Name_____

In this activity you will calculate the length of each part based on the weight.

1. Weigh each part and record the weight below.
2. Use the volume formula given to calculate what the length should be. Record your answer in decimal form. Then convert to the nearest 16th of an inch. (Hint: Think about what your units used in the formula should be. Use that the density of aluminum is 0.098 lb/cu in which means 0.098 lb = 1 cu in).
3. Use a ruler to verify your length.

Volume of a cylinder: $V = \pi r^2 l$

Part	Diameter	1.Weight	2. Calculated Length (Three decimal places)	2. Calculated Length (To the nearest 16th)	3. Measured Length (To the nearest 16th)
A	1"				
B	$\frac{1}{2}$"				

Volume of a rectangular solid: $V = lwh$

Part	width	height	1.Weight	2. Calculated Length (Three decimal places)	2. Calculated Length (To the nearest 16th)	3.Measured Length (To the nearest 16th)
A	$\frac{3}{8}$"	$\frac{3}{8}$"				
B	$\frac{1}{2}$"	$\frac{3}{4}$"				