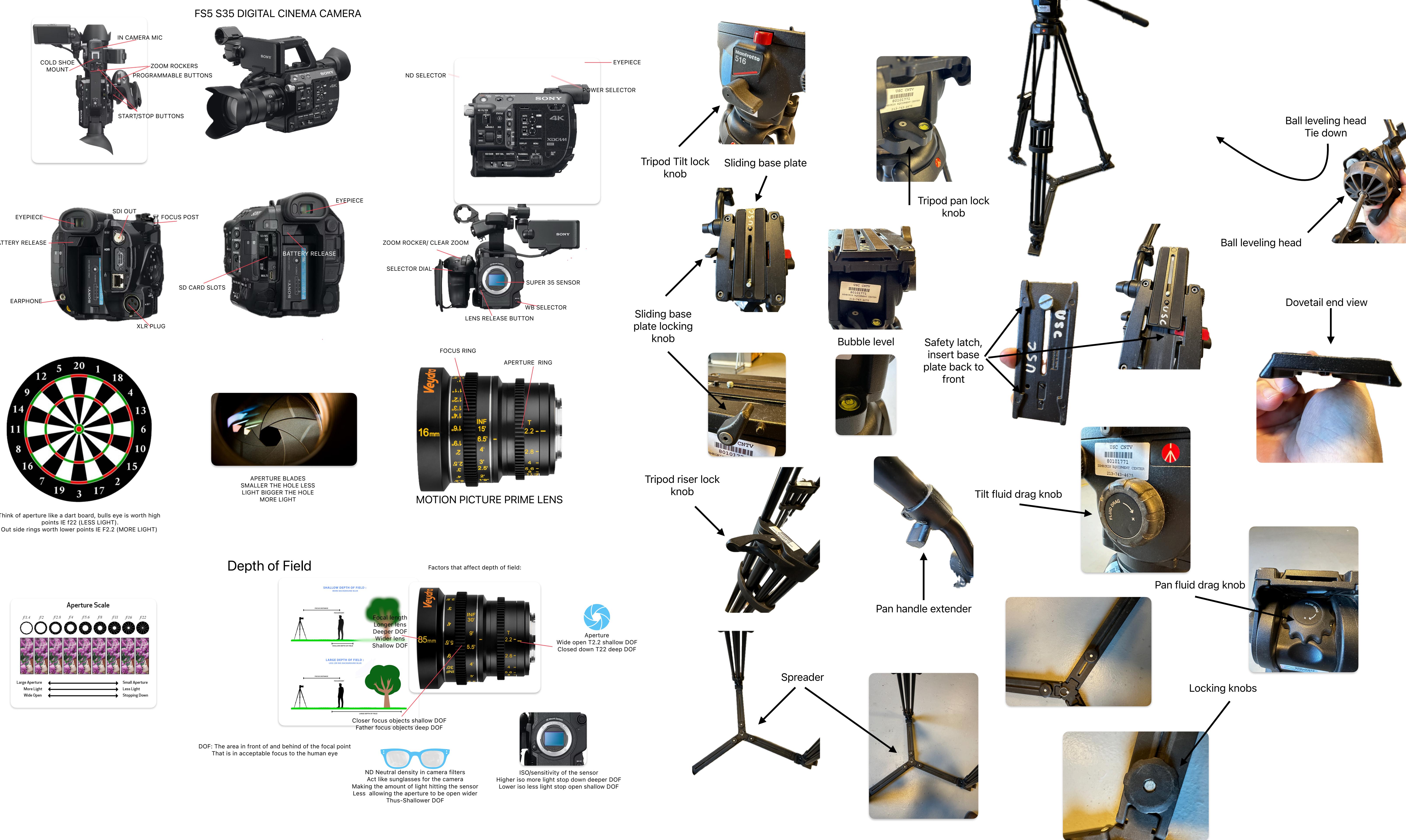


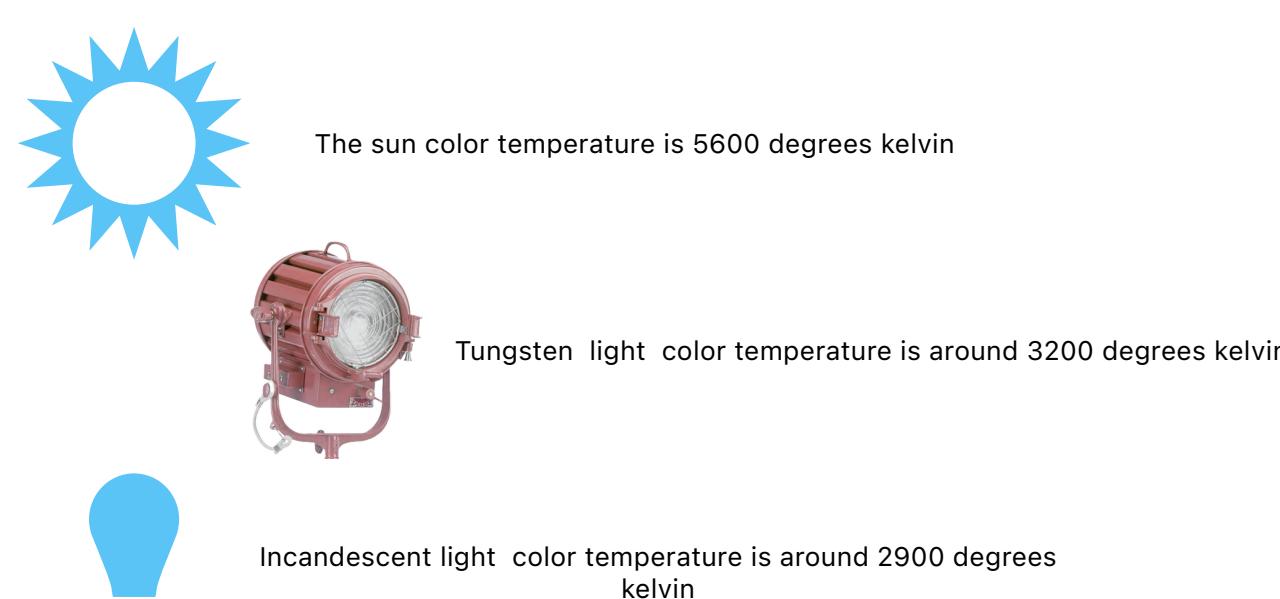


327 Motion Picture camera

Tripod



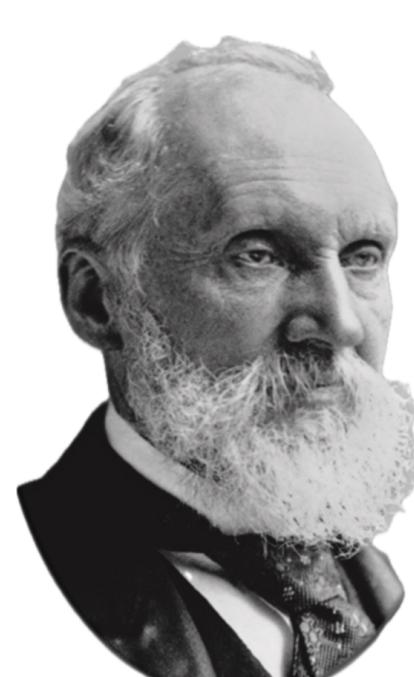
Color temp examples



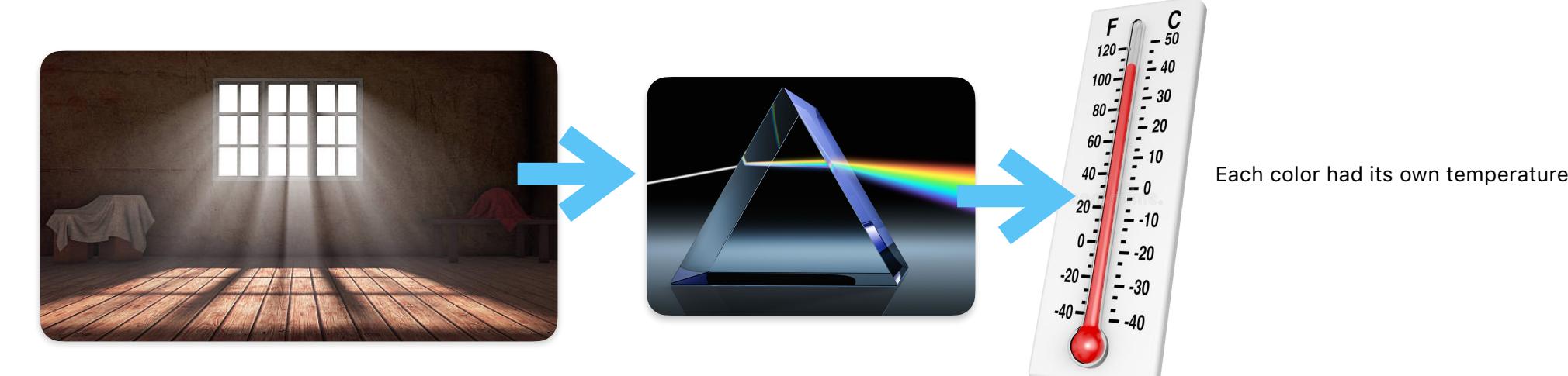
White balance



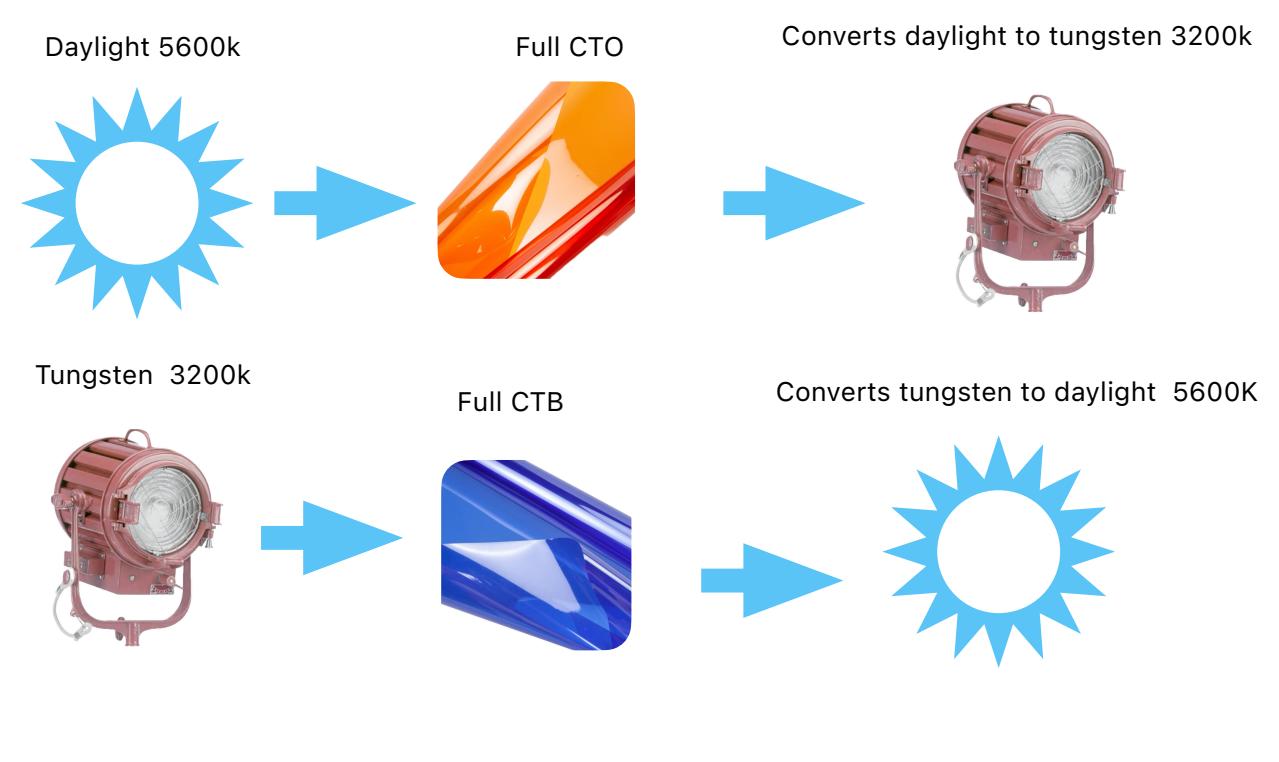
Why do we call color temperature Kelvin?



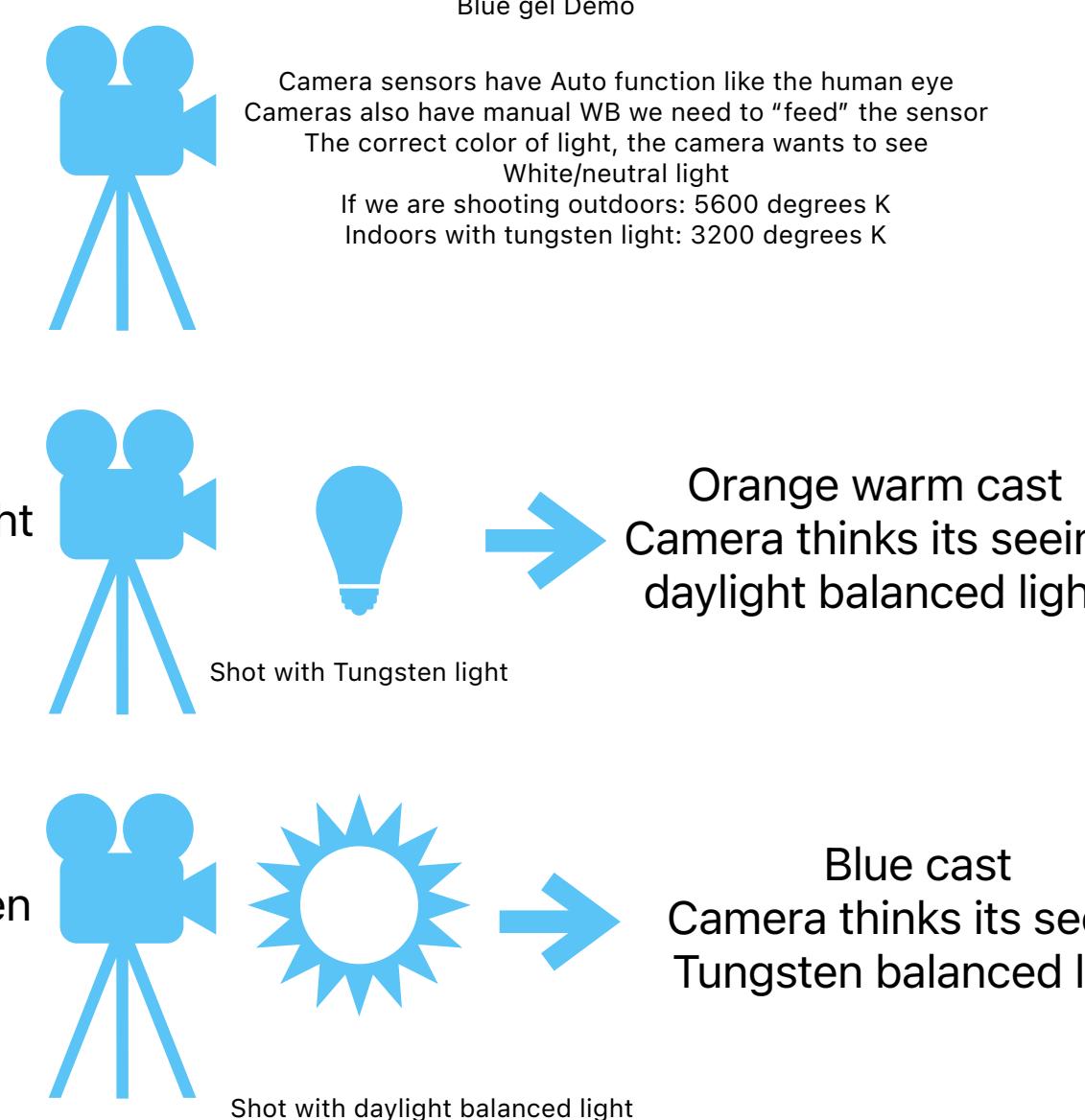
Lord Kelvin's theory



Color temp conversions



WB set to daylight



Scottish-Irish physicist William Thomson, better known as Lord Kelvin, was one of the most eminent scientists of the 19th century and is best known today for inventing the international system of absolute temperature that bears his name. The color of light is defined by a [temperature] scale developed by William Thomson, a British mathematician and physicist. Thomson's work extended the thermometric scales defining the correct value of absolute zero at -273.15 degrees Celsius. For this and many other accomplishments, Thomson was knighted and also became the 1st Baron Kelvin, a title that comes from the River Kelvin that flowed past his laboratory at the University of Glasgow. Absolute temperatures are an integral part of the science of thermodynamics. In 1931 International Commission on Illumination (CIE) developed what we now commonly refer to as the RGB (red, blue, and green tristimulus values) and XY color space, still widely used today. When we superimpose the black body curve onto this color space, we can see the various colors of "white" light that correspond to the relative amounts of red, blue, and green light in the source. The diagram is the graph of the human eye's ability to see the visible light spectrum. The simple explanation of the black body curve is based on heating a piece of iron. As the temperature increases, the iron becomes red, then red, orange, yellow, white, and eventually blue-white. In fact, the color of light is a color of body heat. If it were, we would be able to tell the color temperature of a person by looking at their skin. The color temperature scale is a correlated number based upon what the color of iron would look when heated. Stars range from 800K to 12,200K and we know that the color of daylight changes over the course of a day from the warm colors of sunrise to noon to the evening sunset. The color the human visual system perceives as white light is not constant.

The "Black body Curve"

