

# Flash Bang Wallop what a photograph!



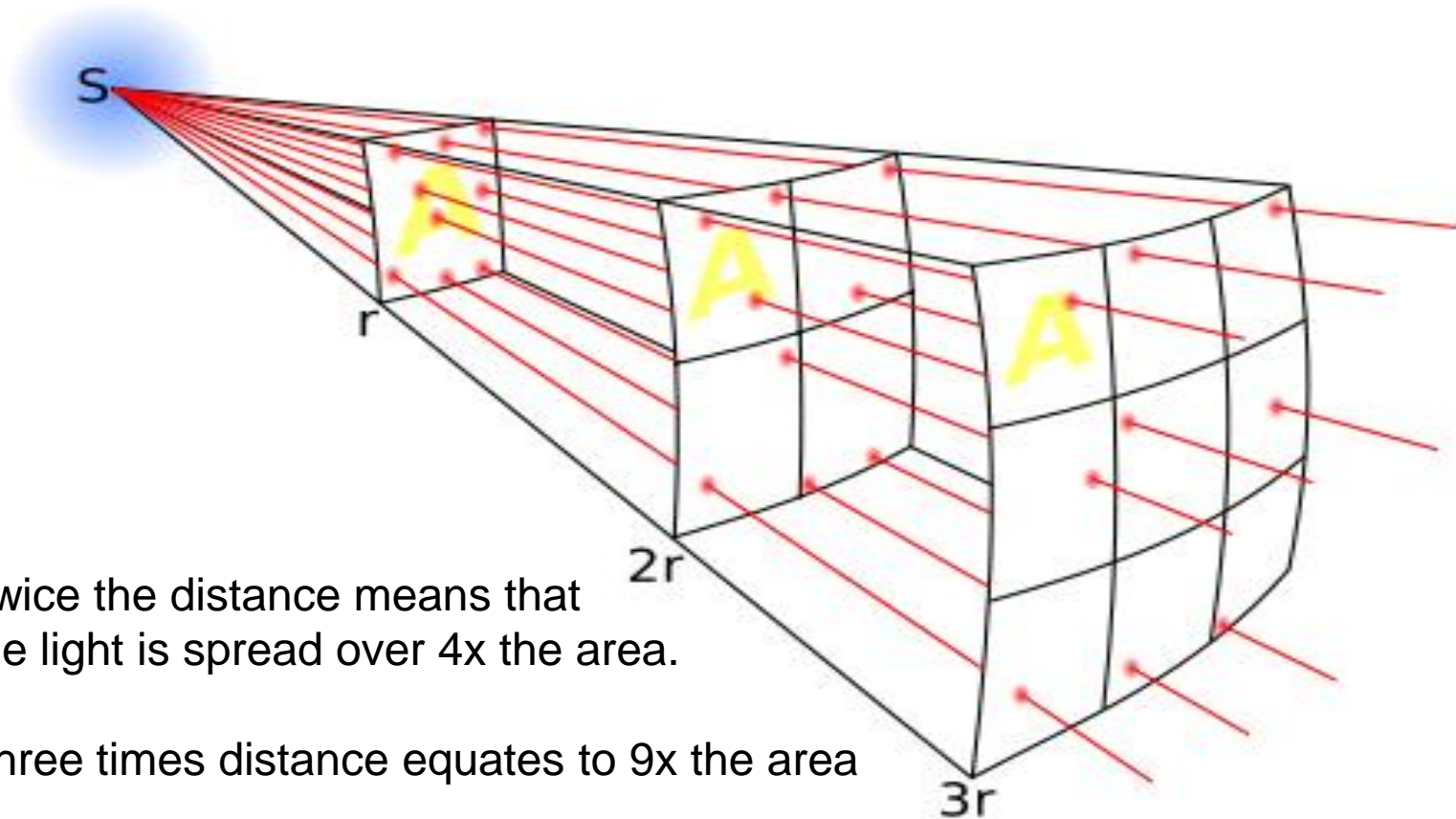
# Do you need flash?



# Do you need flash? Or is it better without?



# Inverse Square Law



Twice the distance means that the light is spread over 4x the area.

Three times distance equates to 9x the area

# Basic Flash Exposure



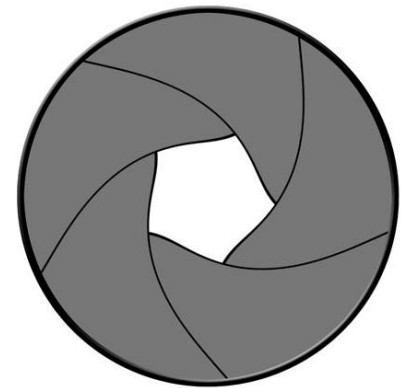
**Box Camera** fixed flash & fixed exposure  
“use flash on subjects between 5 and 10 feet”

# Flash Exposure



Fixed flash & adjustable  
aperture

Aperture can be adjusted  
smaller for closer subjects and  
wider for ones further away



# Flash Exposures



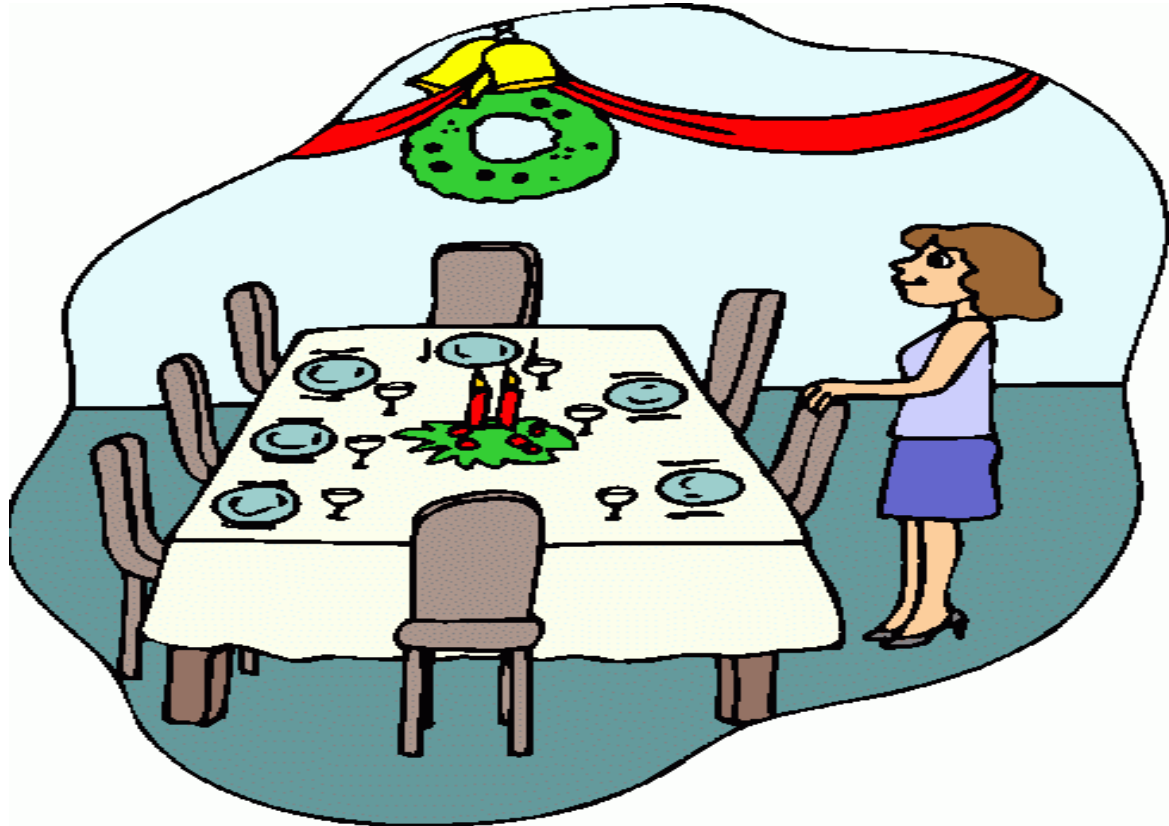
- Focus /aperture auto linked
- Camera knows the distance that the subject is away and alters aperture to allow correct exposure
- (Not common)

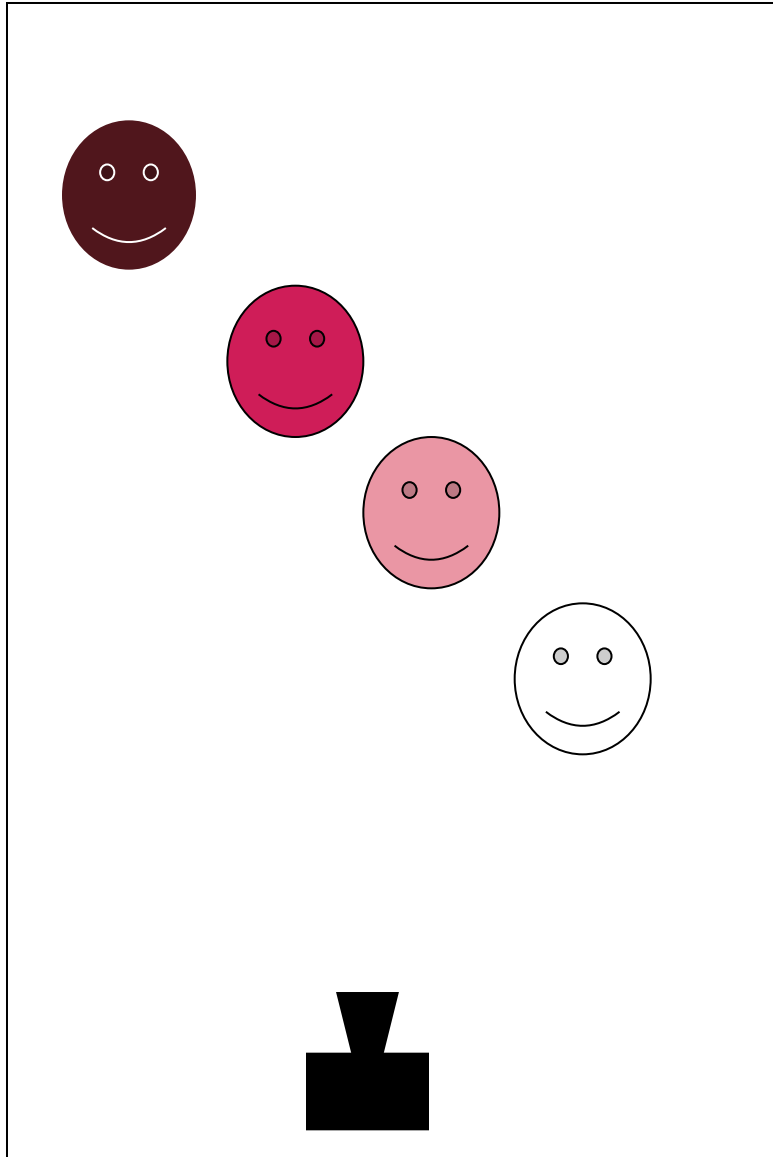
# Modern Flash Exposure



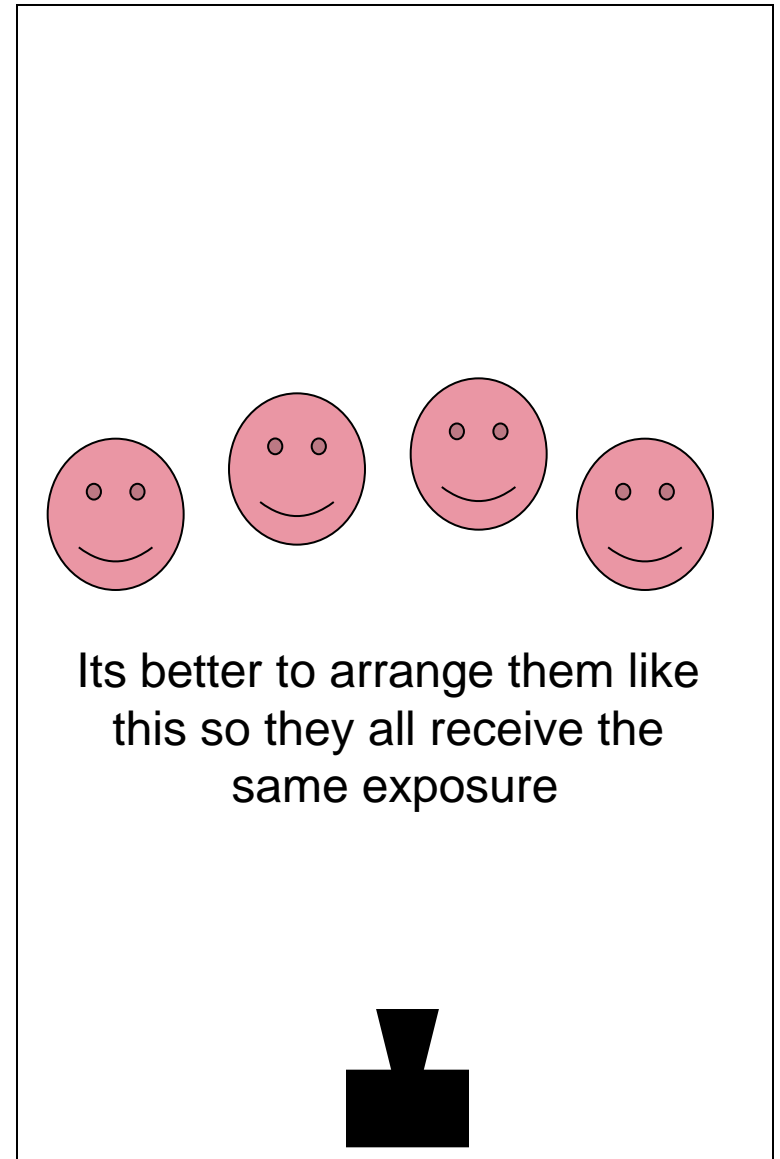
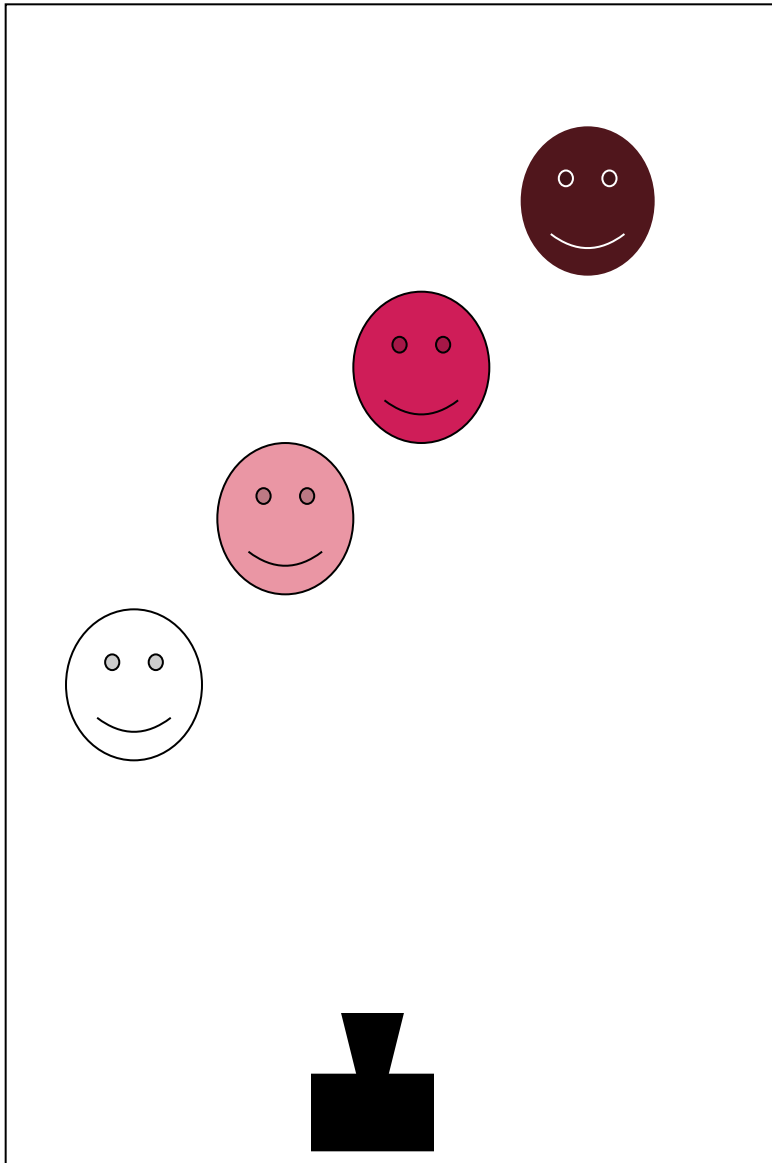
- Intelligent Flash
- Camera measures light reflected from the subject and switches flash off when correct exposure is reached.

# Photographing Groups

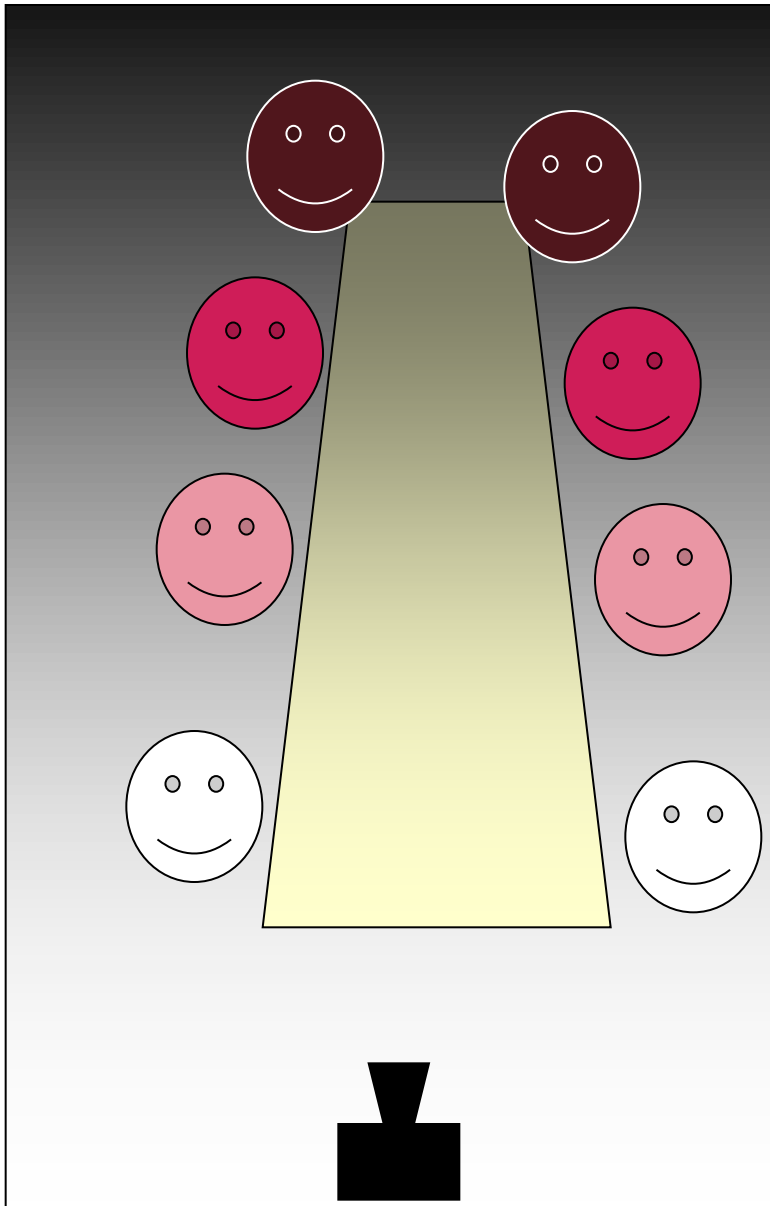


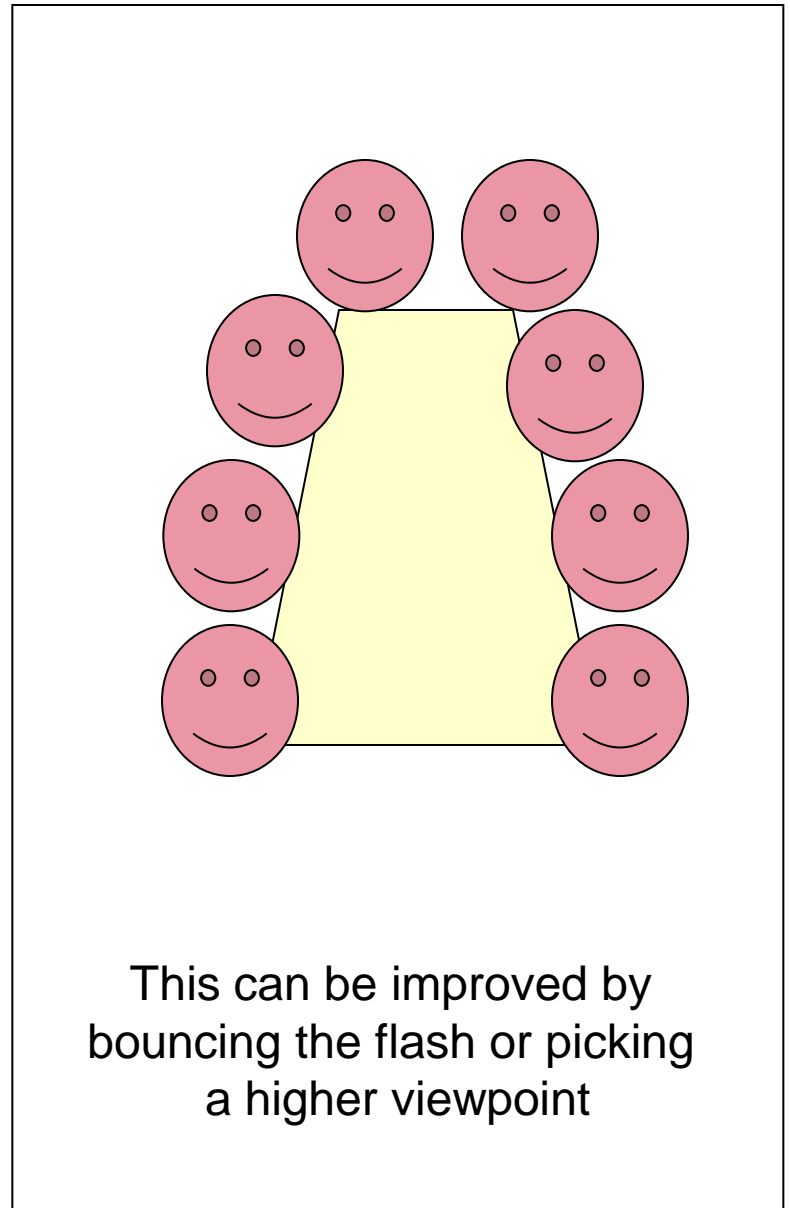
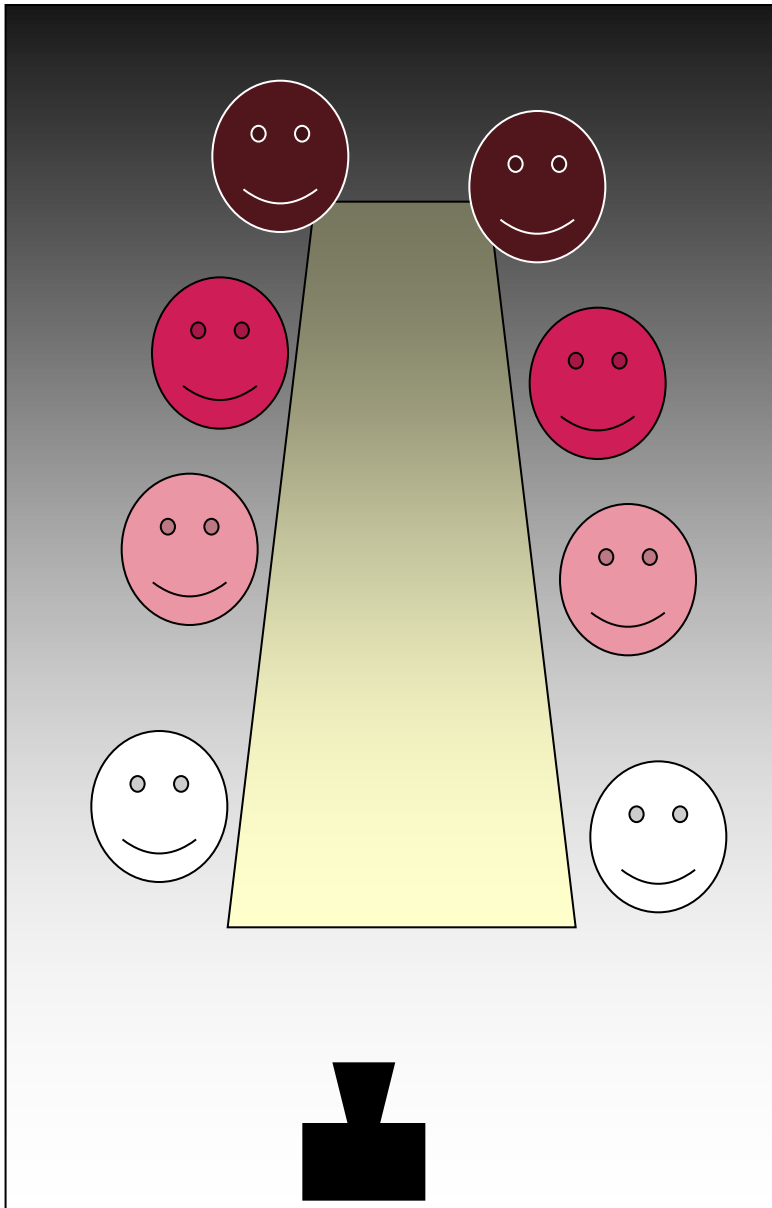


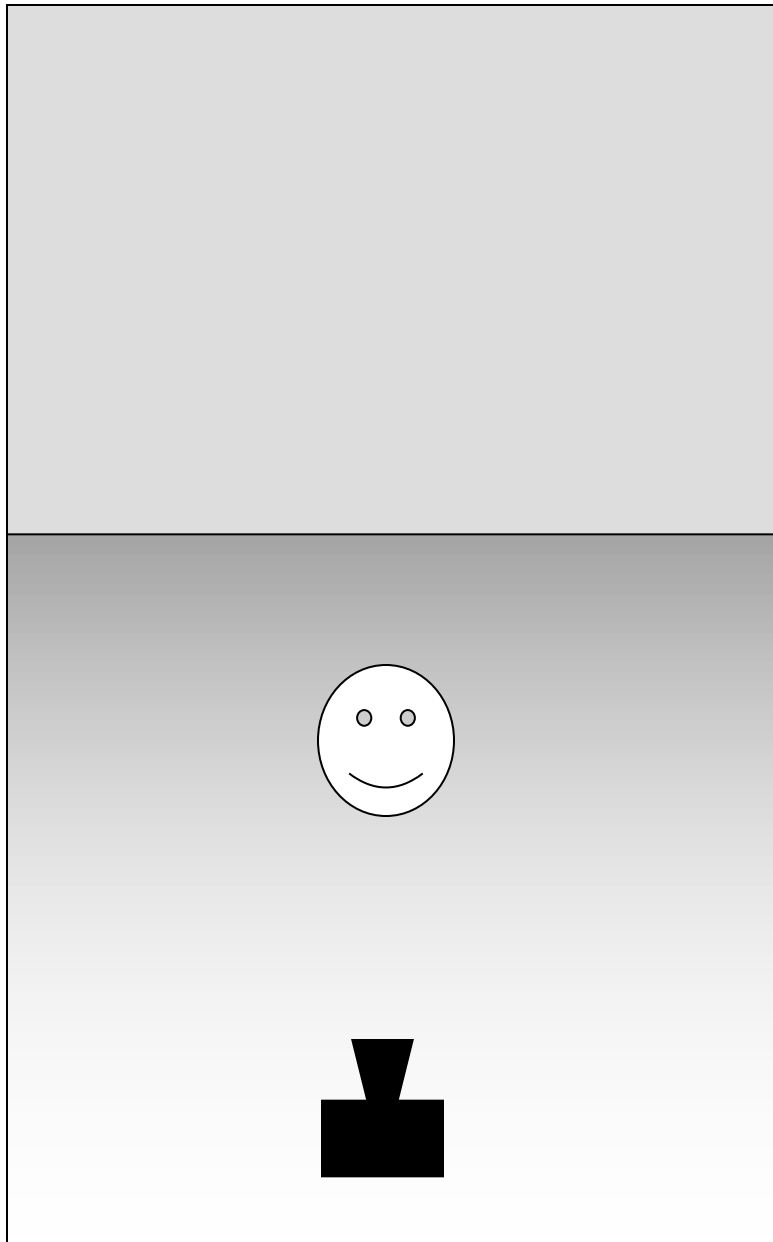
Arranging the group like this means the nearest people will be over exposed and those farthest away are under exposed



It can be very difficult to photograph a dinner table and get everyone correctly exposed







Placing the sitter close to the background means a lighter background

Moving the sitter and the camera away from the background means that the background will be relatively darker



The further ted is away from the background the darker it gets



# Avoiding blast out

- Move back
- Bounce flash
- Diffuse flash
- Night mode?
- Add more light to room