

**CHAPTER 3**

zygote  
 chromosomes / genes / DNA  
 glial cells  
**PARTS OF A NEURON**  
 action potential  
 all-or-none law  
 myelin sheath  
 synaptic transmission - neurotransmitters  
 excitatory/inhibitory synapses  
 neuropeptides  
 CNS, PNS, autonomic systems  
 subparts of the nervous system  
 sympathetic/parasympathetic system  
 endocrine system / hormones / pituitary gland  
 aphasia - Broca's area / Wernicke's area  
 brain imaging techniques  
 hindbrain/midbrain/forebrain  
 pons / medulla / cerebellum  
 reticular formation  
 thalamus  
 limbic system  
     amygdala  
     hypothalamus  
     hippocampus  
 occipital lobe – visual cortex  
 parietal lobe – sensory cortex  
 frontal lobe - motor cortex  
 temporal lobe – auditory cortex  
 right/left hemisphere - corpus callosum  
 Sperry/Gazzaniga - split-brain research

**CHAPTER 5**

sensation and perception  
 sensory receptors  
 thresholds – absolute/difference (JND)  
 Weber's Law  
 sensory adaptation  
 structure of the eye  
 retina / rods and cones / blind spot / fovea  
 dark adaptation  
 presbyopia / myopia / hyperopia  
 glaucoma / cataracts / astigmatism  
 color theories  
 color blindness – monochromatic/dichromatic  
 feature detectors  
 gestalt principles  
**DEPTH PERCEPTION**  
 binocular cues – convergence / retinal disparity  
 monocular cues  
     accommodation / overlap /height  
     texture gradient / linear perspective  
     aerial perspective / relative size

light and shadow / relative motion  
 Eleanor Gibson – the visual cliff  
 size/color/brightness/shape constancy  
 optical illusions  
 cultural differences in optical illusions  
 parts of the ear  
 frequency and pitch perception  
 decibel scale  
 hearing problems – conduction deafness  
     nerve deafness / stimulation deafness  
     tinnitus  
**OLFACTION (sense of smell) and TASTE**  
 Lock-and-key theory  
 Pheromones  
 anosmia  
 taste buds / taste receptors/ ageusia  
 somesthetic senses  
     skin senses  
     kinesthesia  
     vestibular system  
 phantom limb  
 ESP (types of) / parapsychology

**CHAPTER 6**

consciousness  
 circadian rhythms  
 jet lag  
 melatonin / tryptophan  
 why we sleep (theories)  
 stages of sleep/EEG  
 Nathaniel Kleitman - REM and NREM sleep  
 theories of dreaming  
 sleep deprivation / national sleep debt  
 sleep problems – sleepwalking / sleeptalking  
     nightmares / night terrors  
     narcolepsy / sleep apnea  
     insomnia / hypersomnia / snoring  
 Franz Mesmer - hypnosis  
**DRUGS**  
 dependence / withdrawal  
 stimulants  
     amphetamines  
     caffeine  
     cocaine  
     tobacco  
 depressants  
     alcohol  
     tranquilizers  
     opiates  
 hallucinogens  
 marijuana  
 harm reduction