

Name _____

Perception Laboratory: Anatomy of the Eye

1. Anatomy of the Eye

Use the figure to identify the following structures of the eye. After labeling each structure, provide a brief description of its function (its role in processing visual stimuli).

Structure	Letter	Function
Anterior Chamber		
Choroid		
Cornea		
Fovea		
Iris / Pupil		
Lens		
Optic disc		
Optic nerve		
Posterior Chamber		
Retina		
Sclera		
Macula lutea		

Note that the Canal of Schlemm and the Zonules of Zinn are not labeled explicitly on the figure (despite how much fun it is to name those parts of the eye). Can you determine where these structures are located and indicate their function?

Structure	Location	Function
Canal of Schlemm		
Zonules of Zinn		

2. Anatomy of the Retina

Use the figure to identify the following structures of the retina.

Structure	Letter
Amacrine Cell	
Bipolar Cell	
Cone	
Ganglion Cell	
Horizontal Cell	
Rod	

Use the web to learn more about retinal structures and their functions.

Structure	What I learned on the web
Amacrine Cell	
Bipolar Cell	
Cone	
Ganglion Cell	
Horizontal Cell	
Rod	

3. Visual Acuity, Myopia, and Hypermetropia

Briefly explain what is meant by 20/20 vision:

Briefly explain what is meant by 20/200 vision:

If you know your own uncorrected visual acuity, enter it here:

Disorder	What I learned on the web about etiology and treatment
Myopia (Nearsightedness)	
Hypermetropia (Farsightedness)	

4. Visual Disorders of the Eye

a. Cornea

Disorder	What I learned on the web about etiology and treatment
Astigmatism	
Keratoconus	
Fuch's Dystrophy	

b. Anterior Chamber

Disorder	What I learned on the web about etiology and treatment
Primary Open-Angle Glaucoma	
Primary Angle-Closed Glaucoma	

c. *Lens*

Disorder	What I learned on the web about etiology and treatment
Presbyopia	
Cataracts	

d. *Retina*

Disorder	What I learned on the web about etiology and treatment
Macular degeneration	
Retinitis pigmentosa	