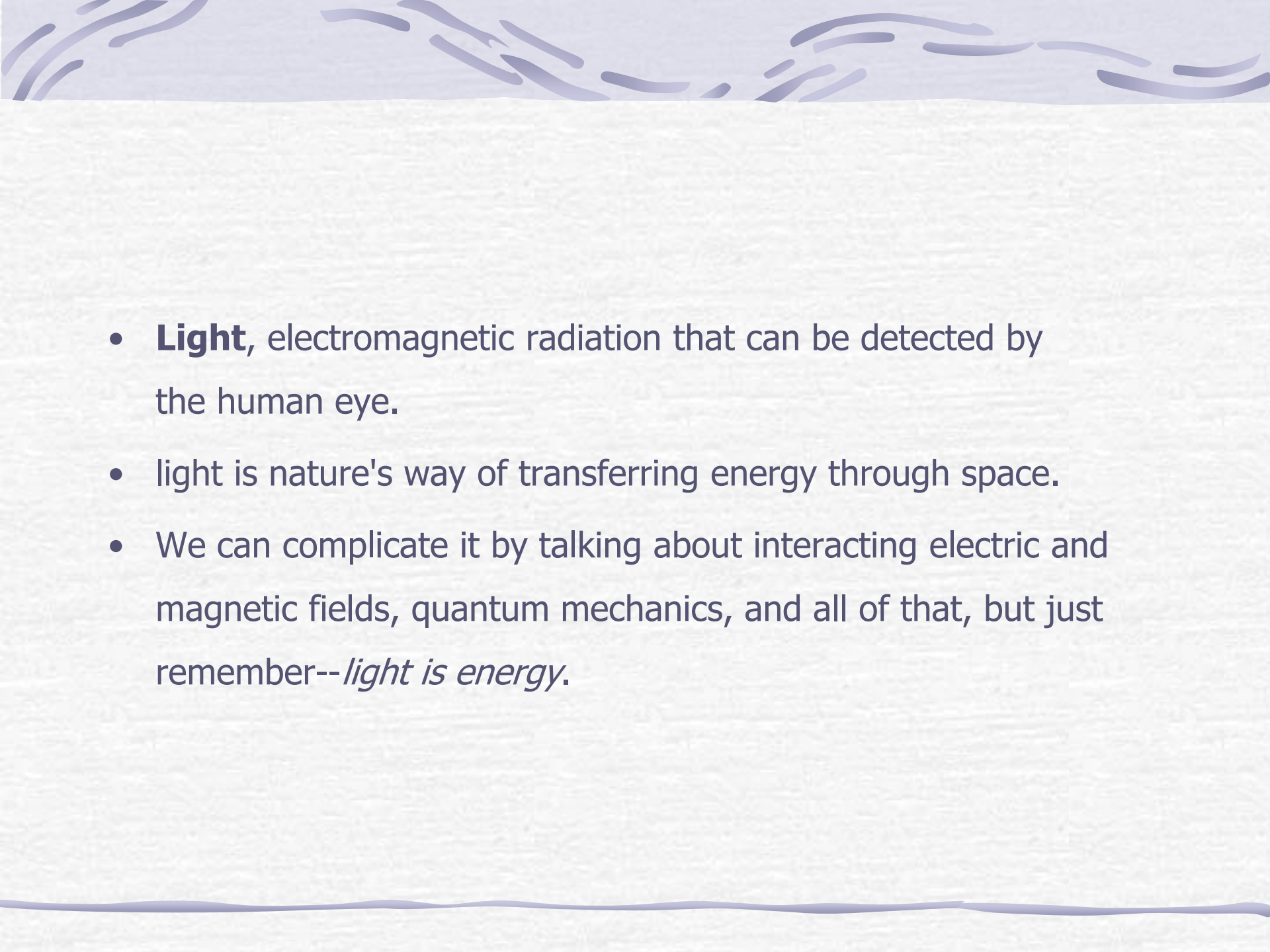




Maya Lights

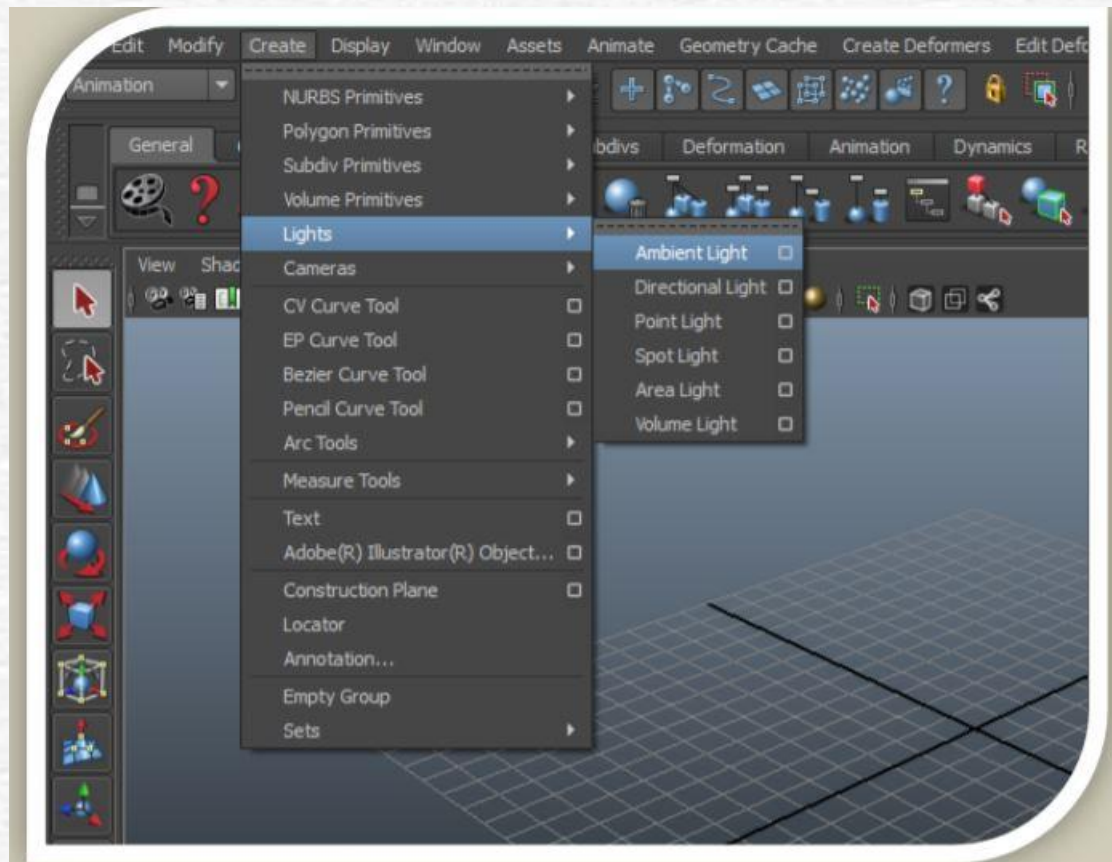
SUDHEESHA P S

- 
- **Light**, electromagnetic radiation that can be detected by the human eye.
 - light is nature's way of transferring energy through space.
 - We can complicate it by talking about interacting electric and magnetic fields, quantum mechanics, and all of that, but just remember--*light is energy*.

SIX TYPES OF LIGHT SOURCES

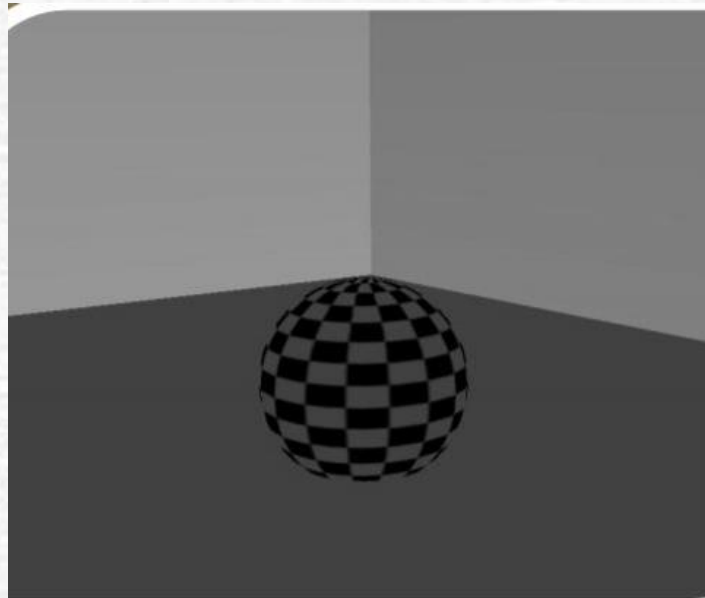
- Ambient
- Directional
- Point
- Spot
- Area
- Volume

- **CREATING A NEW LIGHT**



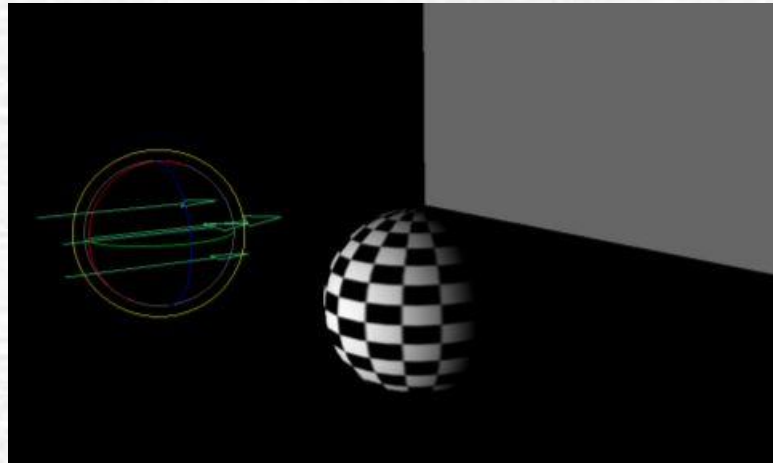
Ambient

- Brightens all parts of the scene uniformly
- Useful for: Simulating a combination of direct and indirect lighting



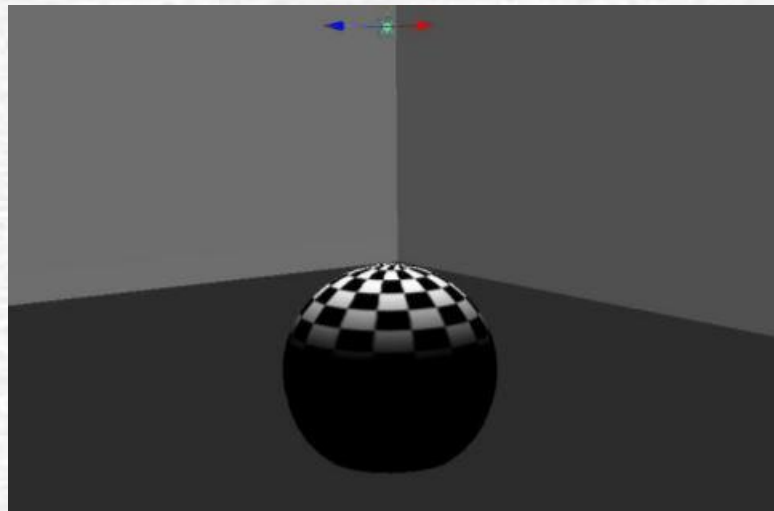
Directional

- Even illumination of a scene using parallel rays of light
- Useful for: Extremely far away sources
- Ex. Sunlight



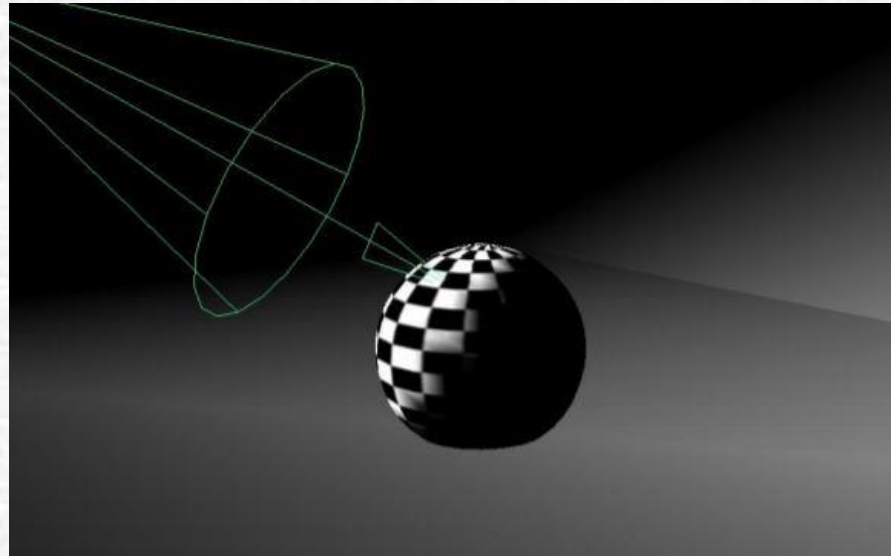
Point

- Light radiates in all directions from a single point
- Ideal for: Omni-directional sources
- Ex. Lightbulb




Spot

- Creates a cone of light in one direction
- Useful for: Beams of light
- Ex. Flashlight, Lighthouse



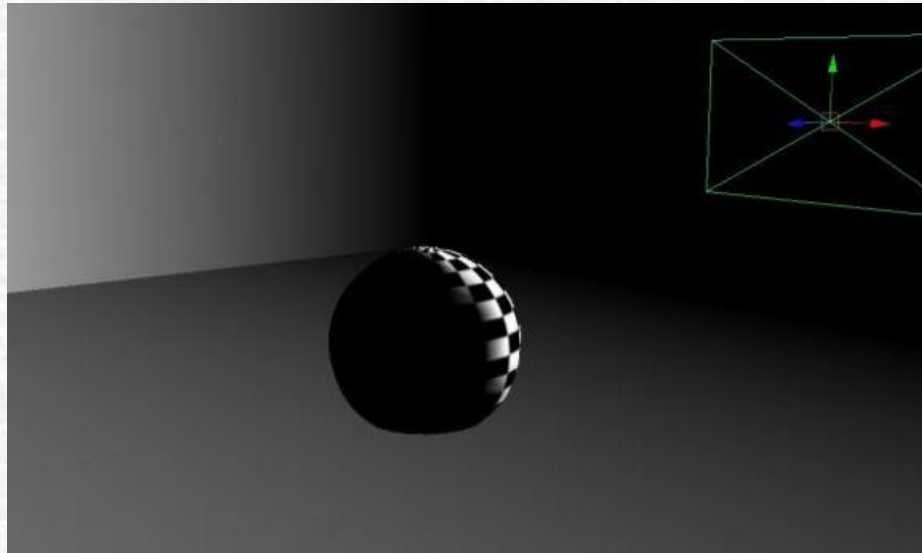


➤ **Spotlight On stage**

- ❑ A spotlight (or followspot) is a powerful stage lighting instrument which projects a bright beam of light onto a performance space.
 - ❑ Spotlights are controlled by a spotlight operator who tracks actors around the stage.
- 

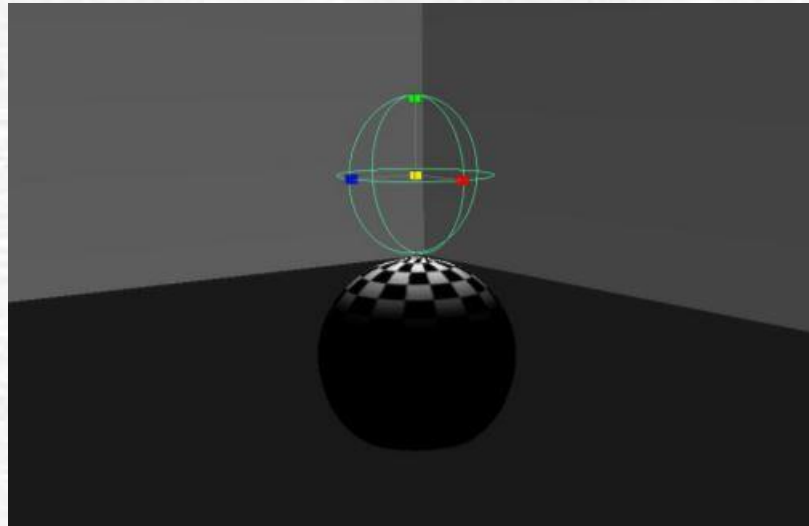
Area

- 2D rectangular light sources
- Useful for: Windows, Ceiling Lights
- Longer render time

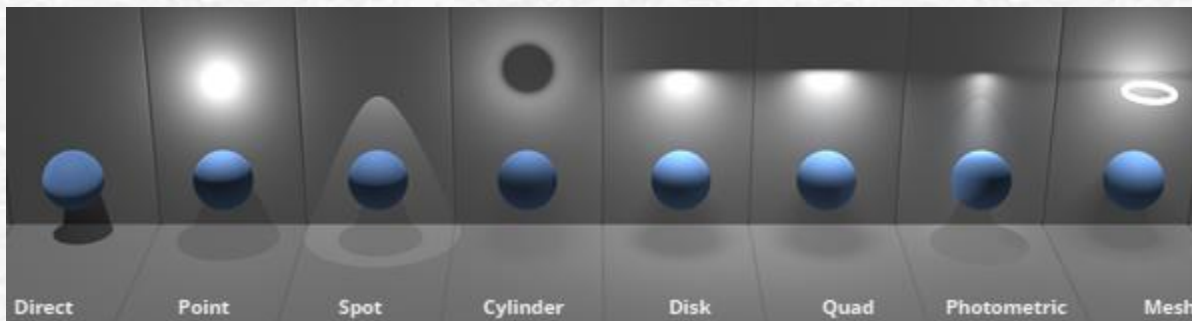


Volume

- Light fills a 3D shape (sphere, cylinder, etc.)
- Useful for: A visual representation of the extent of the light



Arnold Lights

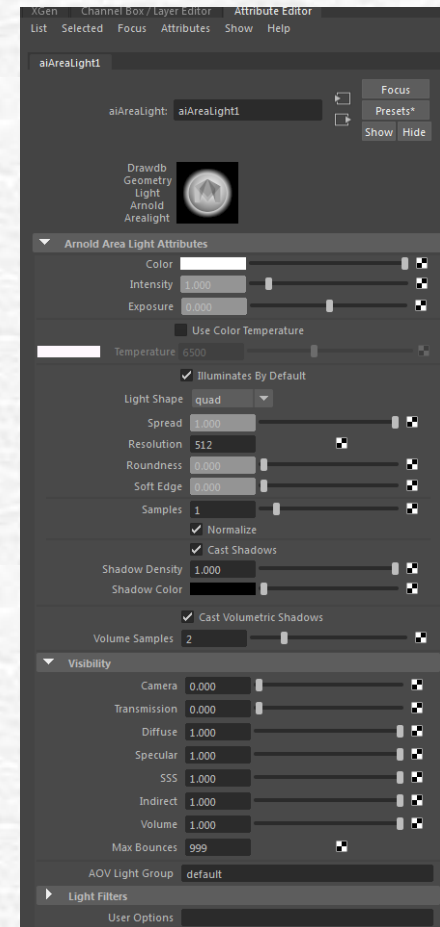


You can use standard Maya lights when rendering with MtoA. If you select a light and then inspect the *Maya Attribute Editor*, as well as the regular light attributes, you will also see a new group of Arnold attributes for the light, which is where any additional settings used by Arnold can be accessed.

The *Maya Ambient* light and *Volume* light are not supported by MtoA.

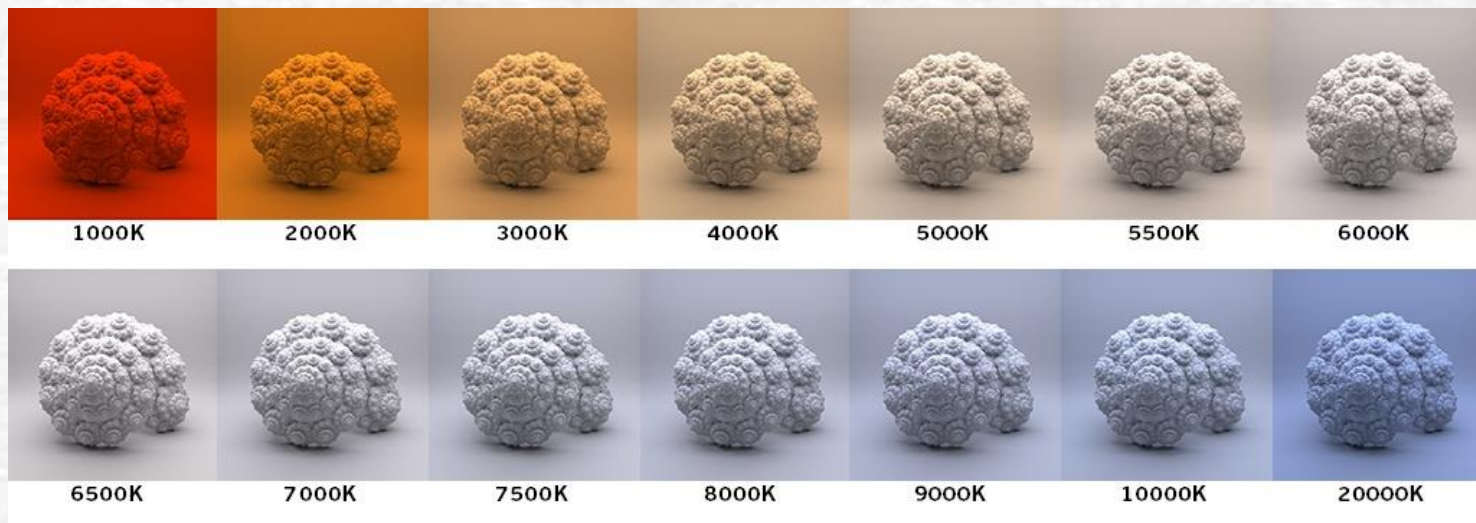
Common Light Attributes

- As well as honoring the standard Maya light attributes, the *Attribute Editor* will also show the following attributes under the Arnold group:



Use Color Temperature

- The temperature of an ideal black-body radiator, in kelvin units, that is used to determine the color for a light source. The default color is set to 6500 K, which is considered as the white point by the Commission Internationale de l'Eclairage (CIE). The color ranges from red, through to white and then to blue. Values above 6500 K will give a cool color, whilst values below will show a warm color.



Cast Shadows

- Enables the computation of shadows cast from the light.



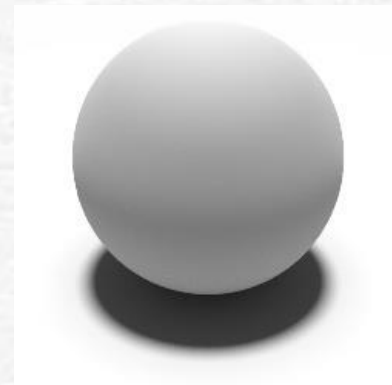
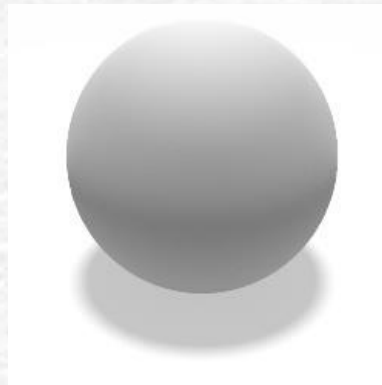
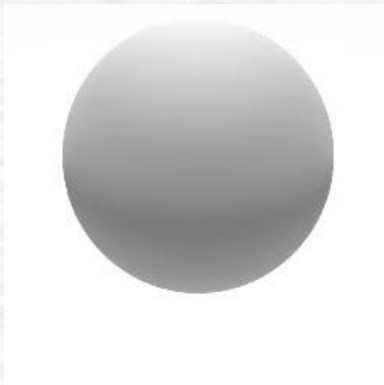
Enabled
(default)



Disabled

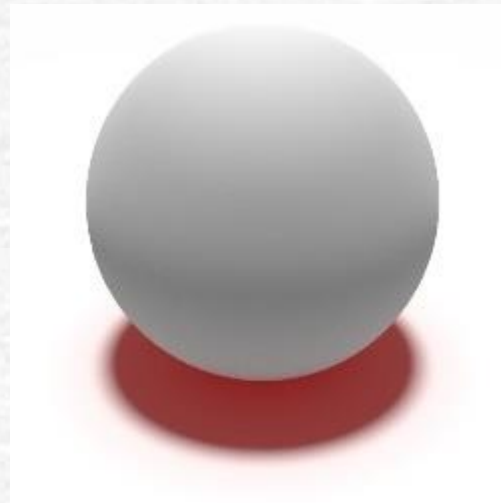
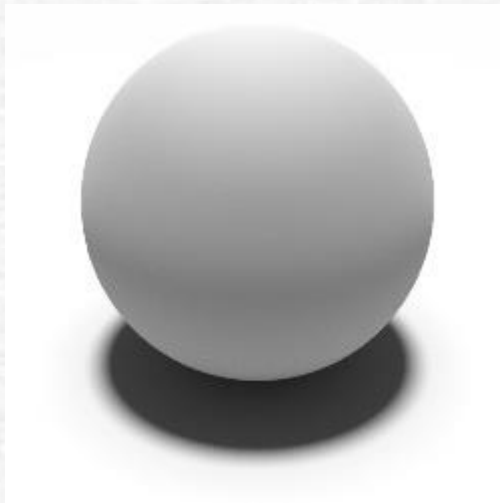
Shadow Density

- Sets the shadow density, or strength. This controls how the shadow blends with the material on which the shadow is cast: a value of 1.0 produces an opaque, black shadow, and a value of 0.0 gives no shadow. Normally this would be 1.0.



Shadow Color

- Sets the intensity of each color channel for shadows. Normally this would be black.





THANK YOU