

# Chapter 4: Sensation and Perception Cheat Sheet by jhundal via cheatography.com/25038/cs/17769/

study of how physical stimuli

#### Sensation and Perception

sensation stimulation fo sense organs

perception selection, organization and interpretation of sensory input

#### Information Processing in the Retina

receptive the retina area that when field of stimulated affects firing of visual light that cell light in the increases firing rate center of receptive field light in the decreases firing rate outside of receptive field occurs when neural activity lateral antagonism in a cell opposes activity in surrounding cells

#### Perceiving Forms, Pattern and Objects

Feature process of detecting Analysis specific elements in visual input and assembling them in to a more complex form bottom up individual to whole top down whole to elements phi illusion of movement phenomenon created by presenting visual stimuli in rapid success gestalt how the visual system principles organizes a scene into discreet forms

### Theories of Hearing

place	perception pitch corresponds to
theory	the vibration of different places
	along the basilar membrane
frequency	perception of pitch corresponds
theory	to the rate/ frequency at which
	the entire basilar membrane
	vibrates

#### **Taste and Smell**

cilia receptive for smell in nose

#### **Psychophysics**

psycho-

physics are translated into psychological experience

Signal the detection of stimuli involves decision processes along as

Theory sensory processes which are both influenced by a variety of factors besides stimulus intensity

#### Vision and the Brain

two magnocellular and parvocchannels ellular

#### Perceiving Depth or Distance

I Cicciving L	1 Crociving Departor Distance		
binocular depth cues	clues about distance based on the differing views of hte two eyes		
retinal disparity	refers to the fact that object within 25 feet project to slightly different locations on the right and left retinas so each eye sees a slight different view of the object		
conver- gence	involves sensing the eye converging towards each other as they focus on closer objects		
monocular depth cues	clues about the distance move across the retina at different rates		
motion parallax	images at different distances move across the retina at different rates		
pictorial	cues about distance that can		

be given i na flat picture

#### Other Senses

kinaes- monitors the position of the thetic various parts of the body system

vestibular responds to gravity and keeps system you informed of your body's location in space

#### Sight

amplitude brightness
wavelength perception of color

#### Information Processing in the Visual Cortex

feature neurons that respond selectdetectors ively to a very specific features of more complex stimuli

#### viewing the world in color

wavelength	hue
amplitude	brightness
purity	saturation
subtractive color mixing	works by removing some wavelngth of light, leaving less light than originally there
additive color mixing	works by superimposing lights, putting more light in the mixture than exists in any one light by itself
trichromatic theory	color vision holds that the human eye has 3 types of receptors with differing sensitivities to different light wavelengths
opponent process theory	color vision holds that colour perception depends on receptors that make antago- nistic responses to three pairs of colour



By **jhundal** cheatography.com/jhundal/

Published 3rd November, 2018. Last updated 3rd November, 2018. Page 1 of 2.

depth

cues

Sponsored by Readable.com Measure your website readability! https://readable.com



# Chapter 4: Sensation and Perception Cheat Sheet by jhundal via cheatography.com/25038/cs/17769/

Hearing	
wavelength	frequency or hertz
amplitude	decibels
external ear	vibrations of air
middle ear	vibration of movable bones
inner ear	waves in a fluid
pinna	sound collecting cone

## Perceiving Sources of Sound

most important for finding loudness source of sound and timing

Touch	
receptive field for touch	when touched neurons fire to the brain alerting it
pain has two pathways to the brain	slow and fast
gate control theory	incoming pain sensations must pass through a "gate" i nteh spinal cord that can be closed, thus blocking ascending pain signals



By **jhundal** cheatography.com/jhundal/

Published 3rd November, 2018. Last updated 3rd November, 2018. Page 2 of 2. Sponsored by **Readable.com**Measure your website readability!
https://readable.com