

This effect is called subsurface scattering. This effect allows for a realistic depiction of how a translucent object would react to lighting. This effect works by reflecting a small amount of specular light and the rest of the light is absorbed into the surface of the material. Once the light is 'inside' its original angle at which it came from changes by 'scattering' within the material and exiting at various angles to give the illusion of a translucent object reacting to lighting. The specific example I am using is from the video game, Red Dead Redemption 2. I like that the effect makes the world of this game so much more real and immersive. For example, the effect changes the texture of the characters' cartilage depending on the camera angle and lighting. If the sun is out and the player moves the camera to face the sun, the light will shine through translucent cartilage like the ears or nose. If the camera is facing forward, this effect isn't as apparent. Similarly, when it gets dark, this effect is absent regardless of the camera's position. This effect extends to every NPC as well, making the game feel more real as a result of every character reacting to the day/night cycles. From what I understand, to implement this effect, I would need to first have a shade that reflects a small amount of light back to the source and then a script that calculates the angles at which the light is scattered inside the material, then another shade to shine that diffused light through the object so it comes out from the back of it.