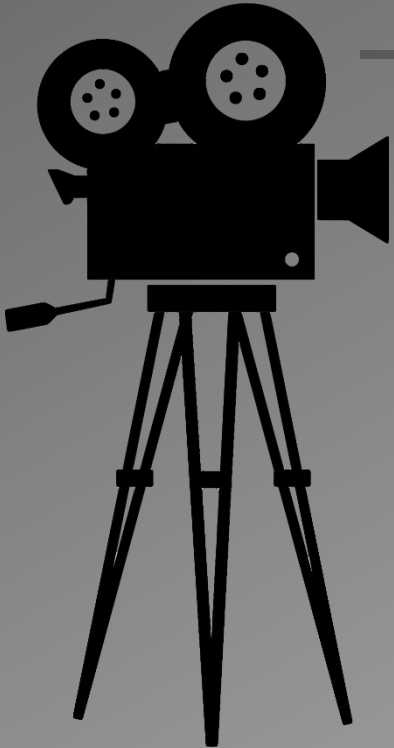


# Diploma in Video

## – Part 3

### Lesson 2

## Apertures and lenses



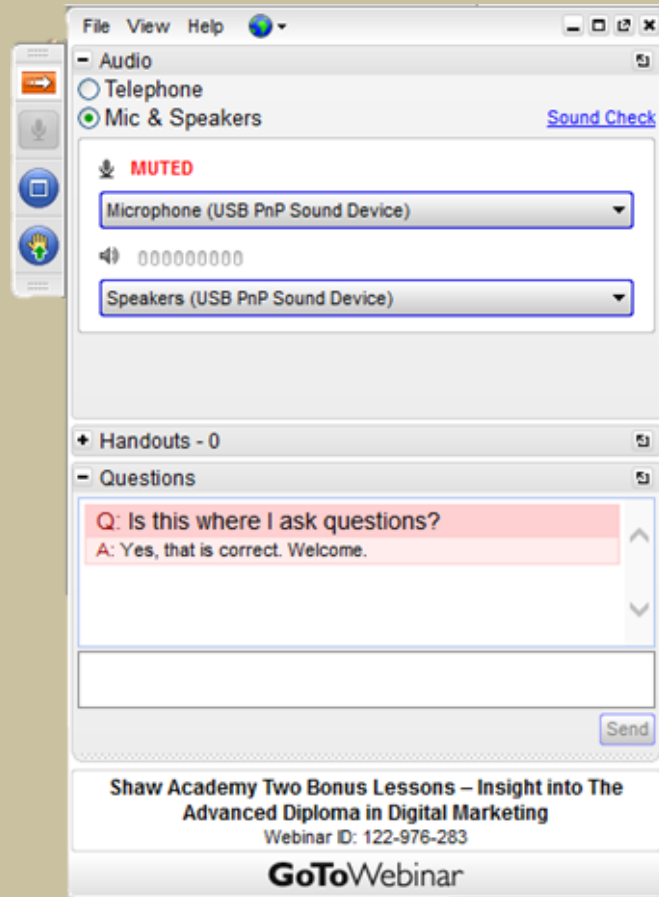
Presented by:

**Adam O'Reilly** Course Educator

F.E.T.A.C in Digital Media Production



# Webinar Interaction



- Chat box – Type responses to the Educator
- We will have a Q&A at the end of the lesson where you can ask questions



# Lesson 3

- Lens Types
- Angle of view
- What is an aperture
- Depth of field
- Q & A

AGENDA



## Why learn about these things?





- Understand the lenses we can use
- Be able to visualise & plan our shoots
- Understand aperture to take creative control of the camera





# VIDEO COURSE TOOL KIT

## INCLUDED:

-  Exclusive Starter Pack
-  Webinar Slides for every lesson
-  Summary Notes for every lesson
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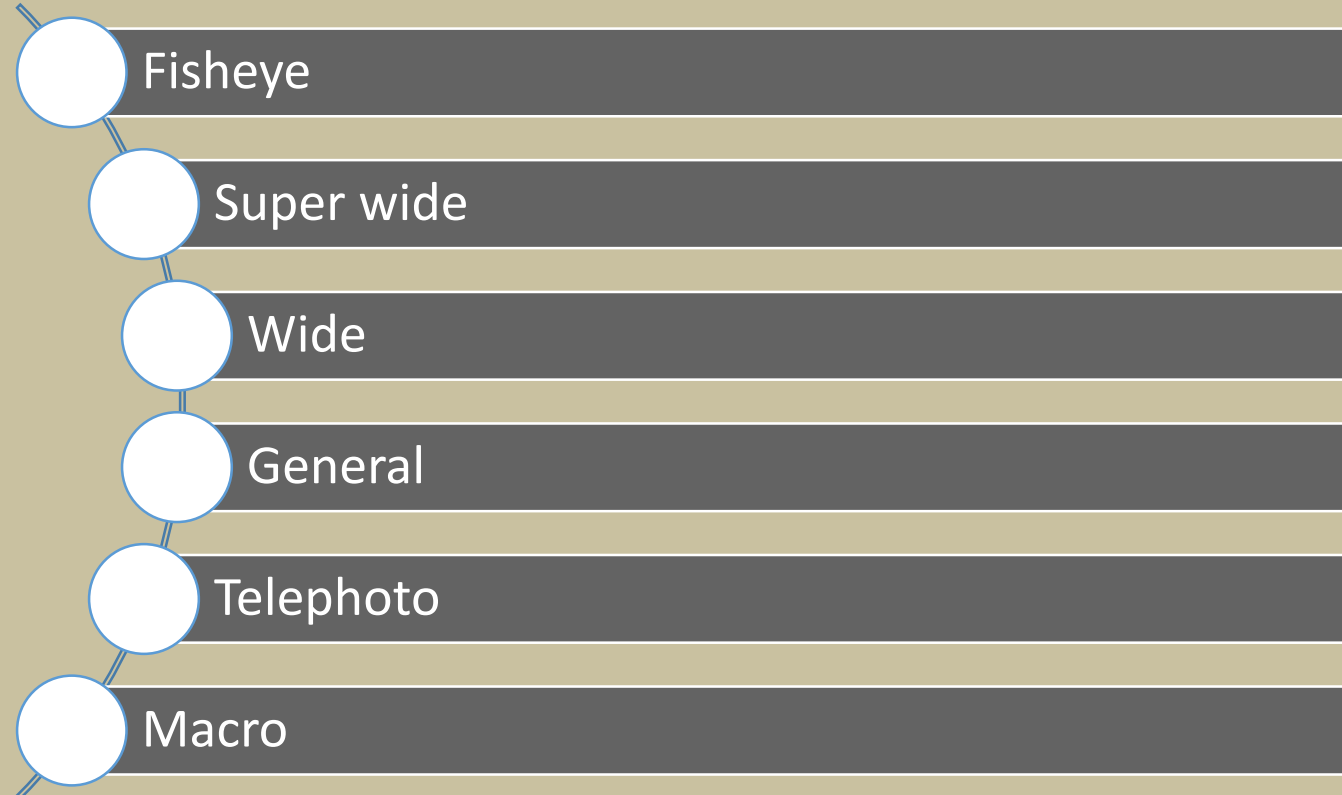
Enhance your learning experience!



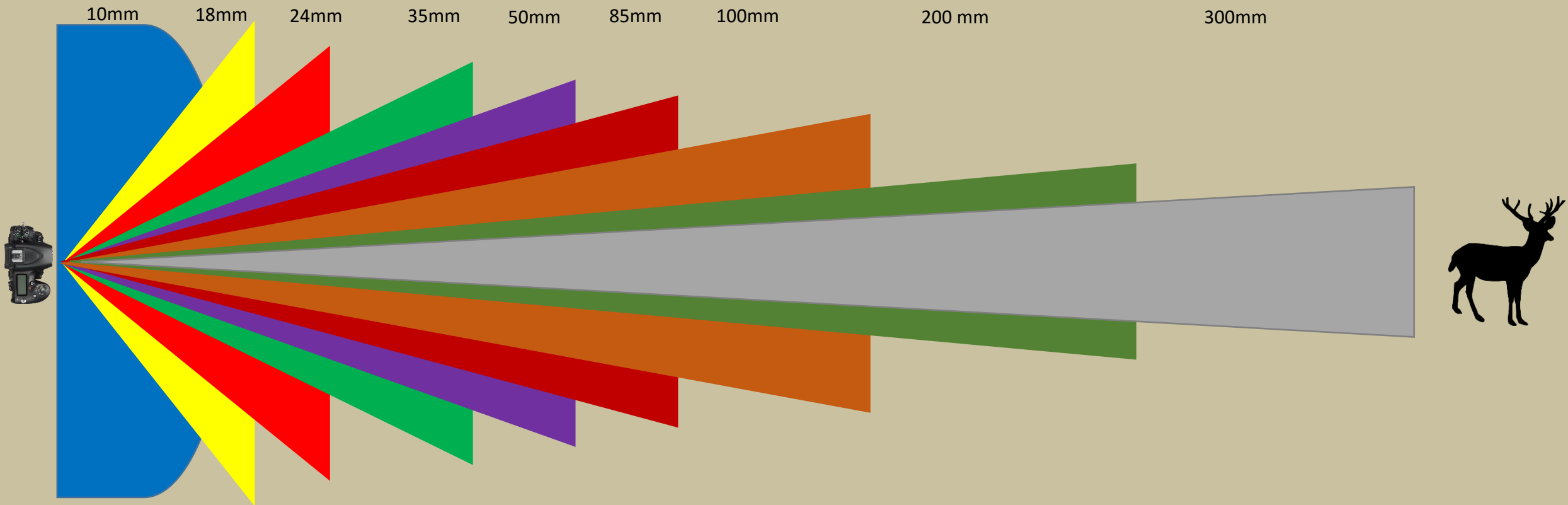
# Lens types

Prime/Fixed (fixed focal length)

Zoom (variable focal length)



# Field of view



Field of view decreases as focal length increases







# What is focal length?



Image Sensor



Focal Length 24 mm





# Primes

Wide



General



Telephoto



# Zoom

Wide



General



Telephoto





# Understanding the Lens



# Prime

## Prime - pros

Easier to focus

Wide apertures

Higher image quality

## Prime – cons

Can be expensive

Limited range



Filter Thread

Lens Hood slot

Focusing Ring

Distance scale

Lens description

Aperture

Optics

Filter thread size

# Zoom

Focus Ring



Zoom control

Lens Info –  
Focal Length

## Zoom – pros

Very versatile

More affordable

## Zoom – cons

Can have poor quality

Difficult to focus

Can lose light when increasing focal length



# Ultra wide/Fisheye



Extreme Sports

Music Videos



# Wide



Landscapes

Large Interiors

Sense of scale

# General



Medium Shots

Dialogue scenes with  
people

Portraits

# Telephoto



Close – ups

Far away subject/objects

Wildlife

Sports

# Macro



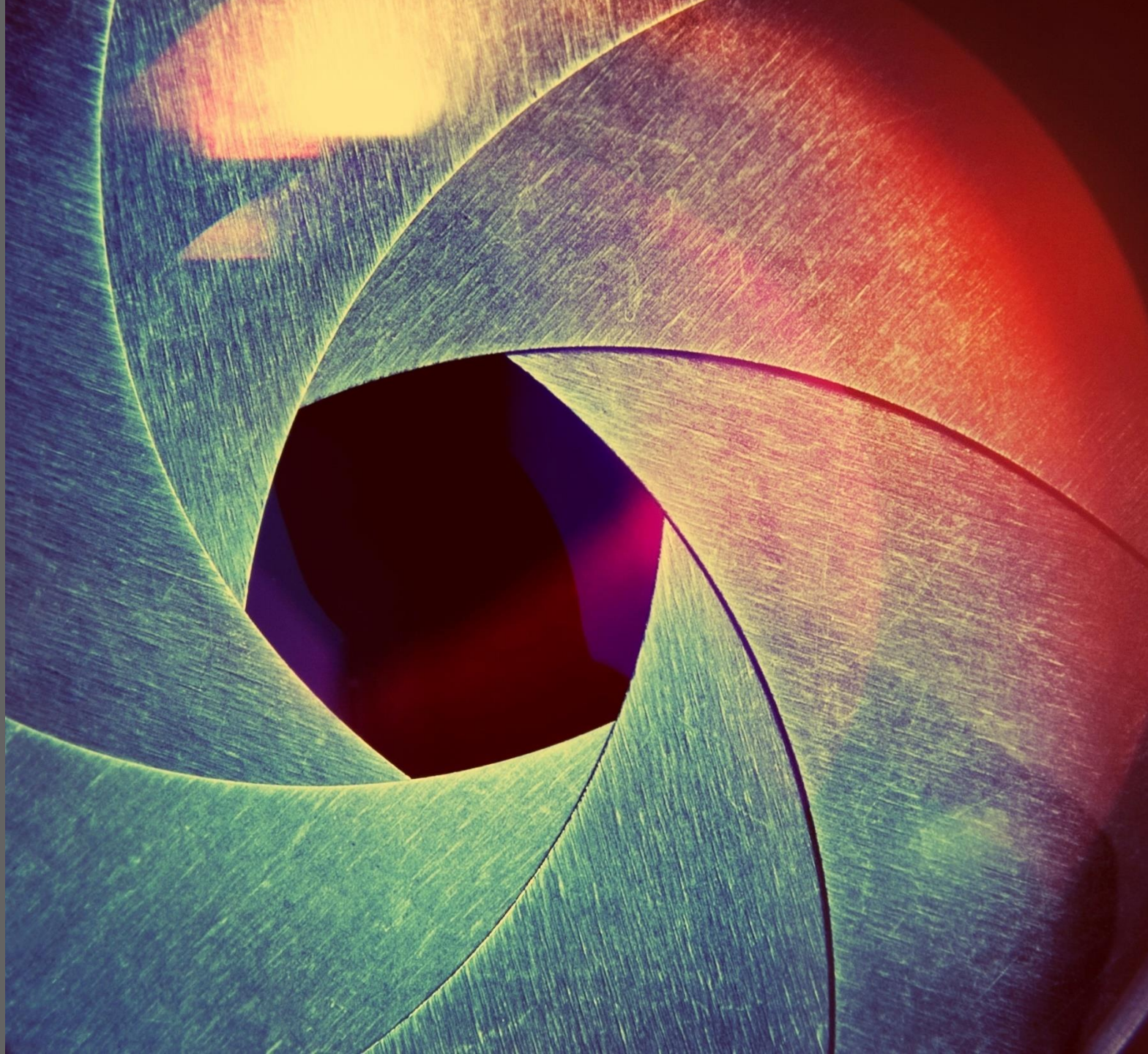
Extreme close up Detail

Food

Wildlife



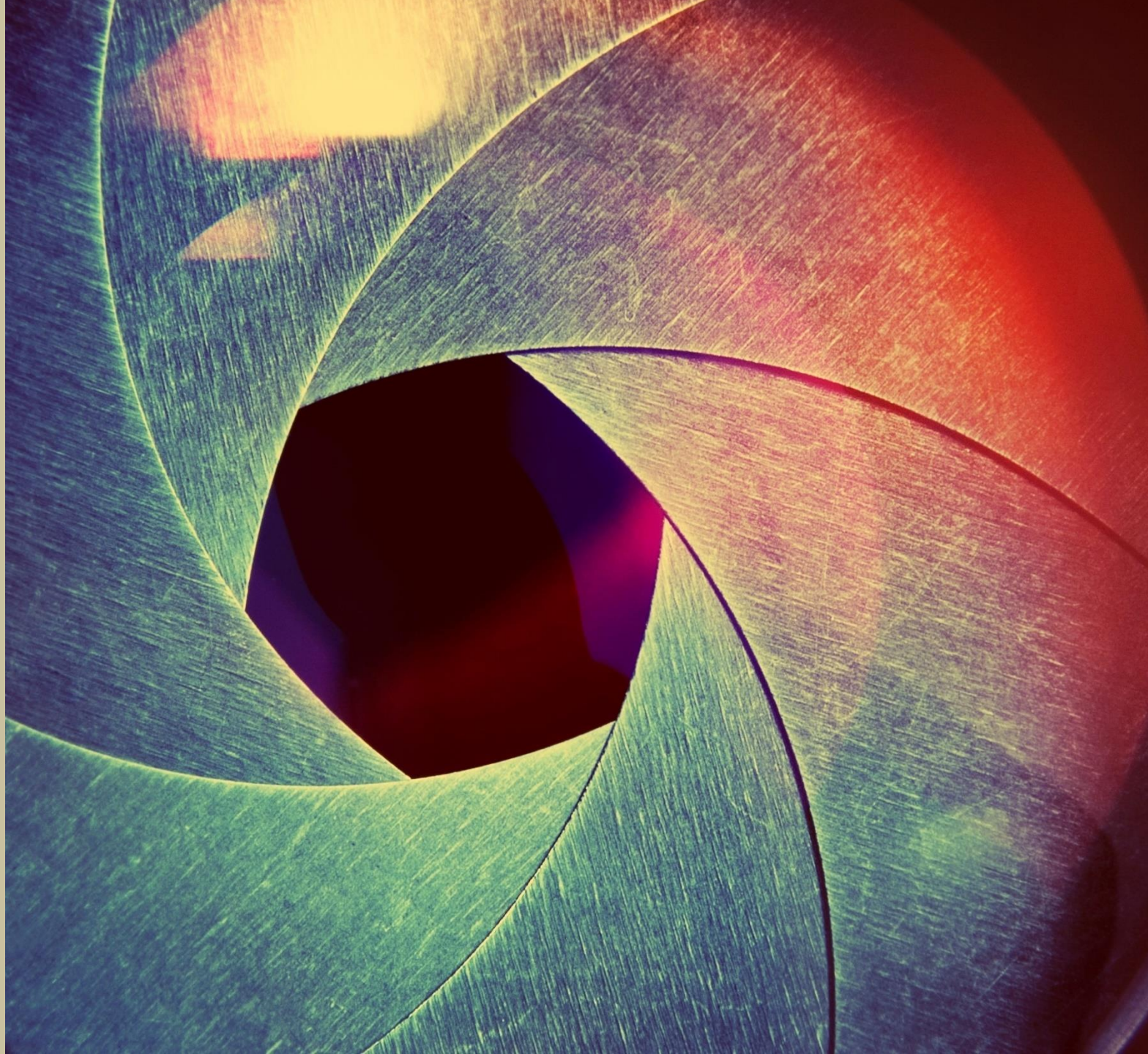
What is Aperture?





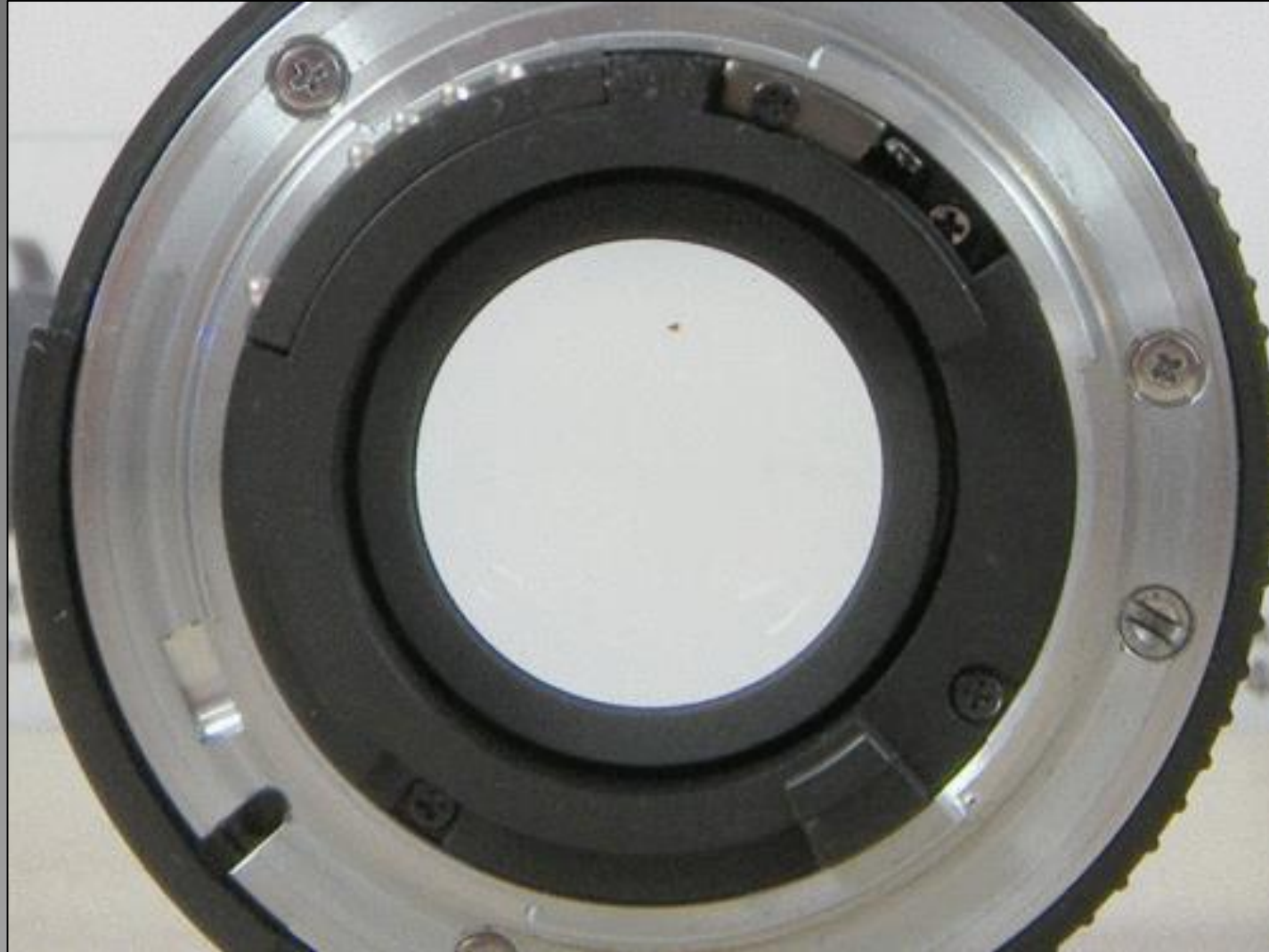
# Aperture:

- Volume of light
- Depth of field

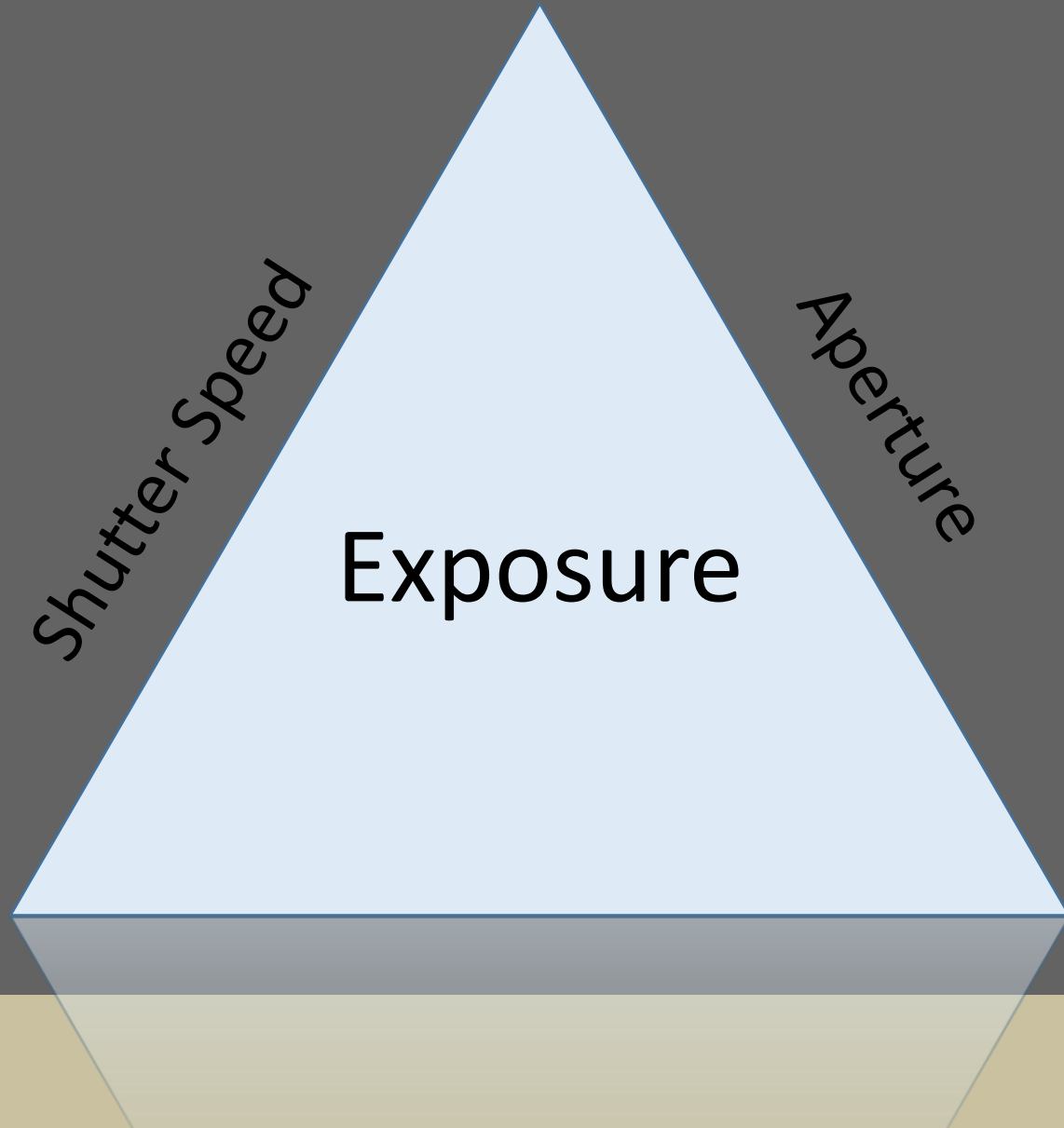




What is an aperture?



# Apertures



# Apertures





# Apertures

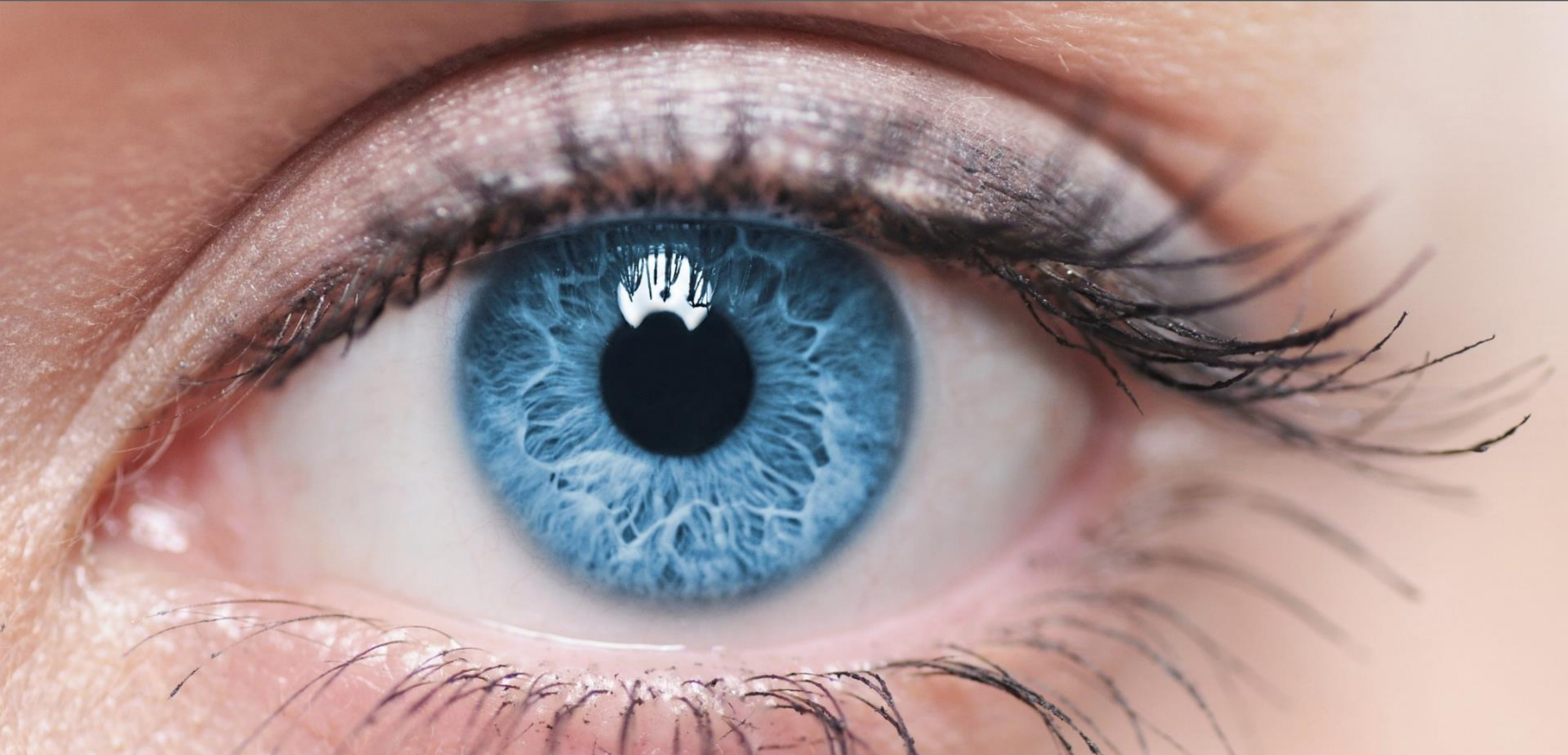


# Apertures





How does it work?





# How does it work?

f1.4

f2.8

f4

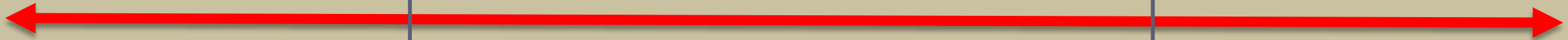
f5.6

f8

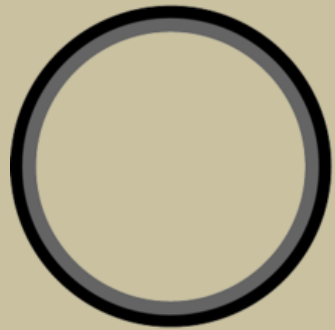
f11

f16

f22



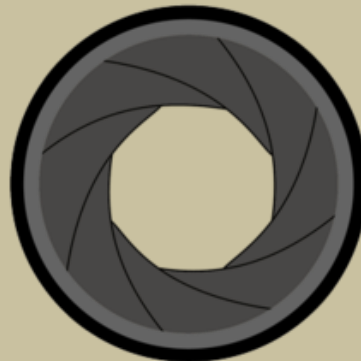
Wide



f/2.0

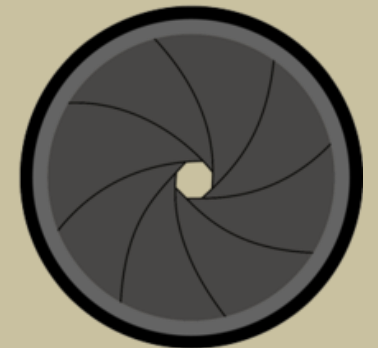
Shallow

Mid range



f/8

Tight



f/22

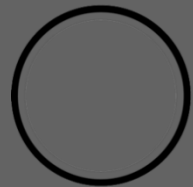
Deep

# Depth of field



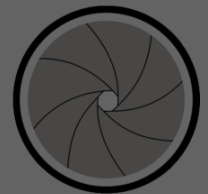
F2.8

Shallow

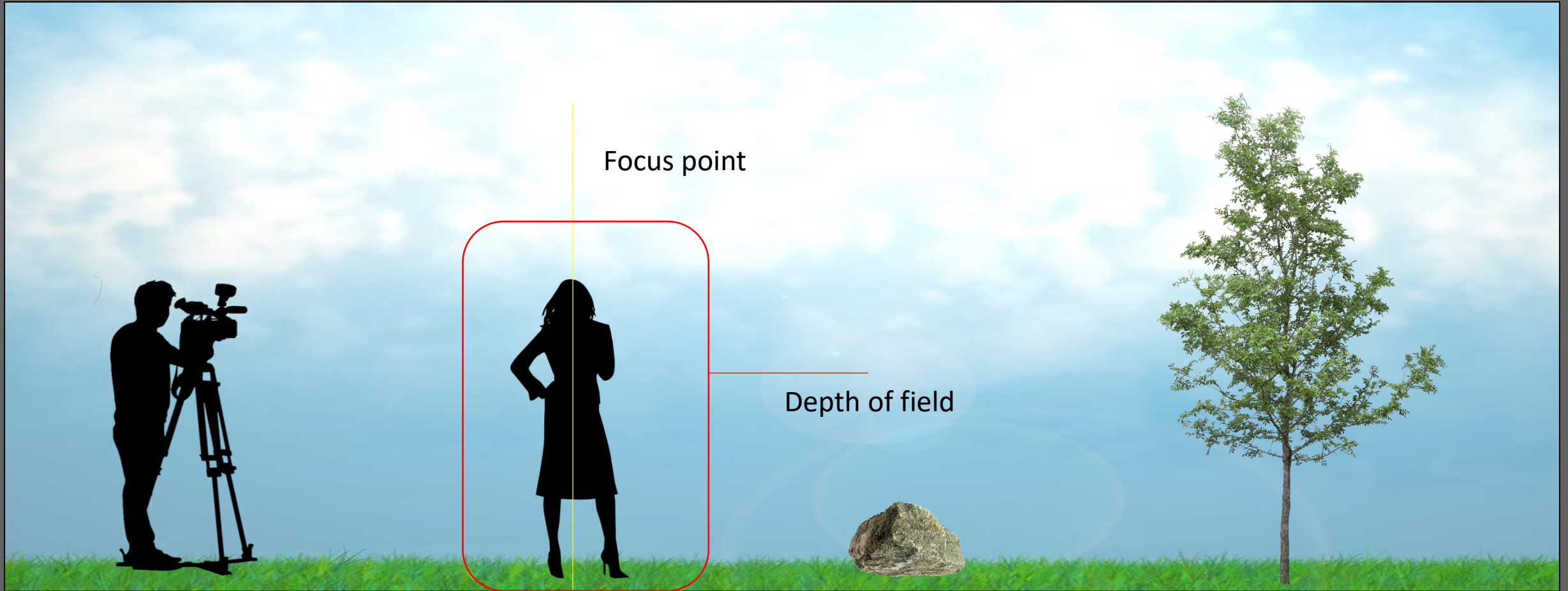


f22

Deep

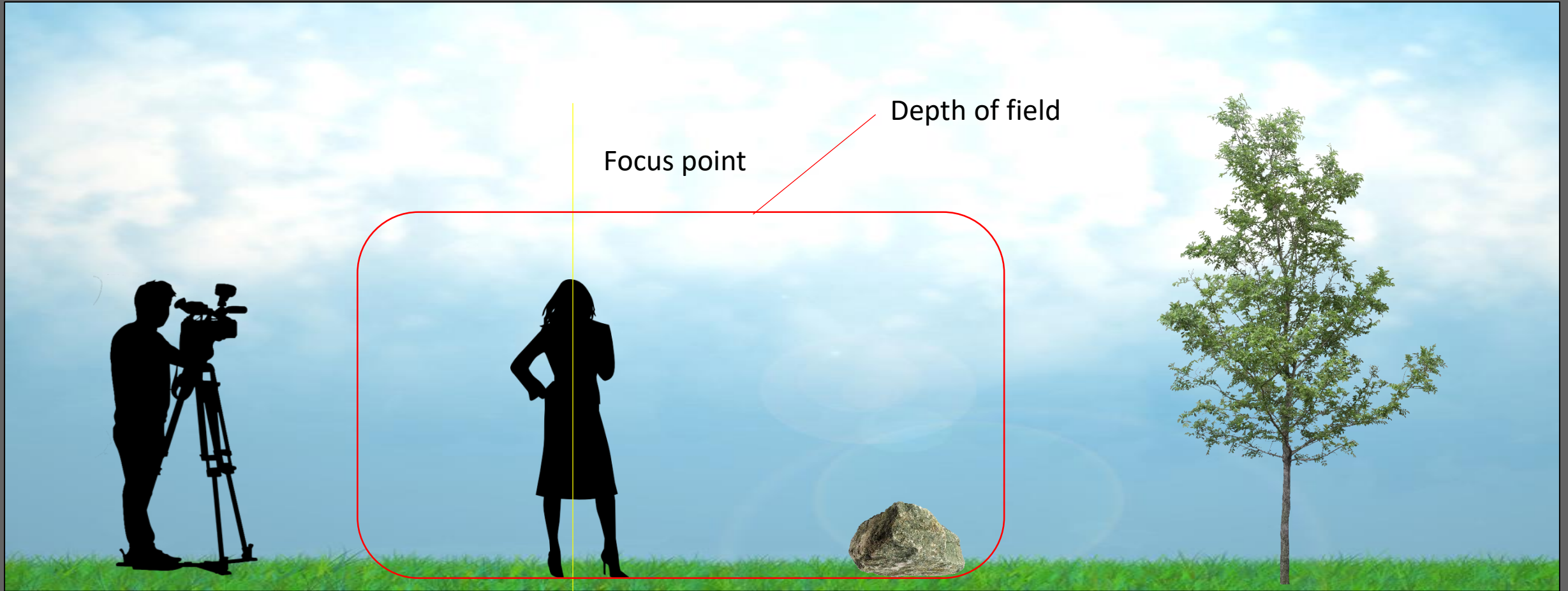


# Depth of Field

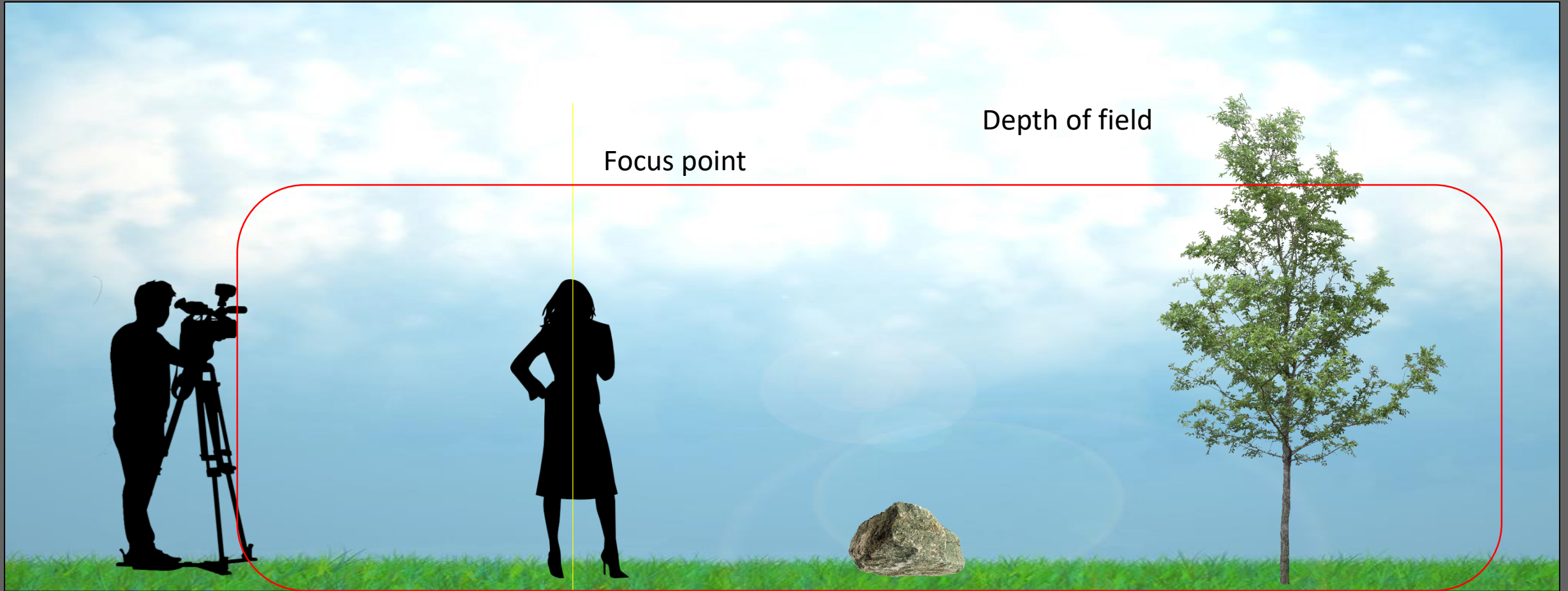




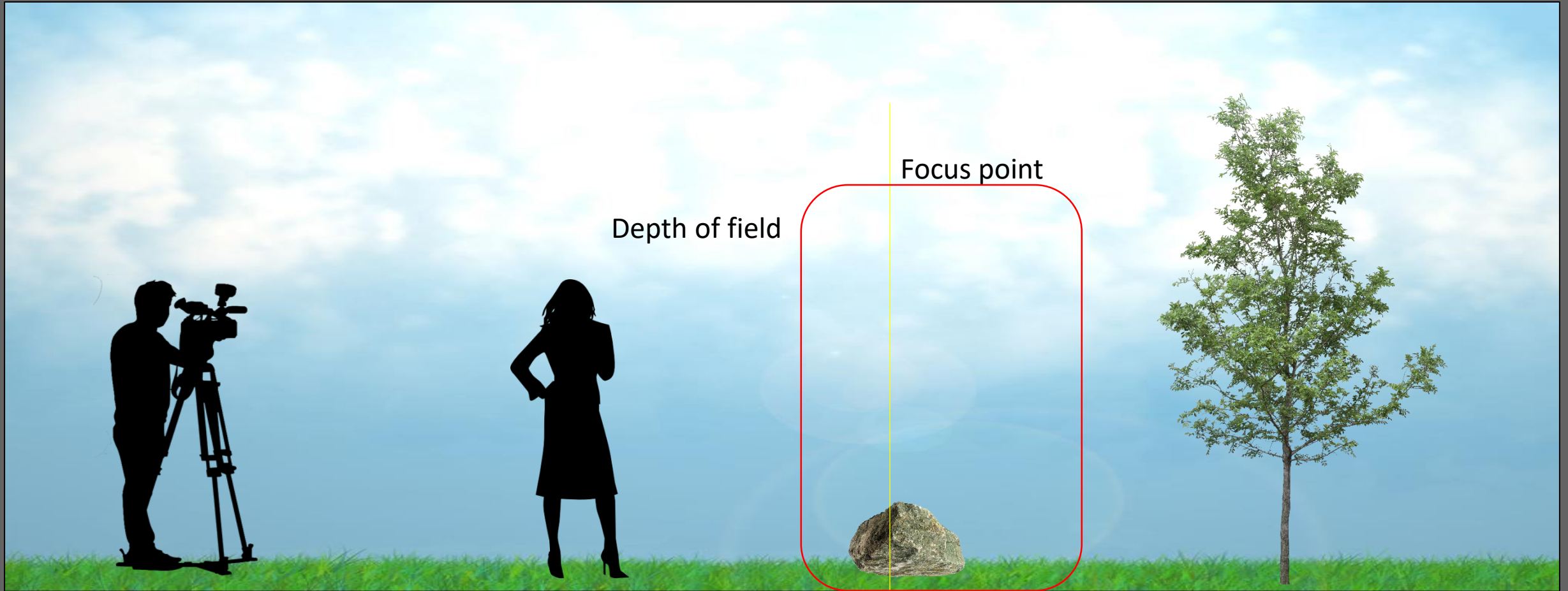
# Depth of Field



# Depth of Field

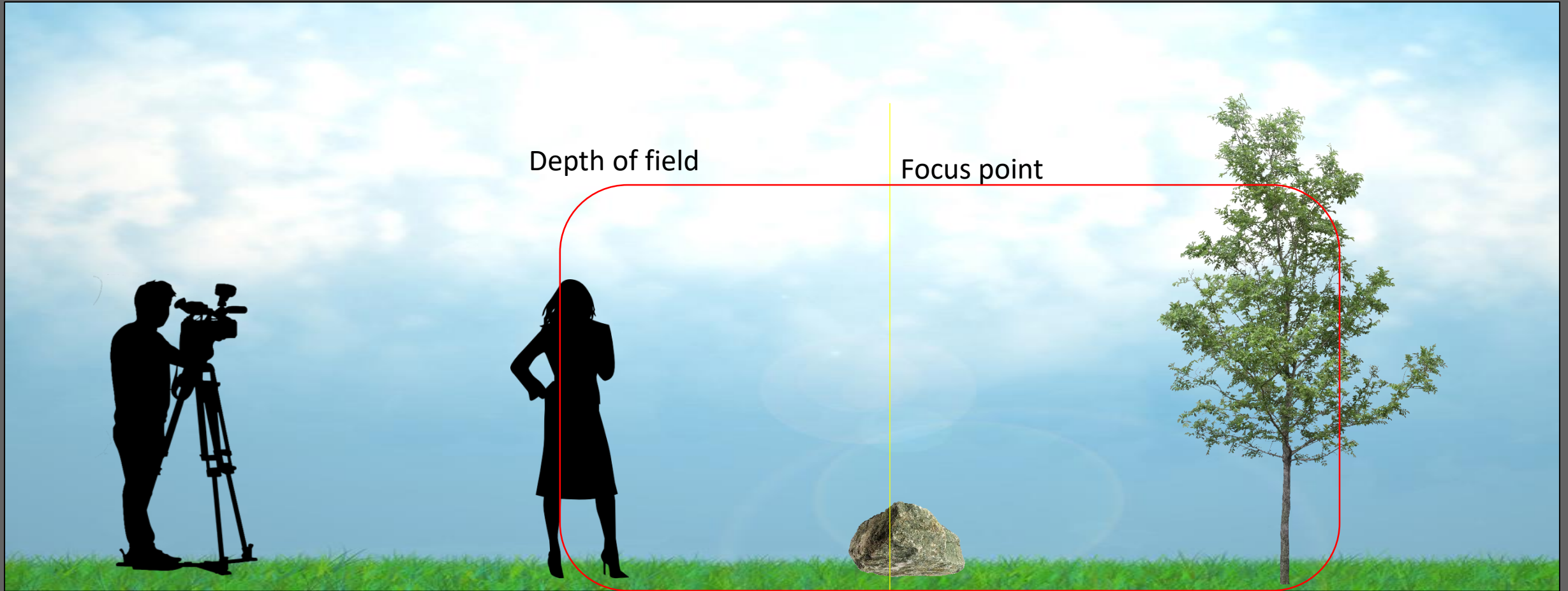


# Depth of Field

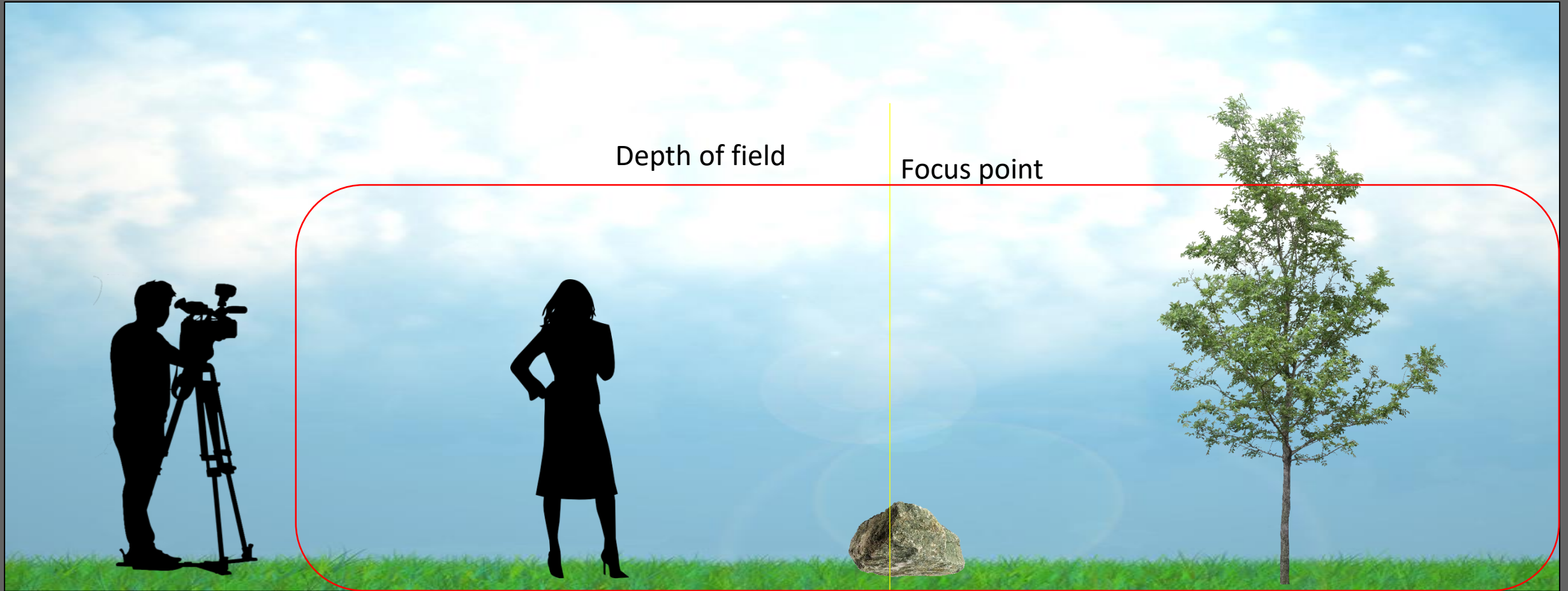




# Depth of Field



# Depth of Field



# Depth of Field





# Shallow Depth of Field



# Deep Depth of Field



# Apertures – Bokeh





# Apertures – Bokeh



Bad



Good



Perfect

# Apertures – Bokeh



# Apertures – Bokeh







# How to Focus



## When to use Auto – focus

---

Helps with tricky shots

---

Panning and tilting

---

Running and gunning

---

Helps to initially set focus

# Auto V Manual



Auto



Manual



# Focus Tips



# Focus Tips





# Focus Tips





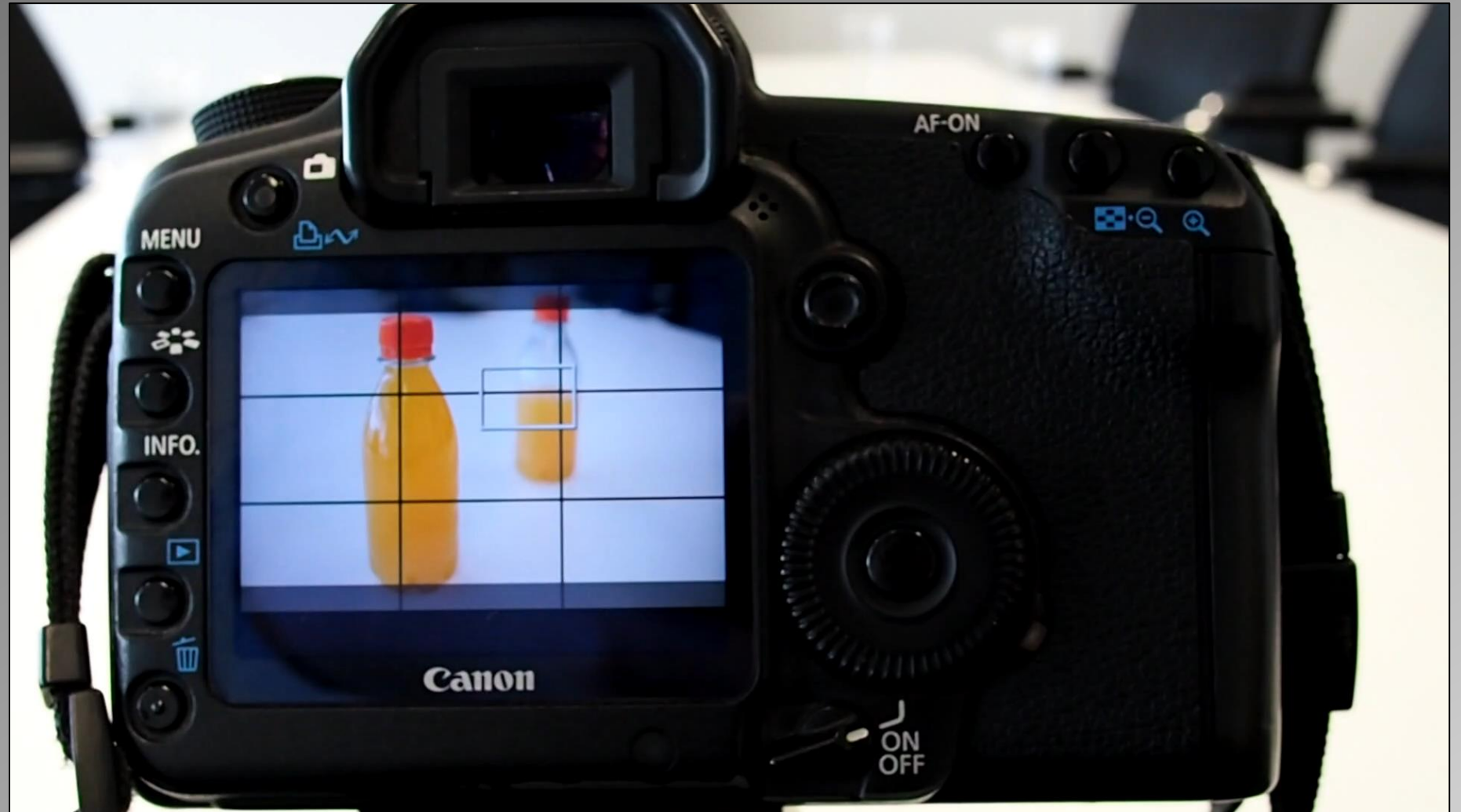
# Focus Tips

## Focus Assist/Peaking



# How to Focus - Tips

## Punching in



# Considerations

- Prime lenses are easier to operate when filming
- Avoid digital zoom
- Image stabilised lenses help
- Learn the lens you have – restricting yourself to one lens is a great way to push yourself
- Depth of field can help to direct viewers attention – mix it up
- The effect of depth of field is most effective in close – ups





# Summary

- Lens Types
- Angle of view
- What is an aperture
- Depth of field

# Further Learning

To expand upon the subjects covered in today's lesson:

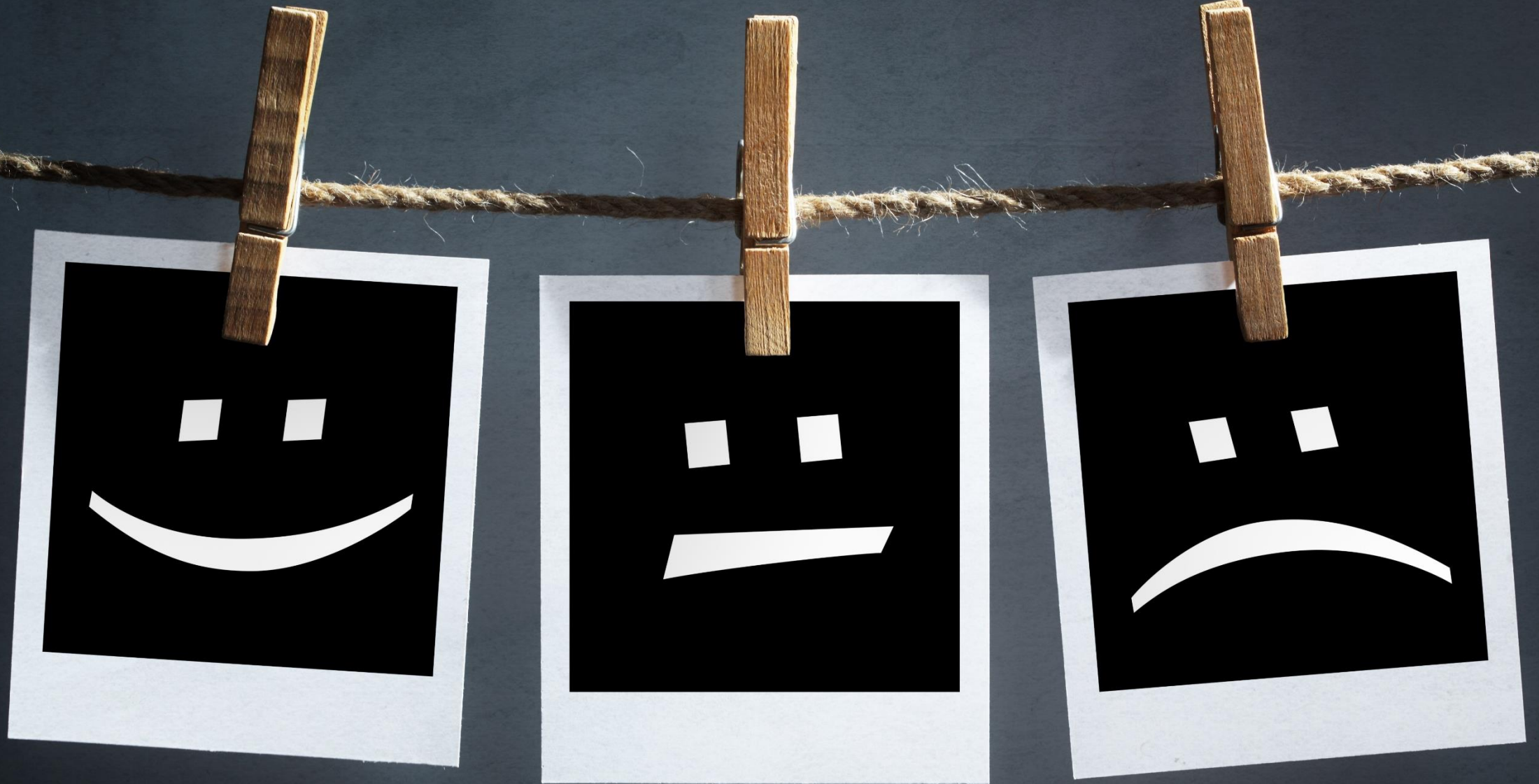
**Lesson 4:** Motion and Depth

## Next Lesson

- Aspect Ratio
- Framing
- Composition Techniques
- Camera movement



# Rate This Lesson



After the lesson we will ask you to rate the lesson on a scale of 1 (lowest) to 5 (highest).

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# QUESTION TIME

See you back for Lesson 3  
Aperture & Lenses



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