

## BIOLOGY 11 - PRE-LAB EXERCISE

# 13

Name:

Lab Day & Time:

## HUMAN SENSES

**Review Chapter 12.1 and the Introduction to the lab on Human Senses and answer the following questions:**

What is the difference between a stimulus and a sensor/receptor? Give an original example to help illustrate your point.

Name a few different types of receptors classified according to their stimulus.

**Review Activity 1A in the Lab on Human Senses and answer the following questions:**

Describe the experiment that you will be doing in this activity.

Describe a specific sensor and a perception that you may experience in Activity 1A.

**Review Chapter 12.1 in your text and Activity 1B in your lab and answer the following questions:**

What is sensory/receptor adaptation?

How is sensory adaptation demonstrated in Activity 2 of the Human Senses Lab?

**Review Chapter 12.4 and Activity 3 in the Human Senses lab and answer the following questions:**

What type of sensory receptor detects sound waves:

What will you be testing for in Activity #3 and how will you go about testing for it?

**Review Chapters 12.6 and Activity 4 in your lab and answer the following questions:**

What is the retina and what are the two main types of photoreceptors in the retina?

What is the difference between farsightedness and nearsightedness?

What causes astigmatism?

Name at least 4 things you will be testing in this activity.

- 1.
- 2.
- 3.
- 4.

**Review Chapters 12.5 in the text and Activity 6 in your lab and answer the following questions:**

How does the inner ear function in maintaining your balance?

## POST-LAB ASSESSMENT

### LAB # 13 - HUMAN SENSES

Draw a diagram detailing the pathway of a response to a stimulus by the nervous system. Include and example of a stimulus and a response.

Sensory receptor cells in the skin are densely packed in certain areas. Why are they not densely packed all over?

What can you expect to happen to your short-distance vision as you get older, and why?

What is the “Blind spot”?

Following an eye test your doctor tells you that you have “20/20” vision, you know that this is good, but what does it actually mean?

Ludwig van Beethoven became deaf by the age of 30. However, he could “hear” by placing a stick between his piano and the bone behind his ear. How did this allow him to hear, and what kind of deafness did he have?