

Miniature Golf Madness

The Panyu city planner is looking to develop the land near the Clifford bus terminal. As one of the main civil engineers in the area, you have been asked for your input as to how the land might be developed. You decide it would be neat to create a miniature golf course, but you'll need a little help from some of your equally educated and creative friends in order to pitch this idea in time! Mr. Shumsky has agreed to lend the services of his brilliant Grade 10 students to help you meet your deadline.

Each student will create a model miniature golf hole with the following requirements:

1. A base platform that measures at least 2 ft. by 2 ft.
2. At least 1 of each 3-D shape: right pyramid, rectangular pyramid, right cone, sphere, hemisphere, cylinder, and rectangular prism.
3. At least 3 of the structures should be composite objects
4. Provide an accurate blueprint of your model: one overhead view, one side view
5. Calculate the surface area of each 3-D shape and/or composite object
6. Calculate the volume of each 3-D shape and/or composite object

You will be graded on the following criteria:

Surface Area Calculations	/25
Volume Calculations	/25
Blueprints (overhead, side)	/20
Minimum Requirements Met	/5
Model Accuracy	/15
Creativity	/10

