Name _____
Human Biology Lab Manual Lab Report
Laboratory Exercise 7: Senses

GENERAL SENSES

Activity 1: Two Point Discrimination Test

Body Location	Distance (mm)
Forearm	
Back of the neck	
Index finger	
Back of the hand	

a. Which location on the body has the greatest density of tactile receptors (shortest distance)? _____
b. Which location on the body has the least density of tactile receptors (largest distance)? _____
c. Why do you think the location with the greatest density has higher density than the location with the least?

_____

_____

Activity 2: Adaptation to Temperature

Hand	Sensation
Left	
Right	

Explain your results:

_____

_____

_____

SPECIAL SENSES

VISION

Activity 3: Dissection of Sheep Eye

a. Which layer of the sheep eye was the most difficult to cut? _____
b. How do you compare the shape of the pupil of the sheep eye with the human eye? _____
c. Describe the lens of the dissected sheep eye.

_____

_____

Activity 4: Visual Acuity Test

Visual Acuity		
Eye	Without Glasses	With Glasses
Left		
Right		

Activity 5: Astigmatism Test

Astigmatism		
Eye	Without Glasses	With Glasses
Left		
Right		

Activity 6: Accommodation of Eye

Eye	Near-Point Distance (cm)
Left	
Right	

Compare your near-point distance to Table 7.2 in the lab manual:

a. What age does your right eye test as? _____
b. What age does your left eye test as? _____
c. Is there any difference in age? _____

Activity 7: Color Vision Test

Number of Plate	Your Response (State What Number You See)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Do you have normal vision or red-green color blindness? _____

Activity 8: Photopupillary Reflex Test

Record your observations of the subject's pupil diameter: constricts (becomes smaller) or dilates (becomes larger).

	Diameter of Pupil
After Direct Light Exposure	
After Removal of Light	

Which is faster: constriction of the iris (pupil size becoming smaller) or dilation of the iris (pupil size becomes larger)? _____

Activity 9: Blind Spot Test

Eye	Distance (cm)
Left	
Right	

Is the distance of your blind spot in each eye about the same? _____

Activity 10: Auditory Acuity Test

Ear	Audible Distance (cm)
Left	
Right	

Is there any apparent difference between the two ears? _____

Activity 11: Sound Localization Test

Actual Location	Perceived Location
Directly below & behind head	
Directly behind head	
Directly above head	
Directly in front of head	
Directly on the right side of head	
Directly on left side of head	

Is there any apparent difference between the two ears? _____

Activity 12: Correlation between Sense of Taste and Smell

Attempt	Actual Life Saver Flavor	Guessed Flavor While Holding Nose	Guessed Flavor After Releasing Nose
1			
2			
3			
4			
5			

Based on your results, would you say that smell affects the flavor of the Life Saver candy?

_____

Activity 14: Lab Review

1. What is the middle layer of the skin? _____
2. What type of sensory receptor detects temperature? _____
3. In what layer of the skin are most cutaneous sensory receptors found? _____
4. What is the innermost layer of the eye that has cones and rods? _____
5. Which photoreceptor detects color vision? _____
6. What eye structure contains smooth muscle that controls the size of pupil? _____
7. Which humor is jelly-like and maintains eye shape? _____
8. What structure of the ear is responsible for transforming vibrations into nervous signals? _____
9. What structures of the ear are responsible for maintaining balance? _____
10. What is another term for eardrum? _____
11. In what structure are the five taste receptors clustered together? _____