

Eye vs. camera - Michael Mauser

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Video Comprehension Questions: How Do Our Eyes See Color?

Color perception begins with light stimulating cones in the eye's retina, which send signals to the brain in this case I don't need the 3 filters RGB because the eyes have this. The brain then interprets these signals to create the experience of color.

1. What causes the colors in the rings of the video disk to appear?

- a. Hypnotism
- b. Tricks played by the eyes
- c. An illusion created by the camera
- d. Differences in the anatomy of the eye and how it processes light**

2. In what way do the lenses of a camera and the lens of the human eye behave differently?

- a. The camera lens changes shape, while the eye lens remains focused on the object.
- b. The camera lens reacts by changing shape, while the eye lens reacts by moving.
- c. The camera lens adjusts to concentrate red and blue light at the same point.**
- d. The eye lens maintains focus on objects by moving.

3. Why do we not perceive things as blurry even though our eyes react differently to different colors of light?

- a. Our eyes use filters to adjust to the different wavelengths of light.
- b. Our eyes have different types of photoreceptors that respond to different colors.**
- c. The center of our vision has less ability to detect blue light.
- d. Our brain fills in the missing information based on context.

4. How do the photoreceptors in a camera differ from the photoreceptors in the human eye?

- a. Camera photoreceptors respond selectively to different wavelengths of light.
- b. The human eye has only one type of photoreceptor, while cameras have multiple types.**
- c. Camera photoreceptors are distributed evenly across the focal surface.
- d. The human eye photoreceptors respond differently to light in low and normal conditions.

5. What happens to our ability to see colors as we move away from the center of our field of vision?

a. Our acuity vision decreases and our ability to see colors diminishes.

- b. Colors become more vibrant and distinct.
- c. Our peripheral vision becomes more sensitive to blue light.
- d. Our ability to detect motion in the periphery of our vision increases.

6. Why do we not experience a vision gap in our field of view despite having an area with no photoreceptors?

a. Our brain fills in the missing information.

- b. There are no gaps in our field of view.
- c. Our eyes constantly move to compensate for the lack of photoreceptors.
- d. Our peripheral vision compensates for the gap.

7. What is the illusion depicted in the video?

- a. Moving image effect
- b. Blurriness caused by eye movement
- c. Colors changing around the center of an image

d. False perception of stationary image movement

8. Why do our eyes stop responding to a stationary image of constant intensity?

- a. Our brain fills in the missing information.

b. Our eyes need constant movement to perceive images.

- c. The optic nerves in our retina stop sending signals.
- d. Our eyes adjust to ignore static stimuli.

9. How do cameras differ from our eyes in terms of capturing details and distant objects?

a. Cameras can capture more details and accurately record distant objects.

- b. Cameras have a wider field of view than our eyes.
- c. Our eyes are more efficient at capturing distant objects.
- d. Cameras require more light to capture details than our eyes.

10. What is emphasized about the human eye and its coevolution with the brain?

- a. The human eye is less efficient compared to cameras.

b. The human eye is a perfect adaptation to our needs.

- c. The human eye is not capable of capturing accurate images.
- d. The human eye does not require constant movement to see clearly.