



RETINA REVIEW

1. When you see an object out of the corner of your eye, or at the edge of your field of view, where do you think the image is focused on your retina?

2. What type of receptor cells would you expect to find there?

3. If you see an object out of the corner of your eye, will it appear clear, detailed, and in bright color? Why or why not?

4. Why is it useful to have peripheral vision?

5. The spot in the center of the retina where there are many cones is called _____

6. This area of the retina is also called the zone of acuity, because our vision there is particularly acute, or sharp. Why?

7. If you stare at the Sun, you can burn a hole in the fovea. What would the world look like if you did this? Why would this be hard to deal with?

The Retina

- Detects light and transmits visual information to the optic nerve and onto brain
- Photoreceptors: Light sensitive cells in eyes

Photoreceptors

A. Rods: cells that are sensitive to intensity of light. Detects black, white, shades of grey. More sensitive to light than cone cells.

B. Cones: Cells that are sensitive to color (red, green, blue)
In center of Retina.

Optic Disk: (blind spot)- no rods or cones

The Center of the Retina

- Macula: (spot) high concentration of cone cells & few blood vessels
- Fovea: (pit) center of macula. Small depression that contains only cone cells

Signals from all photoreceptors and light intensity and all detected color is sent to brain

Information is assembled as the image (mosaic of millions of tiny dots)