

## Locator using the Sun

## **Locator Construction**

- 1. Print or copy the locator sheet.
- 2. Set up the sheet in front of you on a flat surface with the printing upright.
- 3. Fold the bottom edge up 3" so that it falls right on the two small lines label "Line A." Crease the fold. The crease should fall on the horizontal dashed line.
- 4. Unfold the paper and lay it flat as before.
- 5. Fold the left bottom corner of the paper up so that it covers the label "Corner B" and the corner falls on the small cross. Crease the fold. The crease should fall on the diagonal dashed line.
- 6. Fold the right bottom corner up so it covers the label "Corner C" similar to the previous step. Crease the fold. The crease should fall on the remaining dashed line. This part is like the first step in making a paper airplane.
- 7. With the two diagonal folds still in place, fold up the bottom of the paper along the fold you made in step 3 so the point falls on the heavy line in the center of the paper.
- 8. Unfold the bottom half way so that the tip points away from the table. Slide the two edges of the folds out so that they fall on the diagonal rectangles and tape each side down with a small piece of tape.

## Locator Use

The locator can tell you the elevation of the sun anytime. Just place the paper on a flat horzontal surface and turn it so the shadow of the peak falls on the heavy center line. Read off the elevation by interpolating between the marked angles.

To use the locator to find your position, you need to align the paper so that the top faces straight north. Then you need to mark the position of the tip of the shadow several times between 11:00Am and 1:00PM and write down the time.

After all your points have been marked, Draw a smooth line between the points and estimate the elevation of the sun and the time when the sun crossed the thick central black line.