottom to bottom. Cut two coat hangers to make a rack to hold up the cooking pan. Poke the straight pieces of coat hanger through one side and into the other. Two pieces will usually do fine. Put several lit briquettes on the pie pan, put your cooking pan on the rack, and place the cover on top. The first time you use this box oven, check it a few times to make sure that enough oxygen is getting in and that enough gases are escaping to keep the charcoal burning.



Solar Cooking

Solar cooking is gaining in popularity due to the excitement around the STEM programs. There are two different ways to cook in a solar cooker. The first way is to refocus the oven to follow along with the sun's rays every 25 to 30 minutes. This allows for food to be prepared the same way it would with a classic stove or oven. The solar oven can also be used as a slow cooker similar to a Crock-Pot. It is possible to prepare food, put it in the solar oven, point the oven where the sun will be, leave, and come back to a savory, slow-cooked dinner.