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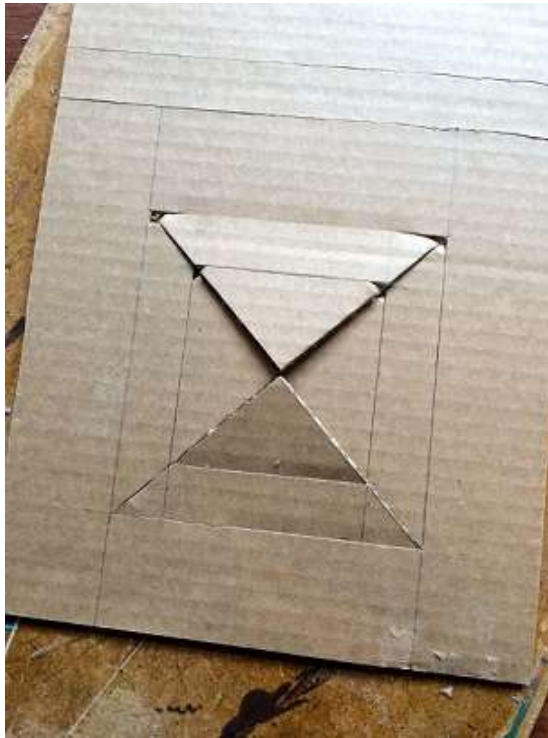
## **PROJECT: Using Carpentry Skills to Create a Corrugated Cardboard Shadow Box**

### Assignment directions

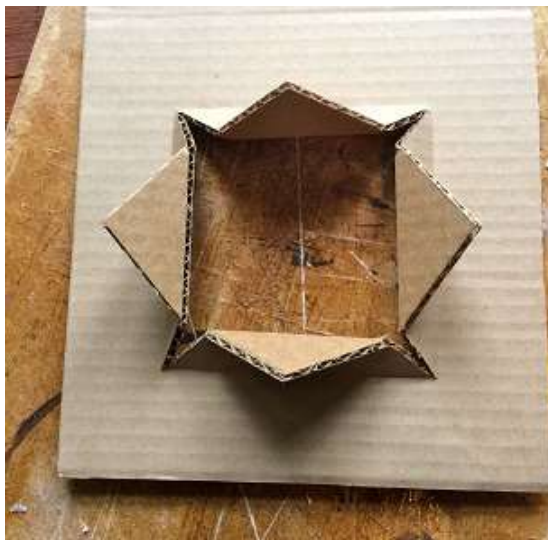
In this project, you will use simple materials and tools to practice making precise measurements and cuts, the type that are the bread and butter of the professional carpenter. You will also practice thinking in three dimensions and following directions closely. At the end, you will have a small shadow box or frame that you can paint. You will also have a better idea if your skill set matches that of a successful carpenter. You will need the following materials: a piece of corrugated cardboard that is 20 inches by 9.5 inches; a ruler or yardstick; a sharp utility knife; a pencil; and glue or masking tape.

### Assignment guidelines:

- a. Draw a line at 10.5 inches and at 9.5 inches across the vertical expanse of the cardboard. This will give your shadow box a depth of 1 inch.
- b. Score both lines with your utility knife, using the ruler as a straight edge; score means to cut through the top layer only.
- c. Fold the cardboard outward along the scores; it should look like the cover of book at this point, with a 1-inch spine. Take a picture.
- d. On what would be the outside cover of the book, draw a square 2 inches in from the edge of the cardboard. Be precise in your measurements.
- e. Draw another square 1 inch inside the first square. Then draw two diagonal lines in the shape of an X connecting the corners of both squares. Take a picture.
- f. Score the lines of both squares, and cut through the two diagonal lines completely.



g. You will now have four triangular flaps, each with two scored lines. Fold back the flaps along the scored line. Take a picture.



h. Fold over the cover of the “book,” and glue down the flaps to the back side of the shadow box. Take a picture.



- i. If you want, you can tape over the visible corrugated seams with masking tape (cut on diagonals at the corners to make sure the tape folds flat). Then you can paint it.

### Submission requirements

Submit your four photographs of your shadow box at various stages of completion (Bonus: Submit a photo of your shadow box in action or after you have painted it.) Also copy the following questions along with your written responses:

- a. Explain the importance of having the right tools for the right job.
- b. What happens if you don't measure correctly?
- c. Did you waste any materials while trying to make your shadowbox? If this were a real construction project, how would that have impacted the budget and the schedule?
- d. What was the hardest part of this project for you, and how would you overcome a similar difficulty on a construction site?