Name $\qquad$

1. Calculate the volume of the tank in cubic inches of the blueprint attached. (Hint: use the inside dimensions)
2. Use your conversion chart to convert the volume from cubic inches to cups to be able to compare with your measuring cup. Verify your calculation by filling the tank with water using the funnel and measuring cup.
3. Calculate the lateral outside surface area (outside skin). (Hint: use the outside dimensions)
4. Verify part of your calculation by measuring the "wrap" (lateral surface area perimeter) of the tank with the pee wee tape.
5. Calculate the total surface area in square inches. You will need to take out the area of the top hole.
6. Use the Ryerson stock list to determine the weight of the tank. Verify the weight of the tank using the scale.
7. List several reasons why you may need to know the volume or surface area of products that you are manufacturing?


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