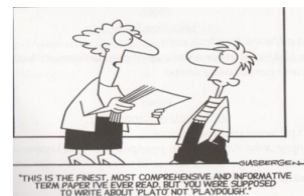


Name: _____

(MPM1D1) Grade 9 Project - Surface Area and Volume of 3-D Shapes
Group Assignment (maximum group size - 3 students) **Due Wednesday March 27, 2008**

With your group, students must create a 3D object using the following shapes.

- | | |
|----------------------|------------------------|
| ✓ Rectangular prisms | ✓ Cone |
| ✓ Cube | ✓ Sphere |
| ✓ Cylinder | ✓ Right angle Pyramids |



You are required to

- ✓ Calculate the surface area of each created object
- ✓ Calculate the volume of each created object
- ✓ Complete all assigned worksheet
- ✓ Submit all work in an organized well presented manner

You must use a minimum of 5 **created** objects. This means that you must create the shape using nets. Your group may purchase an unlimited number 3D shapes for their project, but they are required to calculate the surface area and volume of the objects they have created.

If your group wishes to use a sphere you may purchase or use a pre-existing model (such as a tennis ball or styrofoam ball). This object may be considered a "created item". The group must have at least 4 distinct shapes. *You may not submit 4 different sizes of cubes!*

Projects are due **Wednesday, March 27, 2008**. If the person in your group with the project is absent, the group will lose marks. It is your responsibility to submit it on time. Submit it early if you are unsure if you can make it to class on Friday. The deadline for switching or dissolving your group is **Thursday March 6, 2008**.

Marks will be given to creativity of design and presentation of model.

Please do not make your projects too big!

How your group can get an excellent mark

- ✓ Start the project ASAP. You can ask me questions before the March Break
- ✓ Share and compare your worksheet calculations with your group members or peers. Make sure you include all your units and steps
- ✓ Talk to other groups. You are not competing against each other! Share your ideas.
- ✓ Be original! You don't have to use cardboard boxes. You can use chicken wire, pipe cleaners, straw, food, etc... If you would like to do the project using Flash, GSP or another program, talk to me.
- ✓ Submit your work early for constructive criticism.
- ✓ Discuss the group assessment with your group members. Assign the work accordingly. Poor group dynamics affect everyone's mark!
- ✓ Write legibly! Include a title page, table of contents, and organize your answers and questions in a logical manner. Skip lines! Circle your answers! Reading your work should be **easy!**