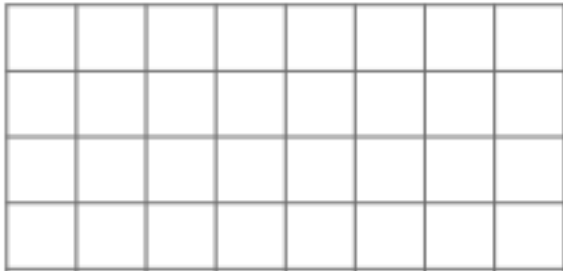


# Area Lab

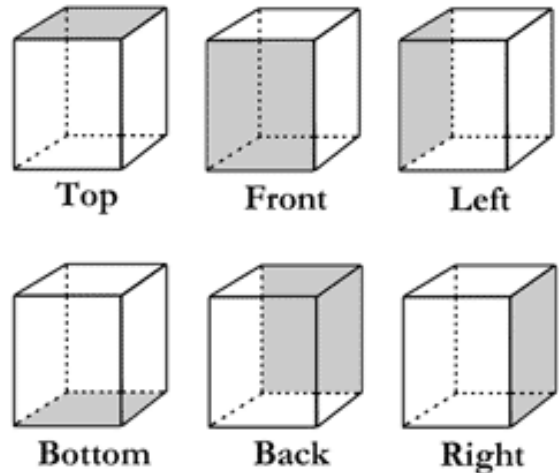
NAME \_\_\_\_\_ hr \_\_\_\_\_

Area is another type of scientific measurement. It is basically the “**skin**” or “**surface**” of any object. It is calculated by multiplying the length times the width. Since two measurements are taken and then multiplied, the label will have a 2 as an exponent. Area is a measurement of 2 dimensions. For example, the square below has a length of 8 cm<sup>2</sup> and a width of 4 cm<sup>2</sup>. Its total area is 32 cm<sup>2</sup>



Sometimes scientists are interested in finding **total** surface area of a 3 dimensional object. In this case you would calculate the area of the top, the bottom, the left side, the right side, the front and the back. Adding all 6 of these surfaces would give you the total surface area.

## Surface Area of a Prism



1. Measure and record the length and width of the index card in cm and mm. Calculate the area of the index card in cm<sup>2</sup> and mm<sup>2</sup>. Use the chart to record your results. Don't forget labels for your numbers!!

Index card	Length in mm	Area in millimeters
	Width in mm	
	Length in cm	Area in centimeters
	Width in cm	

2. Measure and record the length and width of the TOP of your textbook in cm and m. Calculate the area of the textbook in  $\text{cm}^2$  and  $\text{m}^2$ . Don't forget labels for your numbers!!

Textbook	Length in cm	Area in centimeters
	Width in cm	
	Length in m	Area in meters
	Width in m	

3. Measure and record the length and width of the top of your lab table in cm and m. Calculate the area of the textbook in  $\text{cm}^2$  and  $\text{m}^2$ . Don't forget labels for your numbers!!

Lab table	Length in cm	Area in centimeters
	Width in cm	
	Length in m	Area in meters
	Width in m	

4. Measure and calculate all six surfaces of the 2x4 on your table. Add them up to find the TOTAL surface area in  $\text{cm}^2$ . Don't forget labels for your numbers!!

	Top area	Bottom area	Right side area	Left side area	Front area	Back area	Total area
2x4							