Coms 331 Lighting - Material Properties Fall 2007
Homework 13

1. Use the program `Lecture 13 Demo 1.cpp`. In the function `setMaterials()`, change the value of `mat_shininess` to 0.0. What is the effect? Is the effect desirable?

2. Change the value of `mat_shininess` to 128.0 (the maximum allowed). What is the effect? Do the surfaces look shinier or less shiny than they did when `mat_shininess` was 64.0? Change it back to 64.0.

3. In the function `setLights()`, change the value of `light_specular` to $(1.0, 0.0, 0.0, 1.0)$ (red light). What is the effect? Rotate the scene so that you can observe specular reflections off each of the objects.

4. Use the program `Lecture 13 Demo 2.cpp`. In the function `setMaterials()`, change the value of `mat_emissive` from $(0.5, 0.0, 0.0, 1.0)$ to $(1.0, 0.0, 0.0, 1.0)$. What is the effect?

5. In the function `setMaterials()`, change the value of `mat_emissive` to $(1.0, 1.0, 1.0, 1.0)$. What is the effect? Is the effect desirable? Change it back to $(0.5, 0.0, 0.0, 1.0)$.

6. In the function `setMaterials()`, comment out the function call `glEnable(GL_COLOR_MATERIAL)`. What is the effect?