Cube Maps
A single image composed of six 2D images associated with cube faces:

Using CubeMaps: Skyboxes
- Surround the world with a cube map
- Position the camera inside the cube

Texture Cube Maps (simple approach)
1. Load cube map image into texture,
2. Draw cube and texture it using the coordinates shown,
3. Position cube with camera at its center,
4. Disable depth testing, and render it first.

OpenGL support for cube maps
- A single texture object with six 2D faces
- Texture coords \((s,t,r) = \) vector from the cube center

using OpenGL cubemaps makes "environment mapping" easier
Environment Mapping

- Useful technique for rendering “mirror” objects
- Create texture cube map describing the “environment”
- Shade object points by following “reflection” of eye vector (to surface normal) into the map

“Shiny” Object

“Environment”

“Eye”

Point to be shaded

Text used for shade

“Environment Map”