**BUILD A CASTLE!**

**DUE: FRIDAY, MAY 15th**

**DIRECTIONS**

1. **FORMULA SHEET**: Draw a sketch of the following shapes: rectangular prism, square pyramid, triangular pyramid, cylinder and cone.

Write the formula for the VOLUME of each shape.

1. **CREATE A 3D CASTLE** using AT LEAST 10 figures.  
   Print or draw the figures, then cut out and glue or tape together.
2. **TABLE SHEET**: write the name of each individual figure.  
   Write the formula for the volume.

Find the volume of each individual shape.

Find the total volume of your 3D Castle.

Note: **NEATNESS** If you are hand writing this project make sure your teacher can read it!

CASTLE CONTEST – If you want a chance at winning the pizza, be creative! How can you make your castle stand out? Your friends will vote for the most creative castle next week!

**RUBRIC**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Poor | Fair | Excellent | Score |
| **Formula Sheet** | Not all shapes have been included.  Errors in Formulas  (0 points) | All shapes have been included.  Error in one Formula  (1-1.5 points) | All figures have been included.  Formulas are correct.  (2 points) |  |
| **3D Castle** | *Two errors*:  Less than 10 shapes have been used.  Castle has not neatly constructed.  (0-3.5 points) | *One error*:  Less than 10 shapes have been used.  Castle has not neatly constructed.  (4-4.5 points) | At least 10 figures have been used.  (5 points) |  |
| **Table Sheet** | *Two of more errors*:  A table has NOT been created  Each figure has NOT been drawn.  Each formula is NOT written.  Each volume has NOT been calculated accurately.  The total volume of the composite figure has NOT been calculated accurately.  (0-3.5 points) | *One error*:  Each formula is NOT written.  Each volume has NOT been calculated accurately.  The total volume of the composite figure has NOT been calculated accurately.  (4-4.5 points) | A table has been created in Word/Excel/drawn on paper with a ruler.  Each figure has been included.  Each formula is written.  Each volume has been calculated accurately.  The total volume of the composite figure has been calculated accurately.  (5 points) |  |
|  | | | TOTAL: /12 | |