

# REFRACTION

# What is REFRACTION?

... happens when light passes through an object of denser mass, such as water or glass. When this occurs, light is bent, and there is a distortion



# PART ONE: Refraction Still Life

You will be taking 12+ photographs of a glass still life while displaying a 4 DIFFERENT COLOR SCHEMES and the refraction technique.



# PART ONE: Refraction Still Life

## Materials:

Glass or Glasses

Poster Board

Plexiglass

Completely dark room



# PART ONE: Refraction Still Life

## Process:

1. Pick your color scheme- example monochromatic, complementary
2. Place your colors on a poster board
3. Grab some plexiglass- place close to the edge of the table.
4. Place you glass(es) with water in it on top



# PART ONE: Refraction Still Life

## Process:

5. Make sure there is a gap between your backdrop/poster board for a light

- You will need this light to light up your backdrop



# PART ONE: Refraction Still Life

The set up should look like something like this....



(When lights off...)

# Refraction Ideas:



# Refraction Ideas:



# Refraction Ideas:



# Refraction Ideas:



# Refraction Ideas:



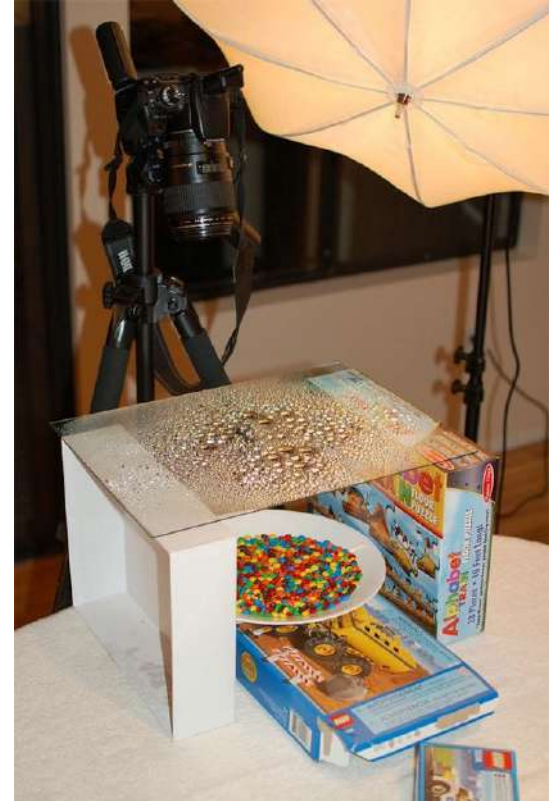
# Refraction Ideas:



## **PART TWO:** Refraction Droplets

You will be taking 12+ photographs of macro droplets while displaying a **3 DIFFERENT COLOR SCHEMES AND PATTERNS.**

**Attention to DETAILS** are important this project



# PART TWO: Refraction Droplets

## Materials Need:

- Plexiglass/Acrylic
- Rain-X
- Water
- Dropper
- Lights
- Various Colorful Subjects
- A partner



# PART TWO: Refraction Droplets

## PROCESS:

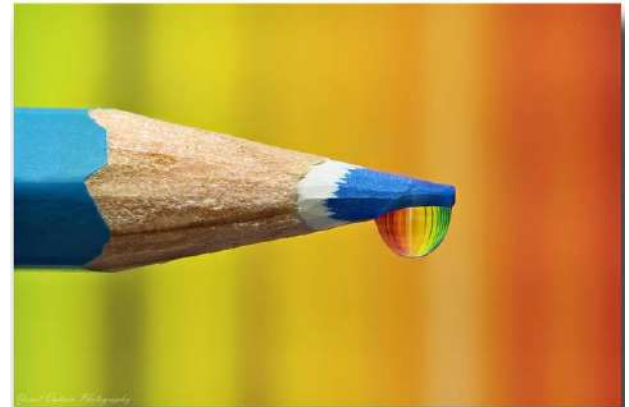
- HAVE YOUR COLOR SCHEMES picked out- easy to pick out subject(s)
- Place subject(s) in glass containers or create 'mini studio' (demo will be given)
- Place clear plexiglass/acrylic over top
- Begin to apply Rain-X (with a dropper) to the top of the acrylic→ **THINK ABOUT YOUR LAYOUT OF DROPLETS! VARY THE SIZES**



# PART TWO: Refraction Droplets

## PROCESS (Continued):

- Balance your lighting appropriately→ have your partner hold the hand held lights on the sides
- Try and use a lower aperture and/or the Macro function on your camera for some photographs-- **GET CLOSE TO THE DROPLETS!! MAKE SURE THEY ARE IN FOCUS AND NOT THE BACKGROUND**
- You will see abstract reflections in the droplet



## Additional Examples:



# Additional Examples:



# Additional Examples:



# Will be graded on:

1. **EFFORT/ Using class time wisely**
2. **Craftsmanship** (neat and clean)
3. **Correct use of the technique** (various color schemes applied)
4. **Following Directions** (Refraction: 12+ images with 4 different color schemes, 6+ BEST edited images) (Refraction Droplet: 12+ images with 3 different color schemes/patterns, 3+ BEST edited images)
5. **Correct use of the camera/ **THOUGHTFUL editing****

