

Exercise II: Visual Senses

A. Blind Spot

✦ Blind Spot: What did you see in the place the black dot disappeared from?

✦ Advanced Blind Spot: What did you see in place of the yellow dot?

Blind Spot Follow Up

1. *What is the name of the physical feature of the retina that causes the blind spot in your vision? _____ Where is it located?*

Explain what is different about that spot that makes it blind.

2. *Based on your observation of the disappearing dot, what does your brain do that makes you unaware of the presence of that blind spot in normal situations?*

B. Which is your Dominant Eye _____

C. Visual Acuity - Distance

w/o correction _____ w/ correction if wearing glasses or contacts

Left Eye:	Left eye corrected:
Right Eye:	Right eye corrected:

D. Afterimage: record the shape and color of the afterimage you see after looking away from the light source. It may help to blink your eyes and look at a blank surface.

Sense Lab Data Sheet

Pupil Response

1. When you look at light, what do your pupils do? _____. When looking away from light what do your pupils do? _____.
2. When covering your left eye, what happens to the pupil on your right eye?

3. When uncovering your left eye, what happens to the pupil on your right eye?

Pupil Follow Up

1. *Based on your observation of your right pupil as you covered and uncovered your eye, do your pupils respond to light levels independently or together? Explain why.*

2. *In a solar eclipse, the moon comes between us and the sun and blocks out much of the direct light. Explain why you should never look at an eclipse of the sun directly, not even with basic sunglasses. What makes it so dangerous?*

E. Depth Perception

- With two eyes, did you have difficulty touching the two pencils together? _____
- With only one eye, did you have difficulty? If so, what direction did you miss the other pencil?

Depth Perception Follow Up

1. *If one eye is dominant, and is paid attention to more by the brain, then what information does the non-dominant eye provide that justifies its existence?*
2. *Explain how two eyes improve depth perception over just one eye? Draw a sketch illustrating how it happens.*
3. *What generalizations can be made about animals with their eyes in the front of their head vs. animals that have eyes on the sides? What explains those adaptations?*