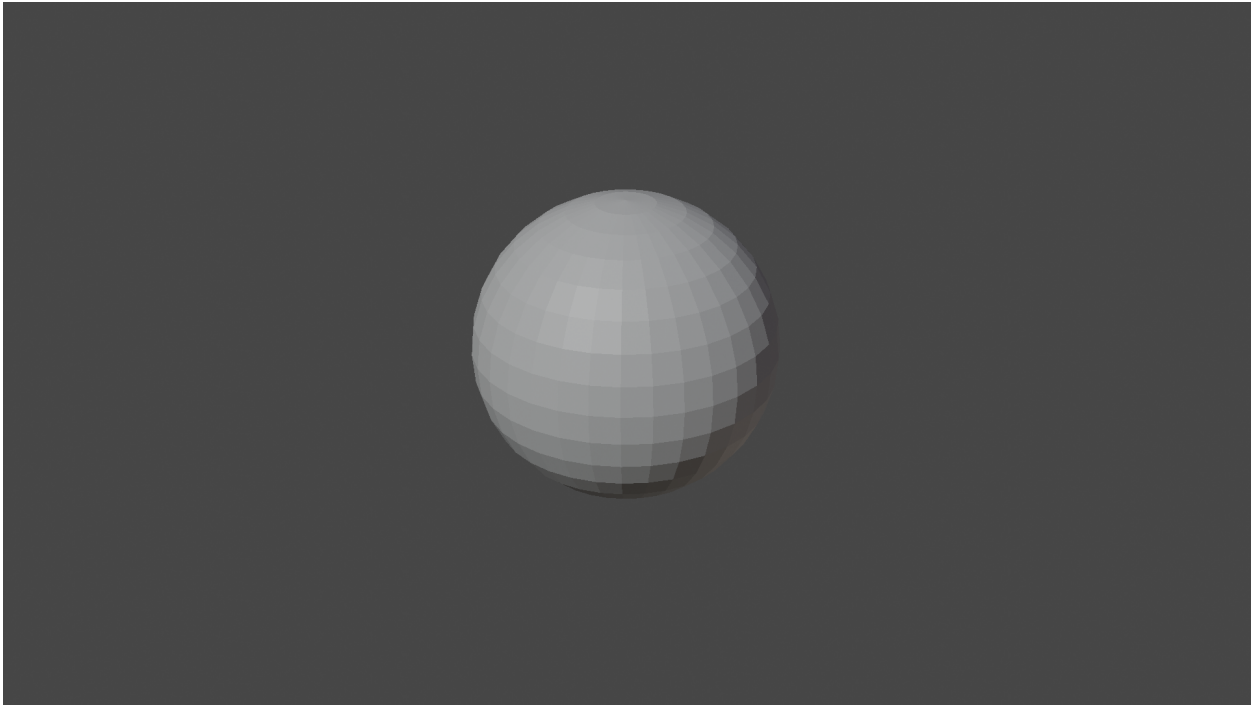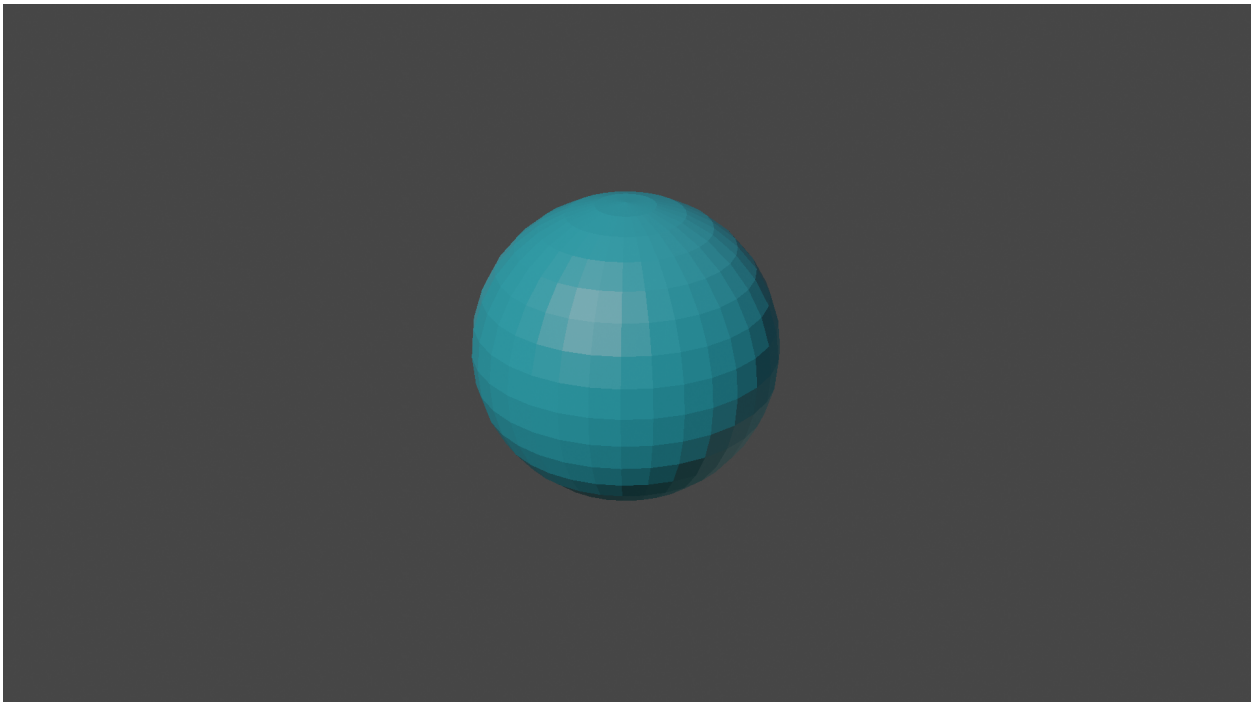## Checkpoint 1: Default Sphere
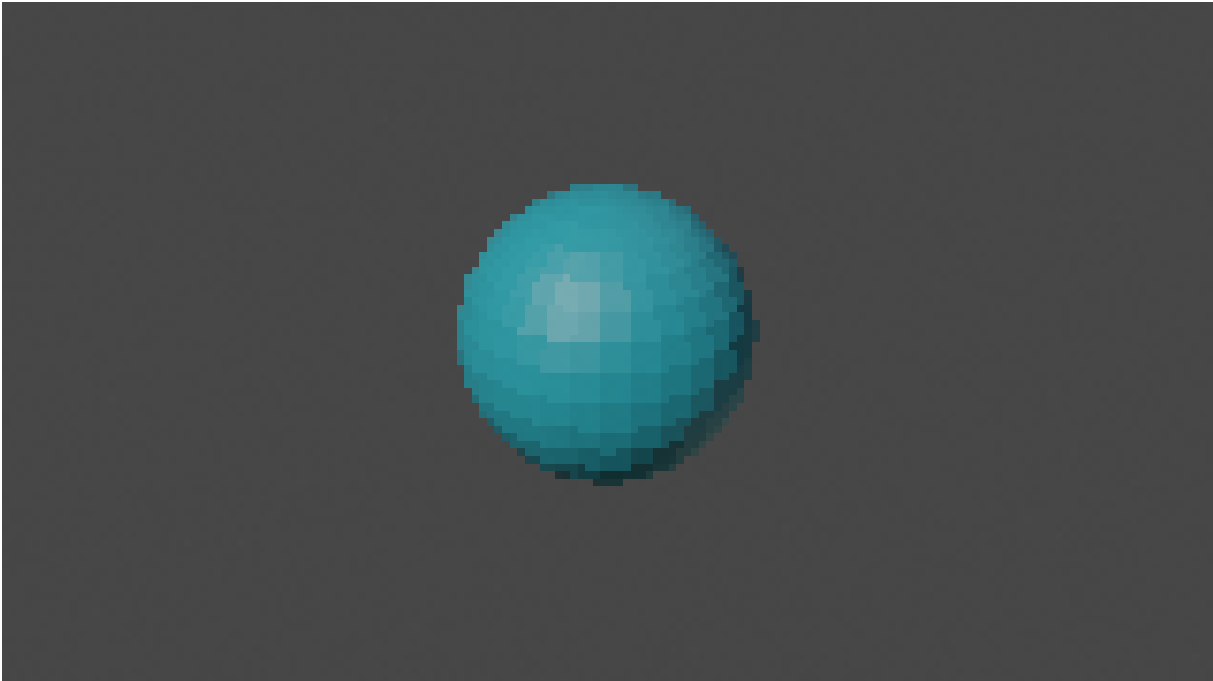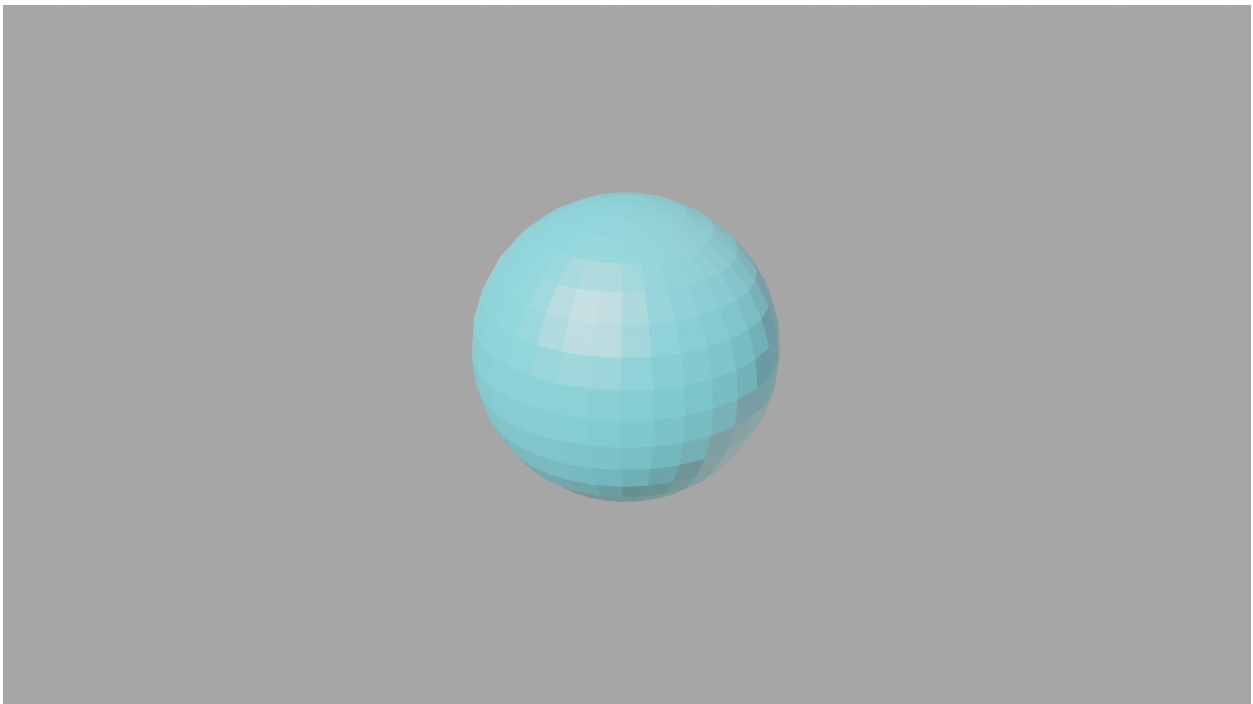

Checkpoint 2: Blue Sphere

Checkpoint 3: Low Resolution

Checkpoint 4: The image in Checkpoint 3 is much more blurry than the image in Checkpoint 2 because the resolution was significantly decreased for the image in Checkpoint 2

Checkpoint 5: Changing Gamma

Checkpoint 6: The image in Checkpoint 5 is much lighter than in Checkpoint 2, since decreasing the gamma value makes shadows look brighter with a more washed out image.

1. When light interacts with different objects, it can either be transmitted, reflected, absorbed, refracted, polarized, diffracted, or scattered. An example of light being reflected is when it interacts with water, an example of light refraction is when you see a rainbow, and an example of light being polarized is sunglasses.
2. Objects appear to have different colors to our eyes because some objects reflect more of a certain wavelength of light than others.
3. An advantage of using YUV color space is that humans' eye is less sensitive to changes in hue than changes in brightness.
4. Adding colors for lights is opposite to adding colors for paint. Adding more colors to a mix will darken the color in paint, but it will brighten the color in light. R+G+B is equal to black in paint, but it is equal to white in light.
5. Green screens are green because green is one of the furthest colors from human skin tones, so it prevents your skin from blending into the background.
6. Tone mapping is needed for HDR images because it best presents HDR images by allowing you to adjust color and luminance, thus giving them a realistic look.
7. Light is made up of different wavelengths of light, so different colors have different wavelengths. Light with the longest wavelength (700 nm) appears red, and light with the shortest wavelength (400 nm) appears purple.