Aluminum foil Lab
Density of $\mathrm{Al}=2.71 \mathrm{~g} / \mathrm{cm}^{3} \quad 1000 \mathrm{~mm}^{3}=1 \mathrm{~cm}^{3}$

| Foil <br> type | Length <br> $(\mathrm{mm})$ | Width <br> $(\mathrm{mm})$ | Area <br> $\left(\mathrm{mm}^{2}\right)$ | Mass <br> $(\mathrm{grams})$ | Density <br> $\left(\mathrm{g} / \mathrm{mm}^{3}\right)$ | Volume <br> $\left(\mathrm{mm}^{3}\right)$ | Thickness <br> $(\mathrm{mm})$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Light |  |  |  |  |  |  |  |
| Light |  |  |  |  |  |  |  |
| Light |  |  |  |  |  |  |  |
| Heavy |  |  |  |  |  | Average <br> thickness |  |
| Heavy |  |  |  |  |  |  |  |
| Heavy |  |  |  |  |  |  |  |
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$25.4 \mathrm{~mm}=1$ inch
Find the average thickness of each foil in inches. Light foil $=$ $\qquad$ Heavy foil = $\qquad$
What size square should give you most accurate results and why?

Graphs Using your data from the heavy aluminum foil, make two separate graphs.
On one graph the mass(y) verses volume ( x )
On the other, graph the volume ( y ) verses area ( x )
Title each graph and label axis using proper scaling.
Find the slope on each graph
State the physical meaning of each slope

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