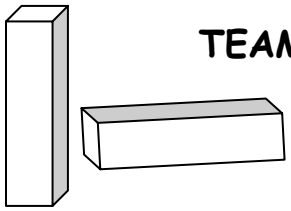

TEAM JENGA HOW MANY JENGAS CAN YOU BUILD?

Name_____

You will need: scissors, tape, ruler, a small piece of card stock and a large piece of card stock or construction paper.

1. Sketch your Jenga block (also known as a rectangular prism.)

2. Using the small paper, make a net for the Jenga block (wrapping all the surfaces). Sketch the *net* for the Jenga.

3. How many lateral faces are there? ____ How many bases are there? ____

4. Measure the length, width and height of your JENGA (in centimeters)
   Length =_____ Width = _____ Height = _____

5. Find the volume of your Jenga. (see class reference sheet for formula)

6. Find the surface area of your Jenga block (see reference sheet)

7. If the Jenga is enlarged using a scale factor of 2, what will the dimensions of the larger Jenga be? Length = _____ Width = _____
   Height = _____

8. If the Jenga is enlarged using a scale factor of 2, what will the surface area of the larger Jenga be?

9. Using the large piece of paper, make a net of the larger Jenga.

10. When everyone on your team has finished to # 9, write the time here. _____. Call your teacher over to initial that all have finished to this point. _____. (Teacher initials)

11. As a team it is your job to build from card stock as many of the enlarger Jengas as possible in 30 minutes. Work together as a team with everyone contributing to the building.

12. How many congruent Jengas did your team build? _____ (If your Jengas are not congruent, they will not stack and slide well for playing Jenga.)

Now play Jenga:

As a team, build the highest tower you can build without it toppling over. You get three tries. Record your heights (levels) for your three tries here: Round 1____, Round 2____, Round 3 ____

Next, rebuild the next highest tower. Take turns sliding pieces out of the Jenga without toppling the tower. You get 1 point for each block pulled out without toppling the tower. You do not get a point for the block that topples the tower.

Scoring: 1 point for each level in the highest tower + 1 point for each block removed without toppling the tower.

SCORE HERE:

13. How did each person on your team contribute to the team's success in the building?

14. What did you learn from this team project?