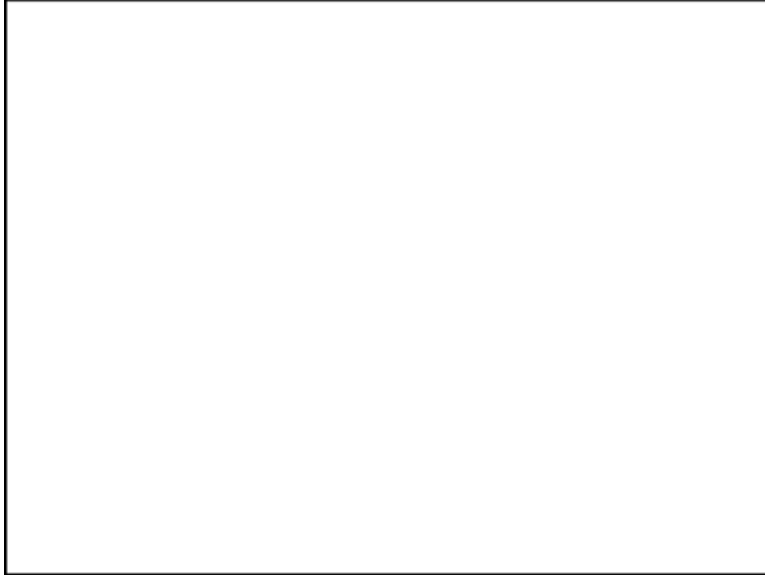


Physical Representations of Area and Volume

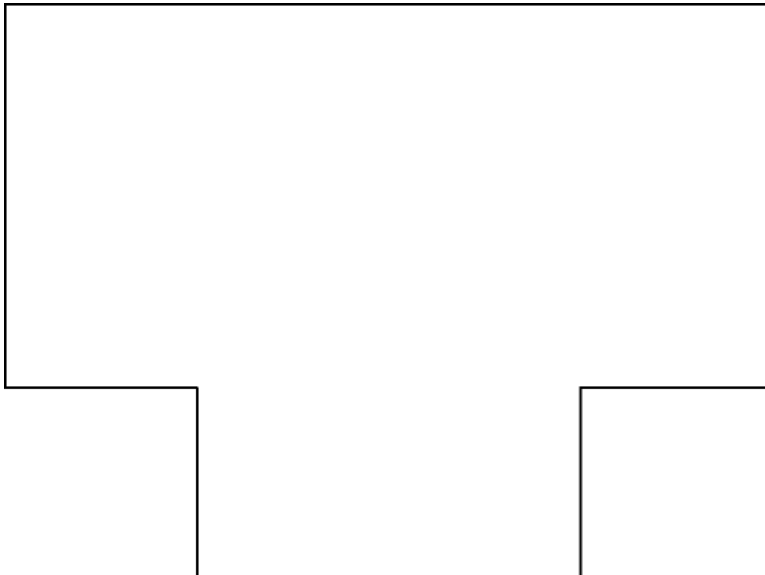
NAMES:

This activity should add meaning to the terms “square inches” and “cubic inches”. You have been given cubes that measure 1 inch on each side. They are cubic inches. You have been given sheets of paper with squares that measure 1 inch by 1 inch. These are square inches.

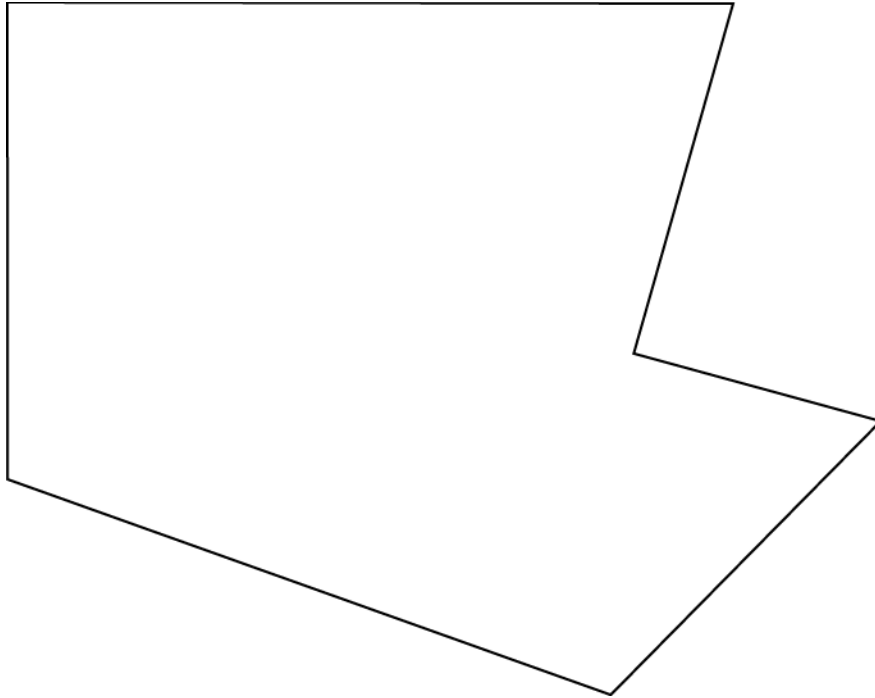
1. Use the square inches to measure the following shapes. Cut and paste your square inches over the pictures. Write the areas of each shape with appropriate units.



area =



area =



area  $\approx$

Use the table below to record your work for the next problem. Use three different boxes.

2a. For each box, label it with its letter and find the number of cubic inches that fills it. Actually fill the box up with the cubic inch manipulatives you were given. Count the cubic inches to calculate the volume of the box.

2b. Measure the dimensions of the box and multiply to find the box's volume. Then compare your two measurements for volume.

Box Letter	2a. Total volume of box (Add up cubic inches)	2b. Total volume of box (Multiply length times width times height)	Do the measurements for volume match exactly? If not, why?

3. Describe the difference between the units used for area and those used for volume.