

Solar Oven

Procedure

- 1. Collaborate** Work in a group. 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.
- 2.** 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.
- 3.** Tape plastic wrap across the inside of the pizza box lid so it forms a tight seal with the flap opening.
- 4. Measure** Place a thermometer in the box. Record the temperature on the line below.

- 5. Observe** Put the oven outdoors. Adjust the flap so that it reflects sunlight onto the thermometer. Use a ruler with clay on both ends to prop the flap open. After 2 hours, measure the temperature again. Record the temperature on the line below. **Safety:** Do not touch the aluminum foil. The oven may be hot.

Conclusion

Write the answers to the questions below.

1. **Predict** What might happen to a slice of cheese placed in your solar oven?

2. **Infer** During what season of the year will your solar oven work best?

Investigate More!

Design an Experiment How does your solar oven work at different times of the day? Test it in the morning and afternoon. Use a bar graph to display the temperatures you measured.