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.
- 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 16 th)	 Measured Length (To the nearest 16th)
A	1"				
В	$\frac{1}{2}$ "				

Volume of a rectangular solid: V = lwh

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

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