**Solar Heater**

**Procedure**

1. **Measure** Put the bulb of a thermometer into a bowl of water. Record the water temperature.

2. Make a solar heater. Use aluminum foil to cover the inside of the flap cut in a pizza box. Make sure the shinier side of the foil is showing. Tape the foil in place.

3. Open the box and cover the inside bottom with foil. Tape the foil in place. Tape sheets of black paper over the foil bottom so the foil is covered.

4. Tape plastic wrap across the inside of the pizza box lid so it forms a tight seal.

5. **Measure** Put the solar heater outdoors. Place the bowl of water in the box. Adjust the flap so that it reflects sunlight onto the water. Use a ruler with clay on both ends to prop open the flap. After 2 hours, again record the temperature of the water. **Safety:** Do not touch the aluminum foil.
Conclusion

1. **Compare** In which step did you record the higher temperature?

2. **Predict** What would happen to the water if you left it in your solar heater for another 2 hours?

Ask Questions

Think about your results. What questions do you have about solar energy? Choose a question to investigate. **Collaborate** on a plan to find the answer.