Name _____ *Key* _____ Date _____

# Area What?  Volume Huh???

DIRECTIONS:  Answer the following questions recalling area and volume INDEPENDENTLY.
If you need assistance, refer to your old notes in the yellow folder.

1.  What is the formula for area? _____ Rectangle $= (l \times w)$
    Triangle $= \frac{1}{2} \times (length \times width)$

2.  What is the formula for volume? _____
    Rectangular Prism $= l \times w \times h$
    Prism $= B \times h$

3.  Describe what a cube looks like.
    A cube is 3 dimensional with 6 faces that are all squares.

4.  What does **B** represent in the volume formula? ___ The area of the bottom layer.

5.  Explain why area is measured in square units and volume is measured in cubic units.
    Area describes the number of square units in 2 dimensions while volume describes the number of cubes in 3 dimensions.

6.  Calculate the volume of a cube with an edge length of $\frac{2}{5}$ in.   Show all of your thinking below.

    $V = l \times w \times h$
    $= \frac{2}{5} \times \frac{2}{5} \times \frac{2}{5} = \frac{8}{125}$
    The volume is $\frac{8}{125}$ in$^3$.

    $\frac{2}{5}$ in
    $\frac{2}{5}$ in
    $\frac{2}{5}$ in