1. Magnification is when a texel is larger than one pixel, so a direct mapping cannot be done, as the texture is too large to paste onto the pixel. Attempting to paste the texel onto the pixel would result in loss of part of the texel. Minification is when a texel is smaller than a pixel. In this case, the texture is too small to paste onto one pixel. Attempting to paste the texel onto the pixel will result in blank space. Both of these can be solved easiest by using the nearest point sampling. Antialiasing would have to be performed as well to clear the image up.
2. Mip Mapping is a way of dealing with minification. It allows us to create a series of texture arrays at reduced sizes, and then uses the size texture on the pyramid of textures that is closest to the size of the pixel. Each successive mipmap texture halves the resolution. It is used because it is better at preventing aliasing artifacts and makes it look more realistic.
3. An environment map is a way to approximate the shading of a reflective surface. It essentially places the camera at the location of the surface and views toward the normal to match the shade of what it sees. It isn’t perfect, but it is normally a good enough approximation. This beats ray tracing, which is just too computationally expensive, despite it being the most accurate. This can be useful for when shading a shiny or reflective material like a mirror.