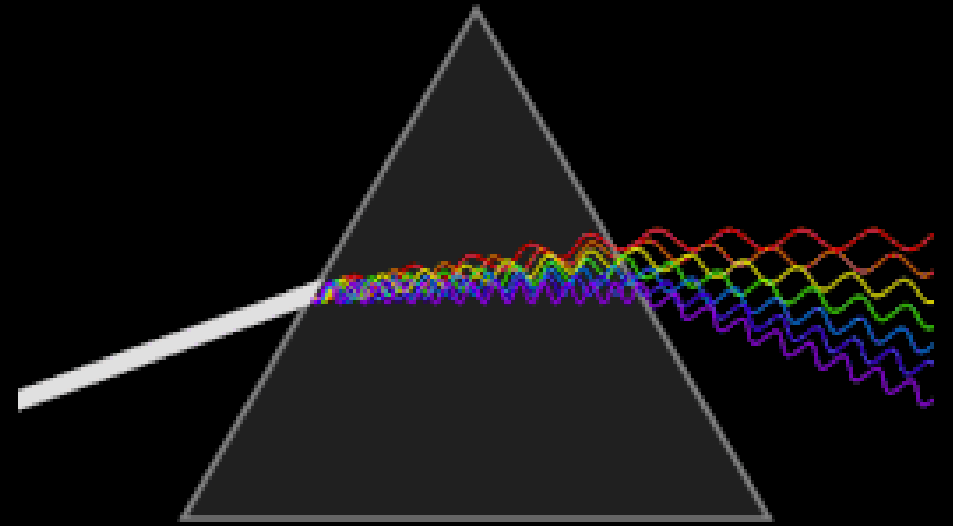


# Understanding The Light

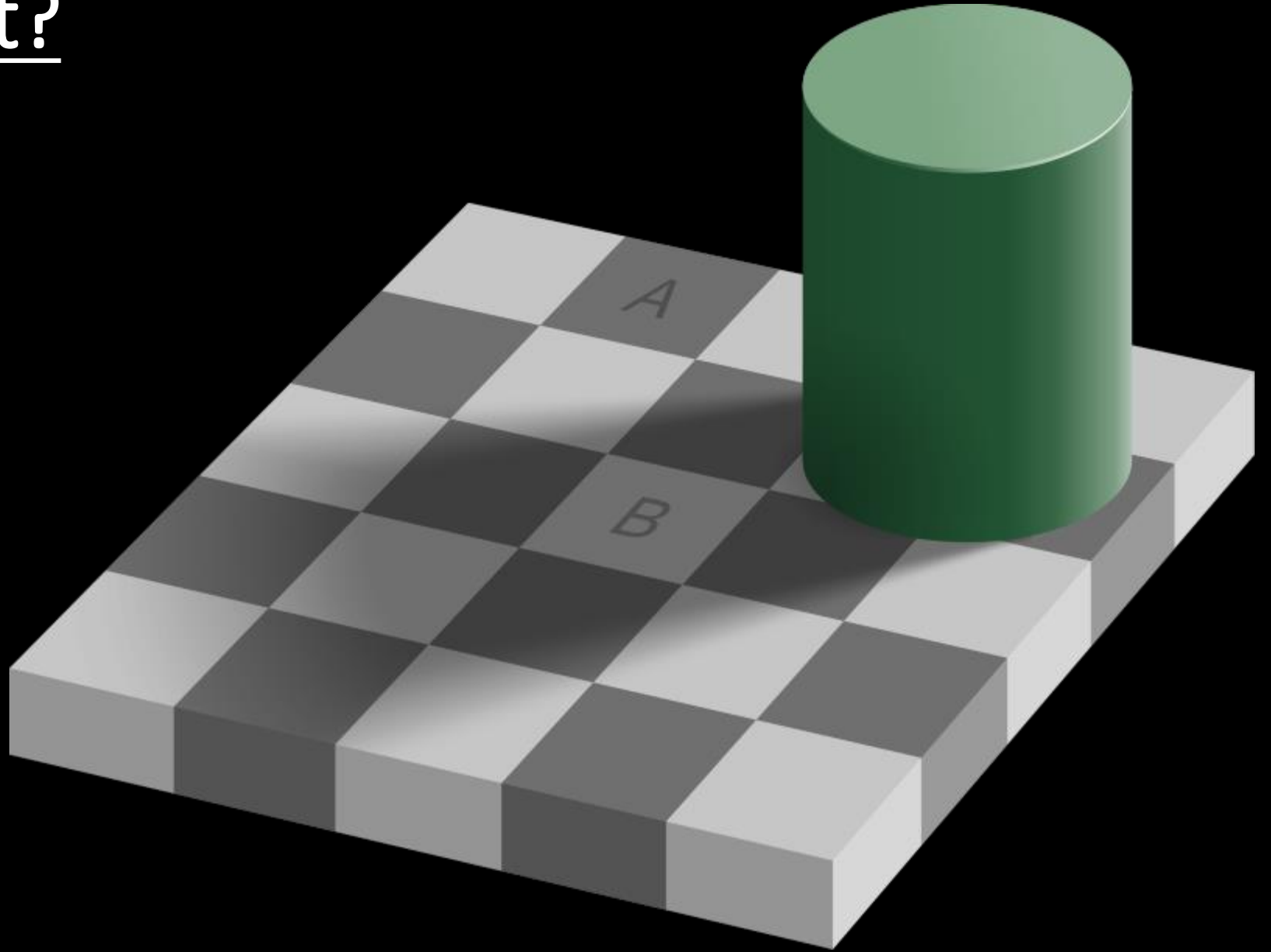
---

# What is Light?

- Something that makes vision possible.
- The sensation aroused by stimulation of the visual receptors.
- Electromagnetic radiation of any wavelength that travels in a vacuum with a speed of 299,792,458 meters (about 186,000 miles) per second.



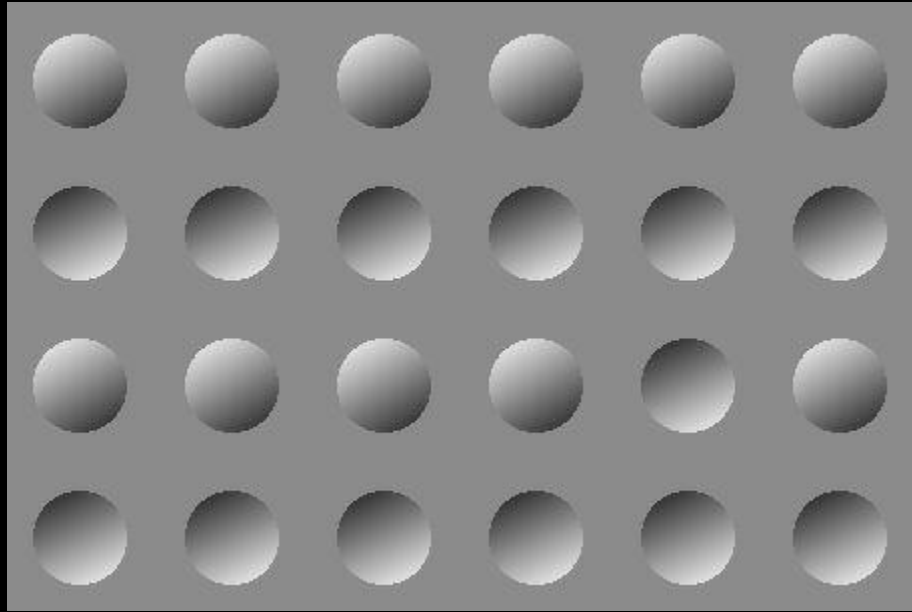
# What is Light?



# Elements of Light

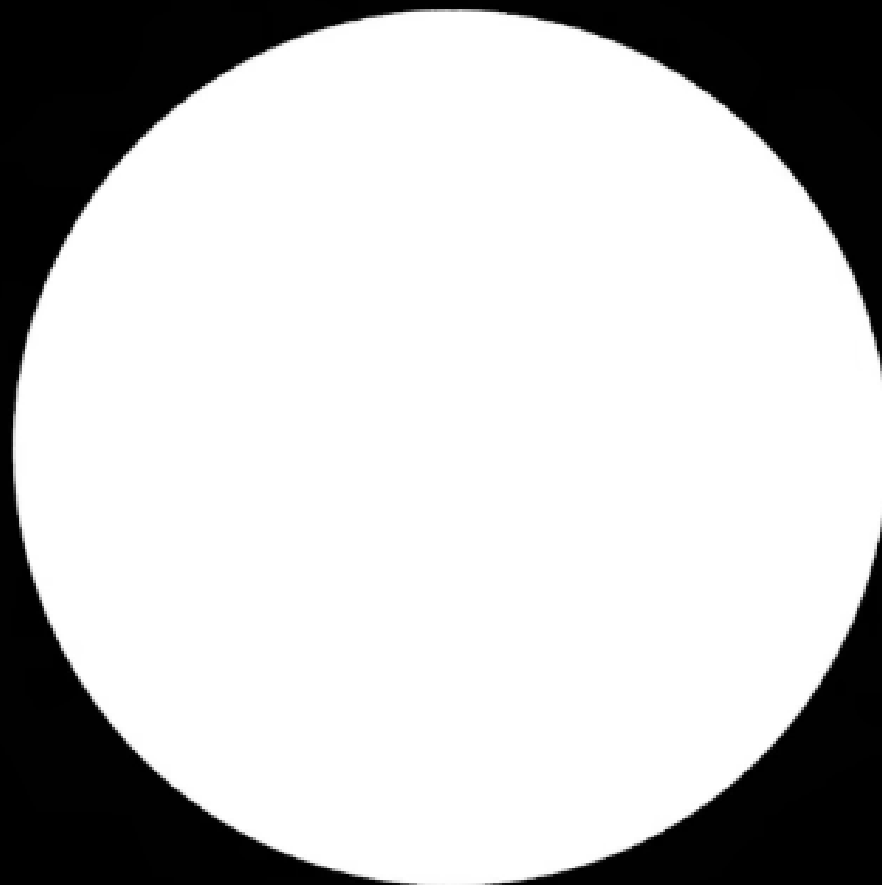
- Direction
- Size
- Color
- Readability
- Emphasis

# Direction



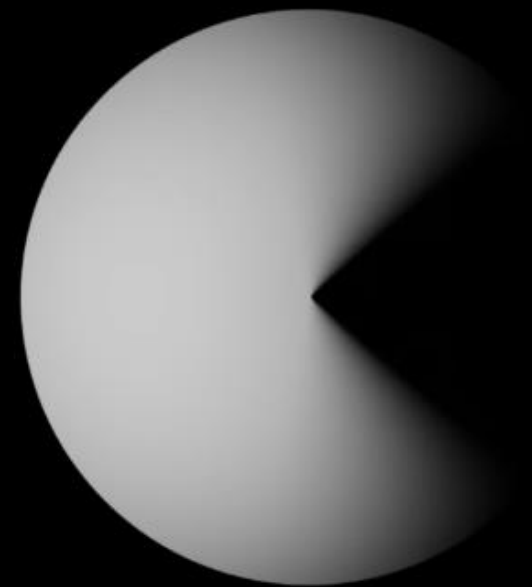
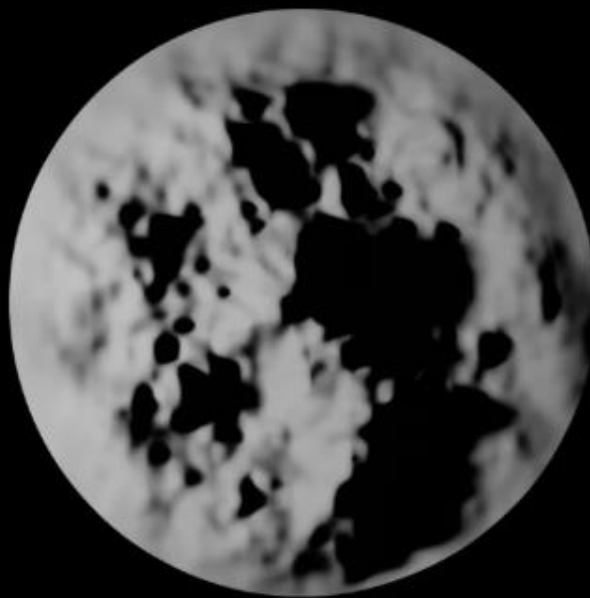
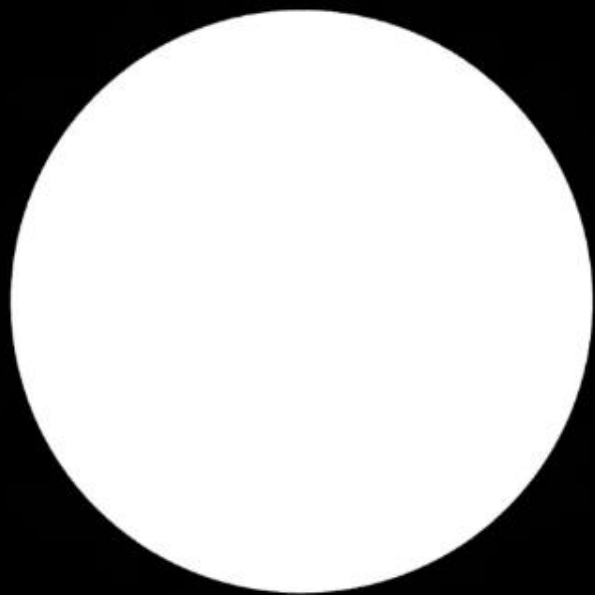
Why some shapes are bumpy some of them are cavities?

# Direction

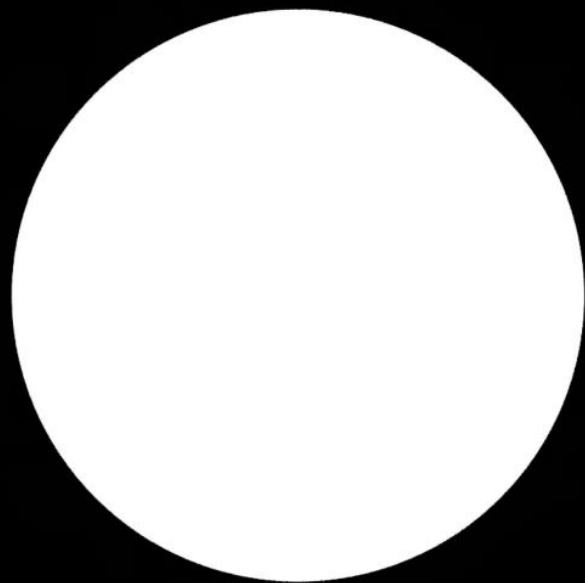


What is this Shape?

# Direction



# Direction



Direction creates **shadow**, shadow reveals **form**.



# Direction

Flat

Front:



Top:



Flatten volume, emphasize color.

# Direction

Paramount /  
Butterfly

Front:



Top:



Neutral, flattering facial traits.

# Direction

Overhead

Front:



Top:



Unflattering, sinister.

# Direction

## Silhouette

Front:



Top:



Emphasizes silhouette, **mysterious**.

# Direction

Split

Front:



Top:



Mysterious.

# Direction

Underside

Front:



Top:



Unnatural, creepy.

# Direction

Rembrandt

Front:

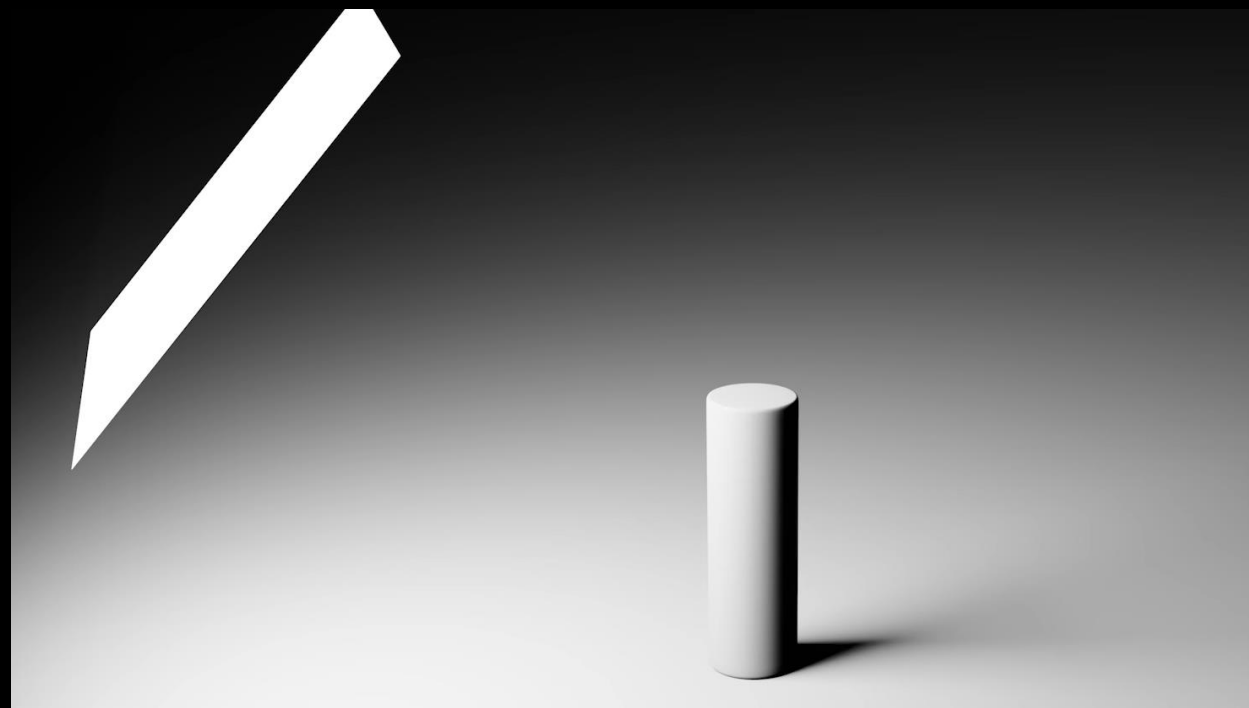
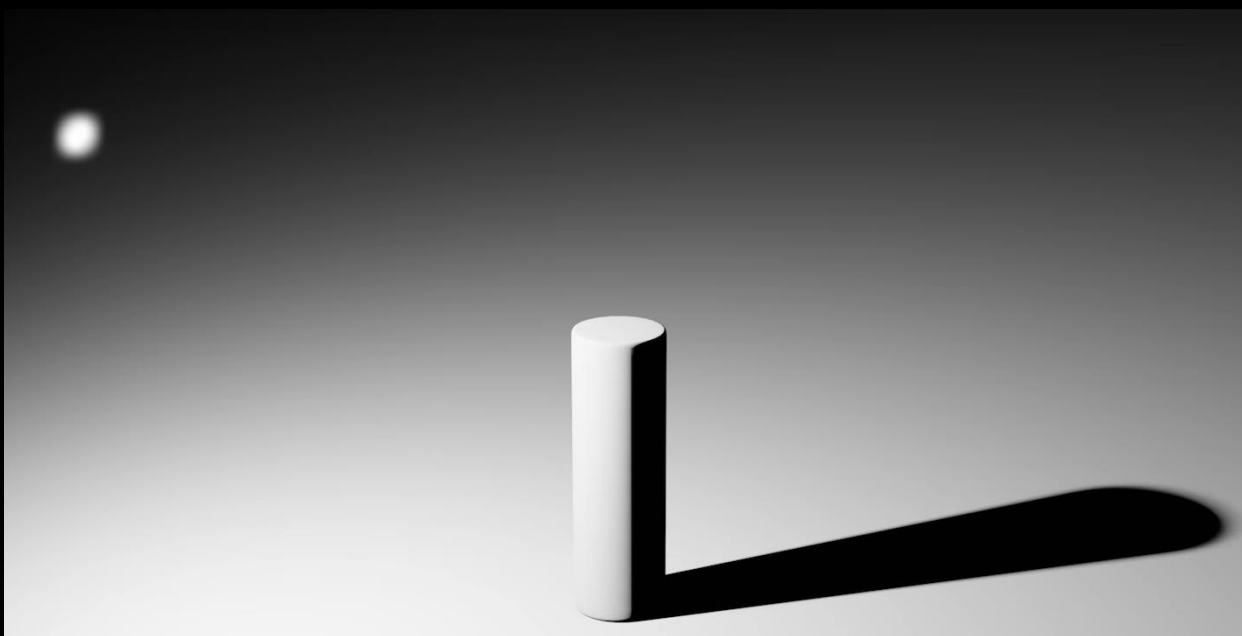


Top:



Neutral, shows accurate form.

# Size



Small light creates sharp shadow, big light creates smooth shadow



# Size



Big light **hides** details.



Small light **shows details** more.

Size



# Size



Lil Puppy Rex (2018) - Damien Guimoneau  
Used with permission.

Which light size should be used?



# Size



Noon vs Golden hour

# Size

## Beauty

## Form

## Fine Details



**Small:**



**Large:**





# Color

Natural: Kelvin



Signals **temperature**

Artificial: Full spectrum



Signals **location** or **symbolism**

# Color/Natural

## Natural Kelvin Blackbody Scale



# Color/Natural

Daytime

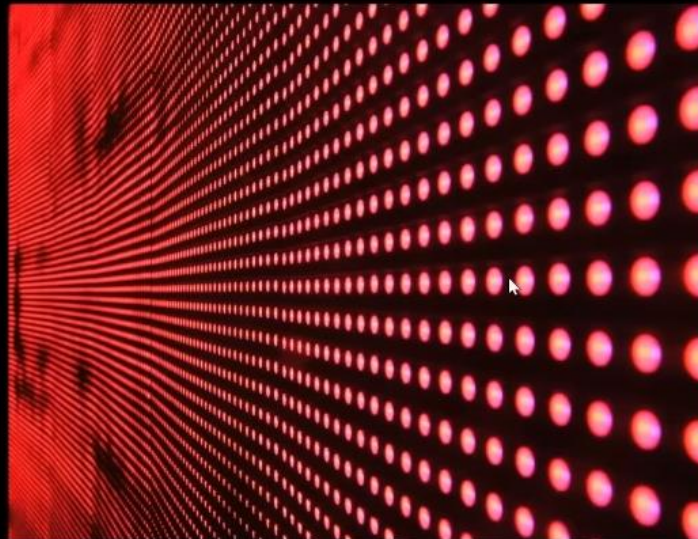


The "Blue Hour"





# Color/Artificial



# Color/Artificial



Location

# Color/Artificial



Only God Forgives (2013)



Spring Breakers (2012)



Only God Forgives (2013)

Story or symbolism



# Color/Artificial

Neutral



White



Hot/Cold



Kelvin Colors



Location or symbolism



Vibrant Kelvin + Green, Purple & Pink

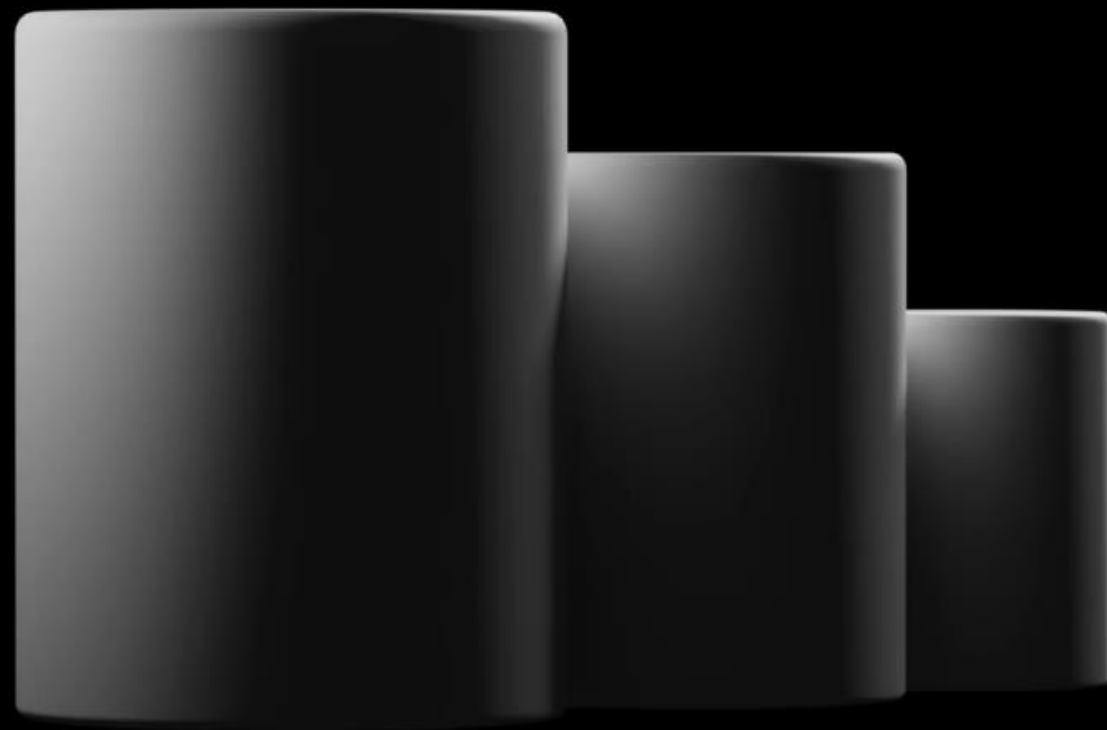


# Readability



Adequate Lighting

# Readability



Object Separation/Rim lighting



# Readability



Object Separation/Rim lighting

# Readability



Overused Rim Light vs Natural



# Readability



Readable thanks to color difference / No need for rimlight.

# Readability

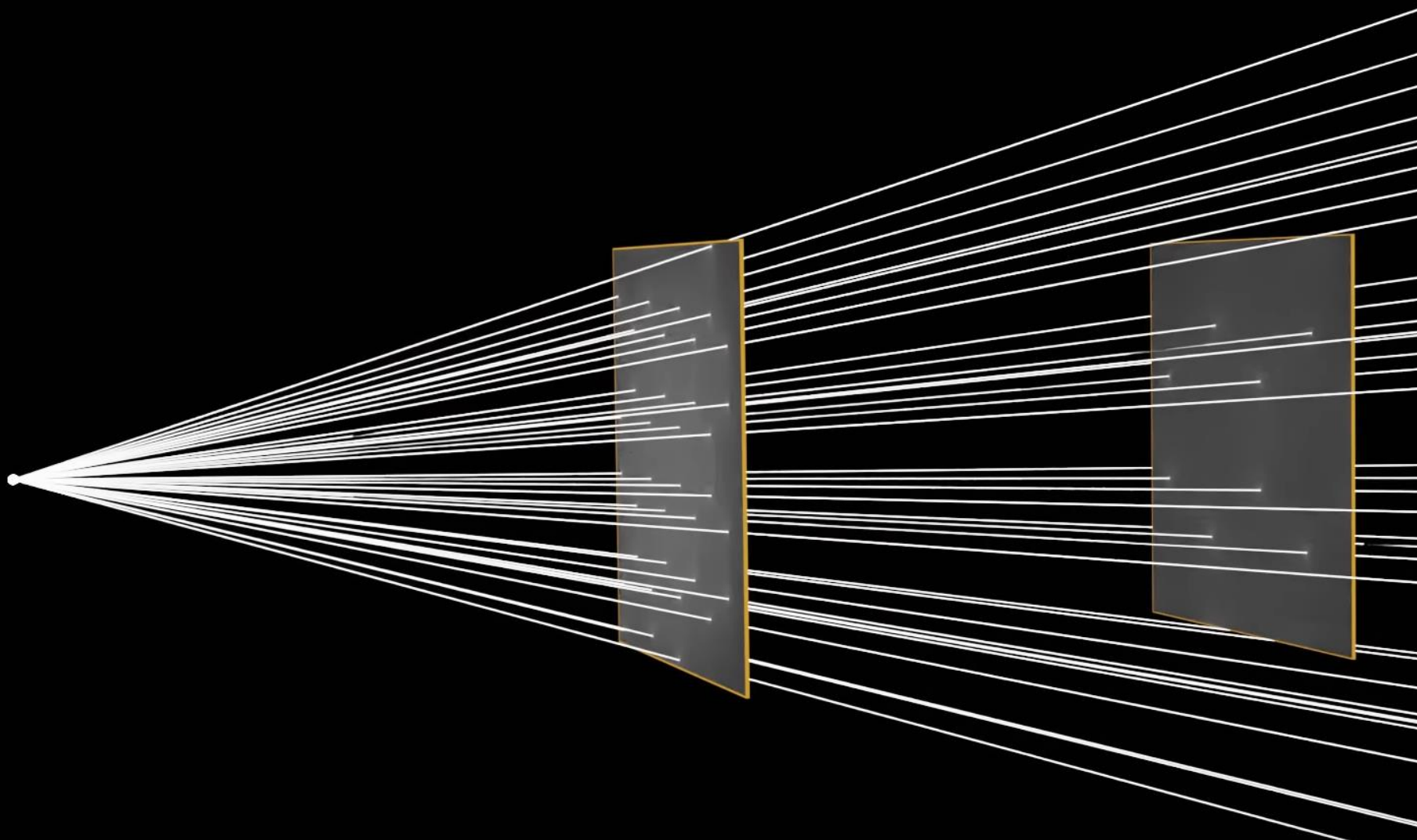


Less readable, more natural



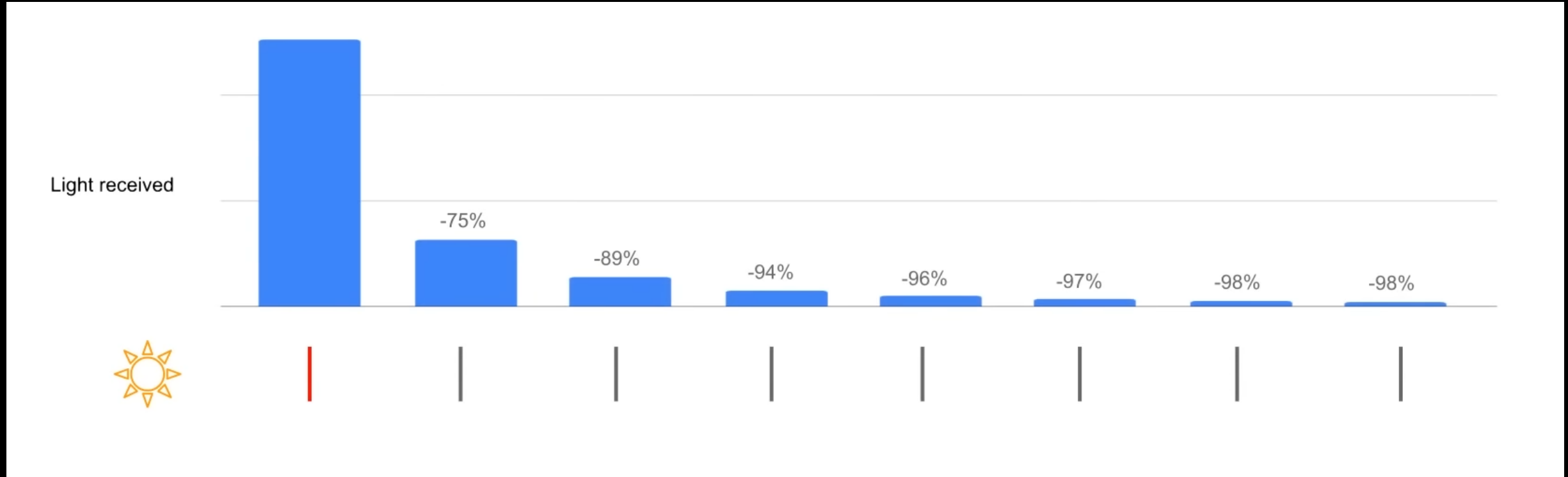
More readable, less natural

# Emphasis



Double the distance 75% less light

# Emphasis



Further from light source, less fall off.

# Emphasis

↖ 120m



Equal light amount



Emphasis on face

# Emphasis



Image courtesy of Quixel



# Emphasis



# Emphasis





# Thank you for listening.

Source: [https: Blender Guru/Lighting Course](https://www.youtube.com/watch?v=BlenderGuruLightingCourse)  
[youtube.com/playlist?list=PLjEaoINr3zgH9vCr47kSS5W8PEJBNliwK](https://www.youtube.com/playlist?list=PLjEaoINr3zgH9vCr47kSS5W8PEJBNliwK)