Sensation Packet 4 A

1. Sensory System:

Step by step……..

A: Accessory Structure:

B: Transduction:

(coding)

C: Happens through Sensory Receptors:

D: Nerves send Message to Brain:

E: Brain Receives in thalamus then brain makes sense of the message PERCEPTION

Sound has physical as well as psychological Dimensions:

Physical: Psychological: :

Amplitude: Loudness:

Frequency: Pitch:

Wavelength: Timbre (tamber):

Examples from class:

How does sound get in??

The Ear:

Auditory Acessory Structure:

Vibration:

Pinna:

Middle Ear:

Cochlea:

Basilar Membrane:

Auditory Nerve

Flowchart: Complete using diagram on page 114 and as a guide

Vibration 🡪 PINNA \_\_\_\_ \_\_\_\_\_\_\_\_\_🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪Incus 🡪 Semicircular Canals 🡪 Cochlea 🡪 \_\_\_\_\_\_\_\_\_\_\_ 🡪 Thalamus -🡪\_\_\_\_\_\_\_\_\_\_\_\_

What causes deafness?

Place Theory:

Frequency-Matching Theory:

Vision:

See Visible Spectrum on page 119. Light is broken into visible light waves. At Ultraviolet levels waves move slow at Infrared waves move fast.

Light:

Eyes: Accessory Structure for vision:

Cornea:

Pupil:

Lens:

Iris:

Retina:

(fovea)

Ganglion Cells:

Optic Nerve:

Vision Transduction:

Photoreceptors:

Rods:

Cones: C C C

Photopigments:

Class Demonstration Cones 1:

Class Demonstration Cones 2:

Color Vision:

4B Sensation (smell, taste, touch)

Sense of Smell: Olfaction

Accessory Structures: (nose, mouth, upper throat)

1000 different receptors (in other words 1000 distinct types of cells

9 million neurons < dogs 25 million

The Question of Pheromones>>>>>>>

Animals can detect Pheromones:

Humans????

Vomeronasal organ:

Odor types:

Gustation: Sense of Taste:

Papallae:

Supertasters….

Tastes we can detect:

Capsaicin

What is Flavor???

Sense of Touch:

Pressure:

Temperature:

Pain:

Gate Control Theory

A-Delta fibers

C-fibers:

Analgesia:

Acupuncture:

Class demonstration:

Kinesthetic:

Vestibular:

Synthesia