

# Monday, December 3, 2018

## Your Learning Goal:

Students will learn about how optical equipment changes the behavior of light. We will zoom out to review the characteristics of the entire electromagnetic spectrum.

## Table of Contents:

Through the Lens of the EM Spectrum- 23L + R

## Catalyst (23L):

How does optical equipment like microscopes, glasses and telescopes effect light?



### Homework:

Study for Final Exam  
Dec 13/14



### Agenda:

1. Catalyst
2. Lens Exploration
3. Reflection

# Table of Contents

<u>Date</u>	<u>Assignment</u>	<u>Pg #</u>
10/25/18	Atomic Jeopardy	16 L + R
11/6/18	Star Bright	17 L + R
11/8/18	Heartbeat Frequency	18 L + R
11/13/18	Spring Into Waves	19 L + R
11/26/18	EM Spectrum Hero	20L + R
11/27/18	Reflections	21L + R
11/29/18	Spectacular Spectra	22L + R
12/3/18	Through the lens of the EM Spectrum	23L + R

Catalyst:

How does optical equipment like microscopes, glasses and telescopes effect light?

**23L**

12/3/18

Through the Lens of the EM Spectrum

**23R**

# Lens #1

- Hold lens #1 over your paper. Move it closer and farther away from your paper.
- In the space on your handout – explain what happens.

**Write three observations in the box for Lens # 1**

# Lens #2

- Hold lens #2 over your paper. Move it closer and farther away from your paper.
- In the space on your handout – explain what happens.

**Write three observations in the box for Lens # 2**

🌸 Read the next section of your handout

🌸 Watch the video and fill in the blanks as we go along

1. We can control the refraction of light through **LENSES**

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2. A magnifying lens is **CONVEX**, which means it is thicker in the **MIDDLE**

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4. The concave lens is thicker on the **EDGES** than the middle.

1. We can control the refraction of light through **LENSES**

2. A magnifying lens is **CONVEX**, which means it is thicker in the **MIDDLE**

3. A convex lens refracts light so that the rays come together. This makes things look **BIGGER**

4. The concave lens is thicker on the **EDGES** than the middle. A concave lens bends light **OUTWARDS**

**Fill in the last section of  
your handout**

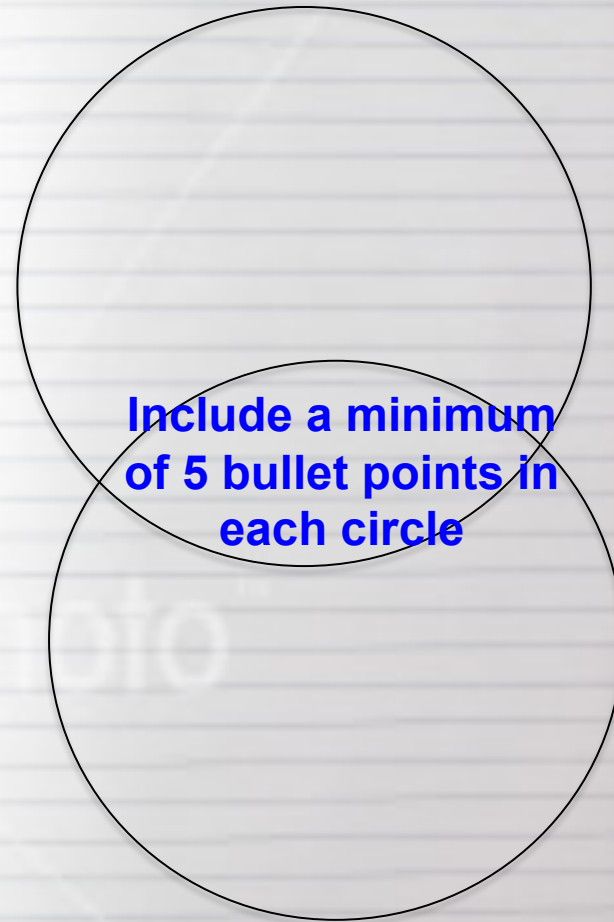
**Catalyst:**

How does optical equipment like microscopes, glasses and telescopes effect light?

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**Convex**

Include a minimum of 5 bullet points in each circle

**Concave**

**23R**

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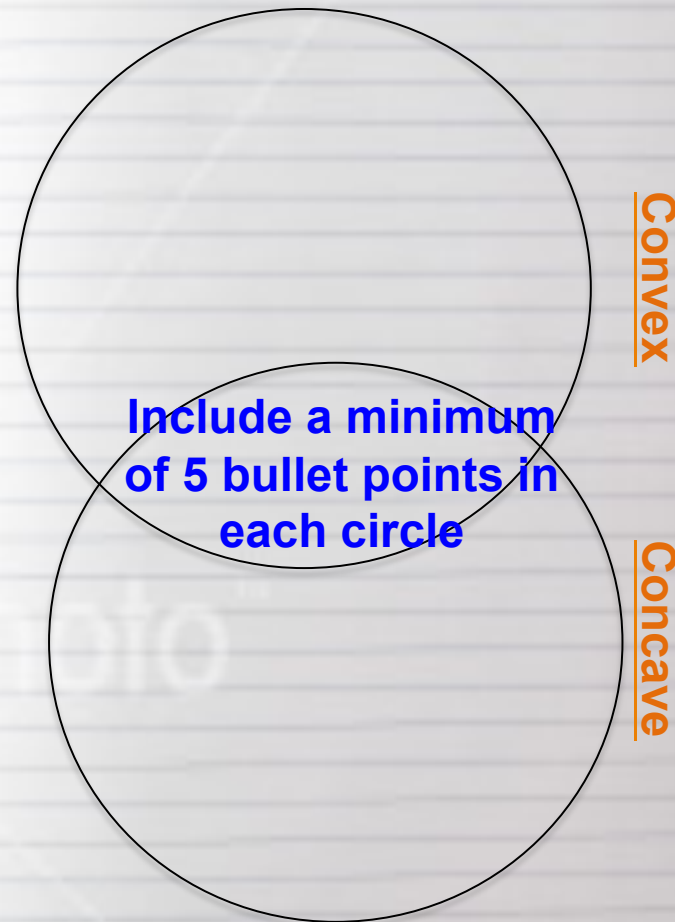
LEAF:

Why are we not overwhelmed by all the electromagnetic waves traveling through the room right now?

**23L**

12/3/18

Through the Lens of the EM Spectrum



**23R**