

## Exercise #4: Texture Mapping

Modify the 'TransformTest.java' file that you finished in Exercise 3 to create a 'TextureTest.java' file that provides the following additional features:

1. Add a "sky" background to the scene.
  - Create a rectangular "sky" with two opposite corners at (-11000,-11000, 0) and (11000, 11000, 0) respectively.
  - Paste the [hemi.gif](#) image onto the rectangle.
2. Replace the ColorCube with a textured cube
  - Make sure that the two opposite corners of the cube are at (-1,-1,-1) and (1, 1, 1) respectively.
  - Maintain the position of the cube in the scene as in Exercise 3.
  - Paste the six images [grass.jpg](#), [wall.jpg](#), [bricks.jpg](#), [roof.jpg](#), [bridge.jpg](#), and [courtyard\\_seamless.jpg](#) onto the front, back, right, left, top, and bottom sides of the cube respectively.
3. (Optional) Add another textured cube to the scene, and hide it.
  - Create a cube with two opposite corners at (-1,-1,-1) and (1, 1, 1) respectively.
  - Rotate the cube for 0.25 in radians around both its x- and y-axes, and places it five meters right behind the previous cube.
  - Paste the [earth.jpg](#) image onto the cube.