

Physical Science
Measurement Review

Name: _____ Block: ____

You will need a ruler and your calculator to complete this worksheet.

1. A bunch of MIT frat boys decided to measure the volume of the Alumni Pool in Honigs. They conducted a series of measurements using Archimedes' principle as follows:

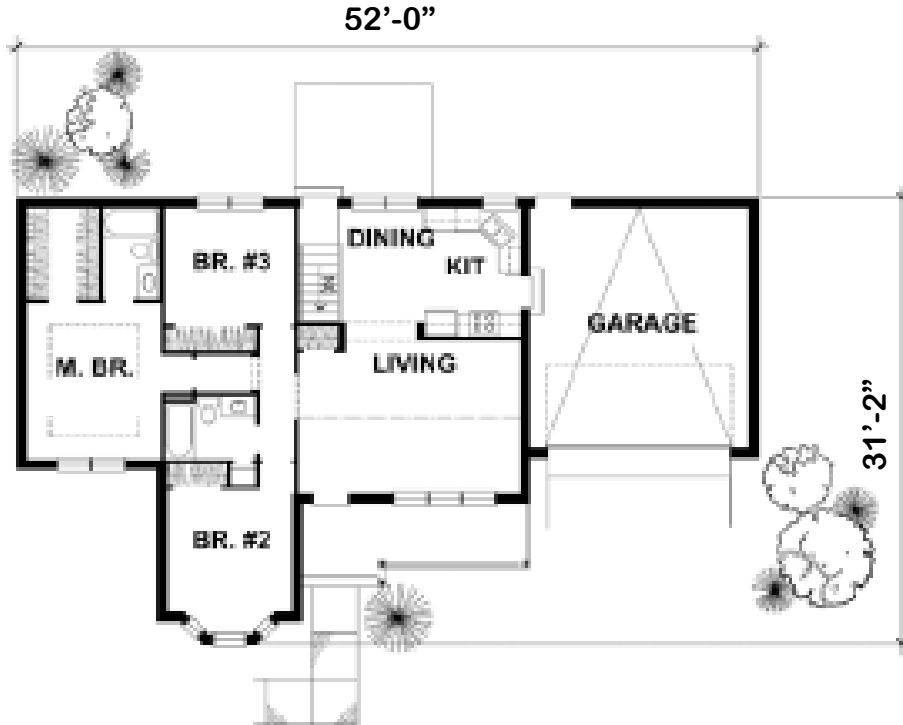
- 50 gallon bathtub = 1.5 Honigs
- 150 gallon hot tub = 4 Honigs
- 1200 gallon crew shell practice tank = 30 Honigs

- a. On the graph below, show the relationship between gallons and Honigs. Put Honigs on the vertical axis and gallons on the horizontal. Show a trendline on your graph.



- b. Using your trendline, estimate how many gallons there are in a Honig.
- c. Use your graph to estimate how many Honigs the 600 gallon Oobleck tank contains.
2. Suppose someone found that Noah's 300-cubit long ark was 200 feet long.
- d. If it were 80 cubits wide, how wide is that in feet?
- e. How long is a 30 foot BassTracker in cubits?

3. The following is a scale drawing of a house with dimensions shown.



- What does one centimeter on the drawing correspond to in feet for the real house?
- If you were to draw a $\frac{1}{20}$ scale set of plans for this house, how wide would it need to be in centimeters?
- How many square feet of floor tile would you need for the master bedroom (excluding the closet and bath)?
- If the walls are eight feet tall, how many square feet of acoustic tile would you need for the inside of the garage, excluding the garage door?