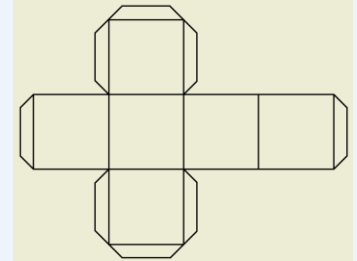


Laser Cut Paper Decision Cube Procedure

- 1 Model the cube in Autodesk Inventor
 - a. Create two parts:
 - Square – 2.75" x 2.75" with a thickness of 0.125"
 - Tab – 2.75" x ½" with a thickness of 0.125"

- 2 'Assemble' 6 squares and 8 tabs in the pattern shown using joints and/or constraints as necessary.



- 3 Create sketch on the surface of the model. In the sketch add text to each cube face. Extrude the text through.
 - Text notes
 - The text should answer a question when the cube is rolled.
 - Use the 'Stencil' font
 - Keep text reasonably large to prevent small regions from being lost

- 4 Create a 'Drawing' from your model
 - a. Use a 'C' sized sheet
 - b. Dimension the drawing
 - c. Add your name and give the drawing a title
 - d. Print and submit this drawing

- 5 Prepare your drawing for laser
 - a. Begin with the drawing created in step 4
 - b. Save the file with a new name using 'save as'
 - c. Delete the title block and boarder
 - d. Delete dimensions
 - e. Change lines (annotate) to be laser ready
 - Cut lines: red – continuous – 0.001"
 - Not to be cut lines: white – continuous
 - f. 'Print' to VLS 4.60

- 6 In the software or 'User Control Panel'
 - a. Ensure lines to be cut are showing as red. If not correct error in Inventor and reprint to UCP
 - b. Move the cutout so that it fits on the paper placed in the machine
 - c. 'Focus' the laser to the surface of the material
 - d. Enter the 'Settings' menu and in the 'Materials Database' select 'Natural', the paper type being used and the thickness (standard copy paper is 0.004" thick)
 - e. Click 'Apply' and 'OK'