*![j0396520[1]]()![bs01143_[1]]()*

**MODULE I**

SUPPLIES:
Firm Plate

Square or Rectangular cookies or Graham Crackers

Frosting

Plastic knives and spoons

Candy décor

Formulas for Perimeter and Volume

PROCEDURE:

1. Obtain 6 cookies
2. Measure the length and width to the nearest centimeter and record on sheet
3. Place small amount of frosting on plate to use as foundation
4. Stand up four cookies vertically in a square on the foundation, using frosting to glue between the “walls” of the house
5. Put frosting glue on the to edges of two parallel sides
6. Glue the remaining cookies together with frosting, and gently place them on the glue on top of the “house.”
7. Decorate your house with available candy décor items
8. Do the calculations on the following page
9. For each calculation involving a geometric shape, note the name of the shape you are using before calculations
10. Use a scale to measure the house and answer question number

DATA:

Record the length and width of one cookie: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use this number for the following:

1. What is the area of one cookie?
2. What is the area of the surfaces of all of the walls of the house?
3. What is the area of the roof?
4. What is the area of the surface where the house stands?
5. What is the estimated area of the triangle formed by the roof above the house? (Hint, assume this area were filled in, using the top of a wall as the hypotenuse, and the lengths of the roof edges as the legs of the triangle)
6. What would be the perimeter of the length around the outside of the house?
7. What would be the perimeter of a fence if it were put up one inch from all sides of the house?
8. What would be the area enclosed by the fence? (\*remember to subtract the area of the house from the total)/
9. What would be the volume of the base of the house, not including the roof?
10. What would be the volume of the roof area of the house?

When the above calculations are complete, EAT YOUR HOUSE!