Ultimate Study Guide for AP Psychology

*Unit numbers are based on the College Board outline...not necessarily the order we learned about them in class

2019-2020 Exam

Tuesday, May 19th, 11am, Online submission at home

2 FRQS:

	#1 FRQ (55% of score)	#2 FRQ (45% of score)
Time allowed (+ 5 mins to submit)	25 mins	15 mins
Type of question	Applying concepts from multiple units to a prompt	Analyze and interpret research data and design (think variables, charts, ethics, etc.)

Since this is at home, will it be open notes?

- Technically, yes, but if you look up every term you will run out of time! <u>Do NOT rely on this</u>. You will only have 25 mins for 6-8 terms to define and apply. You MUST go quickly.

General Tips for Exam Writing:

Look at the FRQ tips and tricks again.

DEFINE & APPLY!!!

- Tell what the term means, then apply it to the prompt
- No Intros/Conclusions
 - Just get right into it
- O DO NOT BULLET OR LETTER OR USE HEADINGS!!!!
 - Full sentences only!

Studying Suggestions:

- Follow along with me and my review schedule for our online school format
- Fill out this study guide *Note: highlights in GRAY are concepts we didn't get to but are still important
- Watch review videos (see below)

Resources:

- Your notes/charts/assignments
- Your textbook
- My Website!
 - o Individual unit pages & "AP Exam Resources" page
- Old Study Guides
- AP Psychology Tutorial Videos (new this year!)

Unit 1 – SCIENTIFIC FOUNDATIONS OF PSYCHOLOGY

Intro to Psychology

- ✓ 1.A- Recognize how philosophical and physiological perspectives shaped the development of psychological thought.
 - Descartes and dualism
 - Phrenology
 - Darwin and evolution and how that shaped psychology, etc.
- ✓ 1.B- Identify the research contributions of **major historical figures** in psychology

Names to know:

- Rene Descartes
- Wilhelm Wundt
- Edward Titchener
- William James
- Max Wertheimer
- Sigmund Freud
- John B. Watson
- Ivan Pavlov
- B. F. Skinner
- Abraham Maslow
- Charles Darwin
- Charles Cecil Sumner
- Mary Whiton Calkins
- Dorothea Dix
- G. Stanley Hall
- Margaret Floy Washburn
- 1.C- Describe and compare different theoretical approaches in explaining behavior.
 - Structuralism
 - Functionalism
 - Gestalt
 - Behaviorism
 - Psychoanalytic/Psychodynamic
 - Humanistic
 - Evolutionary approach
 - Biological Approach
 - Cognitive Approach
 - Biopsychosocial Approach
 - Sociocultural
- \checkmark 1.D- Recognize the strengths and limitations of applying theories to explain behavior.
 - Theories can't explain all behaviors in all people
- ✓ 1.E- Distinguish the different **domains** of psychology. (**TYPES** of psychologists)
 - *know the difference between a psychologist and a psychiatrist
 - Biological Domain
 - Cognitive Domain
 - Clinical Domain
 - Counseling Domain
 - Developmental Domain
 - Educational Domain
 - Experimental Domain
 - Industrial-Organizational (I/O) Domain

- Personality Domain
- Psychometric Domain
- Social Domain
- Positive Domain

RESEARCH METHODS

- ✓ 1.F Differentiate **types of research** with regard to purpose, strengths, and weaknesses. Strengths/Weaknesses and Definitions of:
 - Experiments
 - correlational studies
 - survey research
 - tests
 - case studies
 - naturalistic observations
 - lab observations
 - longitudinal studies
 - cross-sectional studies
- \checkmark 1.G Discuss the value of reliance on **operational definitions** and measurement in behavioral research.
 - Why are operational definitions important?
- 1.H Identify independent, dependent, confounding, and control variables in experimental designs.
 - Independent variable
 - Dependent Variable
 - Confounding variable
 - Situation vs. participant-relevant confounding variables
 - Experimental vs. Control groups
- ✓ 1.I Describe how research design drives the reasonable conclusions that can be drawn.
 - Experiments are useful for determining cause and effect.
 - The use of experimental controls reduces alternative explanations
 - o The use of double blind and single blind methods
 - Random assignment is needed to demonstrate cause and effect.
 - Correlational research can indicate if there is a relationship or association between two variables but cannot demonstrate cause and effect. *** Correlation does NOT equal causation!!!***
- ✓ 1.J Distinguish between **random assignment** of participants to conditions in experiments and **random selection** of participants, primarily in correlational studies and surveys.
 - Sampling
 - Population
 - Representative sample (does your sample represent the larger group you're studying?)
 - Random SELECTION (selecting people to study/survey)

Vs.

- Random ASSIGNMENT (in an experiment -everyone gets equal chance of being in control or experimental group)
- 1.K- Predict the validity of behavioral explanations based on the quality of research design.
 - Confounding variables limit confidence in research conclusions.
 - Like....if your experimental basketball method is only tested on the tall, varsity team and not the shorter team....can we really say the method worked?
 - Participant Bias
 - o Placebo effect
 - Hawthorne effect

- **Experimenter Bias**
 - Pygmalion effect (Rosenthal study with "bloomer" students and teachers' treatment of them)

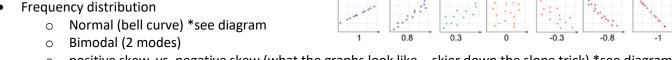
1.L Apply Basic descriptive statistical concepts, including interpreting and constructing graphs and calculating simple 99.74 descriptive statistics.

Measure of central tendency (where does the data "center"?)

- Mean, median, mode
- Variation (how much does the data vary?)
 - Range
 - Standard deviation
 - definition
 - Z-score *see diagram

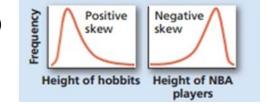


- for correlations only
- r = -1..... r = 0..... r= +1
- interpret a scatter plot graph
- - positive skew vs. negative skew (what the graphs look like skier down the slope trick) *see diagram



Standard

- 1.M Distinguish the **purpose** of <u>descriptive statistics</u> and <u>inferential statistics</u>.
 - Descriptive describes the data (above measures like standard deviation)
 - Inferential infers what it means
 - Statistically significant? ($p \le 0.05$ is significant)



95.44

68.26

34.13% 34.13%

13.59%

13,59%

2.15%

- 1.N Identify how ethical issues inform and constrain research practices.
 - Institutional Review Board (IRB)
 - They look over research proposals to make sure they are ethical
- 1.0 Describe how **ethical and legal guidelines** protect research participants and promote sound ethical practice.
 - Those provided by the American Psychological Association and Federal regulations
 - Coercion
 - Informed consent
 - Anonymity
 - Confidentiality
 - Debriefing
 - Confederate
 - No (or minimal in rare circumstances) psychological or physical harm
 - Institutional Animal Care and Use Committee (IACUC)
 - Rules around animal use in psych experiments
 - These outline rules on how animals are obtained, cared for, if it is necessary to use them, best methods of euthanasia if necessary, etc.

Unit 2 – BIOLOGICAL BASES OF BEHAVIOR (BioPsych)

Interaction of Heredity and Environment

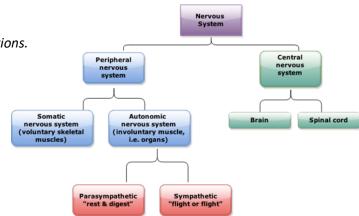
- ✓ 2.A Discuss psychology's abiding interest in how heredity, environment, and evolution work together to shaper behavior.
- ✓ 2.B Identify key research contributions of scientists in the area of heredity and environment. (Nature/Nurture)
- ✓ 2.C Predict how traits and behavior can be selected for their adaptive value. (evolutionary psych)
 - Evolutionary Psych and Genetics
 - Darwin's influence on psychology
 - Key components of evolutionary psych
 - Looking for universal traits
 - Theorizing why they might be adaptive for our survival
 - Minnesota Twin Study/ twin studies
 - What they show us about nature vs. nurture

The Endocrine System

- ✓ 2.D Discuss the effect of the endocrine system on behavior.
 - Hormones!
 - Adrenal hormones
 - Sex hormones
 - o melatonin

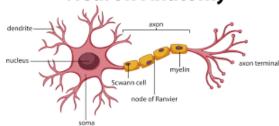
Overview of the Nervous System and the Neuron

- ✓ 2.E Describe the nervous system and its subdivisions and functions.
 - Central Nervous System (brain and spinal cord)
 - peripheral nervous system
 - o somatic nervous system
 - sensory system (w/ afferent neurons)
 - motor system (w/ efferent neurons)
 - autonomic nervous system
 - sympathetic nervous system
 - parasympathetic nervous system



- \checkmark 2.F Identify basic processes and systems in the biological bases of behavior, including parts of the **neuron**.
 - <u>neuron</u> (order of parts in neural transmission....be able to locate parts on neuron diagram)
 - dendrite
 - o soma
 - o axon
 - myelin sheath
 - terminal buttons (or terminal branches)
 - synapse
 - o afferent neurons/ efferent neurons/ interneurons

Neuron Anatomy



Neural Firing

- ✓ 2.G Identify basic process of transmission of a signal between neurons.
 - resting potential
 - action potential
 - all-or-nothing rule
 - mirror neurons

- neurotransmitters
 - excitatory/inhibitory (definition of)
 - agonists/antagonists (definition of)
 - o functions of:
 - Acetylcholine
 - Norepinephrine
 - Dopamine
 - Serotonin
 - GABA
 - Glutamate
 - Endorphins

Influence of Drugs on Neural Firing

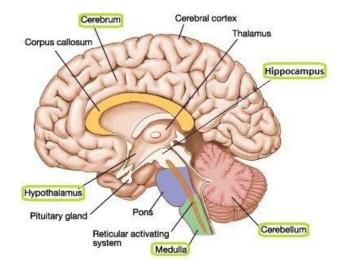
- 2.H Discuss the influence of drugs on neurotransmitters.
 - Agonist
 - Antagonist
 - affect drugs have on neurotransmitters
 - o (which drug category increases GABA? Blocks dopamine? Sharp increase then decrease in serotonin?)

The Brain

- \checkmark 2.1 Describe the nervous system and its **subdivisions** and functions **in the brain.** know basic functions and locations
 - hindbrain
 - o medulla
 - o pons
 - o cerebellum
 - Reticular Formation
 - forebrain
 - o limbic system
 - thalamus
 - hypothalamus
 - amygdala
 - hippocampus
 - cerebral cortex
 - o hemispheres
 - left hemisphere
 - right hemisphere
 - o brain lateralization (or "localization of function"....what does each hemisphere do?)
 - corpus callosum
 - lobes (frontal, parietal, temporal, occipital)
 - association areas (Broca's area, Wernicke's area)



• Gazzaniga and Sperry



Tools for Examining Brain Structure and Function

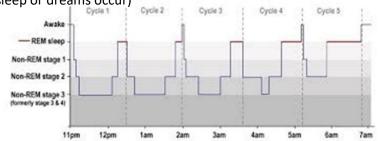
- ✓ 2.K Recount historic and contemporary research strategies and **technologies** that support research.
- ✓ 2.L Identify the contributions of **key researchers** to the development of tools for examining the brain.
 - accidents (Phineas Gage with the rod through his skull)
 - lesioning
 - TMS
 - EEG
 - CT scan
 - MRI scan
 - PET scan
 - fMRI

The Adaptable Brain

- ✓ 2.M Discuss the role of **neuroplasticity** in traumatic brain injury.
 - neuroplasticity definition
 - Girl with half her brain
 - Younger you are, more adaptable/plastic your brain is
- ✓ 2.N Identify the contributions of **key researchers** to the study of neuroplasticity.
 - Gazzaniga, Ramachandran
- ✓ 2.0 Describe various states of consciousness and their impact on behavior
 - Levels of consciousness
 - O Conscious, preconscious, subconscious, nonconscious, unconscious
 - Theories of hypnosis
 - Social Role-Playing/ Social-Cognitive Theory
 - Hypnosis as Dissociation
- ✓ 2.P Identify the major psychoactive **drug categories and** classify specific drugs, including their psychological and physiological **effects**.
 - Depressants
 - Stimulants
 - Hallucinogens
- ✓ 2.Q Discuss drug dependence, addiction, tolerance, and withdrawal.
 - Difference between these
- \checkmark 2.R Identify the contributions of major figures in consciousness research.
 - Freud's ideas of conscious levels

Sleeping and Dreaming

- ✓ 2.S Discuss aspects of sleep and dreaming.
 - Sleep stages (know the general cycle and when deep sleep or dreams occur)
 - o NREM1
 - o NREM2
 - o NREM 3
 - o REM
 - ✓ Theories of Sleep/Dreaming (activation-synthesis)
 - ✓ Major symptoms of sleep disorders:
 - sleep apnea
 - narcolepsy

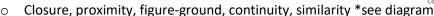


Unit 3 – SENSATION AND PERCEPTION

Principles of Sensation

- √ 3.A Describe general principles of organizing and integrating sensation to promote stable awareness of the external world.
 - Bottom-up processing
 - Top-down processing
 - Depth perception
 - o Binocular depth cues
 - Retinal disparity
 - Retinal convergence
 - Monocular depth cues
 - Overlap
 - Gradient/texture
 - Relative size
 - Linear perspective
 - Aerial perspective















- ✓ 3.B Discuss basic principles of sensory transduction, including absolute threshold, difference threshold, signal detection, and sensory adaptation.
 - Difference threshold
 - Absolute threshold
 - Signal detection theory
 - Sensory habituation
 - Sensory adaptation
- ✓ 3.C Identify the research contributions of major historical figures in sensation and perception.
 - Weber, Fechner, Wiesel, Hubel, Gibson and Walk (Visual Cliff study), Turnbull (Kenge and perception)

Principles of Perception

- √ 3.D Discuss how experience and culture can influence perceptual processes.
 - Perceptual set/ top-down processing/ our schemas (our expectations influence how we perceive things)
 - Perceptual Constancies (shape, size, color)
 - o Turnbull study with Kenge in Africa
- ✓ 3.E Discuss the role of attention in behavior.
 - Cocktail party effect
 - Divided vs. focused attention
 - Change blindness

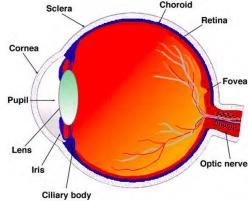
Visual Anatomy

- √ 3.F Describe the vision process, including the specific nature of energy transduction, relevant anatomical structures, and specialized pathways in the brain for each of the senses.

 Sclera

 Choroid

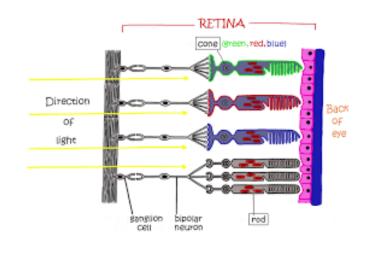
 Chor
 - What is light?
 - why we see color
 - how light waves travel through eye and get transduced
 - major eye anatomy
 - (including rods and cones see diagrams)
 - feature detectors in occipital lobe in brain
 - why we have a blind spot



- trichromatic color theory
- opponent-process color theory
- after images and why they occur

√ 3.G Explain common sensory conditions.

- Color-blindness
- Synesthesia
- Conduction vs. nerve deafness
- Phantom limb syndrome
- CIPA (congenital insensitivity to pain)
- Sensory-conflict theory (motion sickness)



Visual Perception

- ✓ 3.H Explain the role of **top-down processing** in producing vulnerability to **illusion**.
 - Our expectations lead us to interpret things a certain way, even though it might not actually be the case (how illusions work)

Auditory Sensation and Perception

- ✓ 3.1 Describe the hearing process, including the specific nature of energy transduction, relevant anatomical structures, and specialized pathways in the brain for each of the senses.

 Outer ear Middle ear Inner

 Outer ear Middle ear Middle ear Inner

 Outer ear Middle ear Middle ear Inner

 Outer ear Middle ear Middle ear Middle ear Inner

 Outer ear Middle ear Mi
 - sound waves and how they're measured
 - how sound travels through the ear and is transduced
 - major ear anatomy (see diagram)
 - place vs. frequency theories of pitch
 - hearing in the temporal lobe of brain



Chemical Senses

- ✓ 3.J Describe **taste and smell** processes, including the specific nature of energy **transduction**, relevant **anatomical** structures, and specialized pathways in the brain for each of the senses.
 - how taste and smell are connected
 - taste buds
 - cilia
 - olfactory bulb
 - gustation
 - tastants
 - odorants

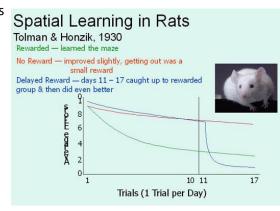
Body Senses

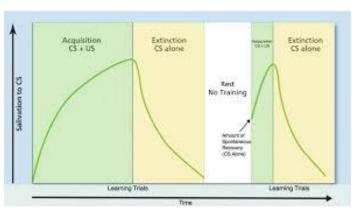
- ✓ 3.K Describe **body sensory processes**, including the specific nature of energy **transduction**, relevant anatomical structures, and specialized pathways in the brain for each of the senses.
 - Afferent and efferent pathways
 - visceral vs. somatic pain
 - gate-control theory of pain
 - kinesthetic sense
 - vestibular sense
 - sensory-conflict theory and how motion sickness works

UNIT 4 - LEARNING

Introduction to Learning

- √ 4.A Identify the contributions of key researchers in the psychology of learning.
 - Pavlov (dogs)
 - Watson (Little Albert)
 - Garcia (effect)
 - Rescorla
 - Thorndike (law of effect)
 - Skinner (operant cond. pigeons)
 - Tolman (rats and cognitive maps)
- ✓ 4.B **Interpret graphs** that exhibit the results of learning experiments
 - See diagrams

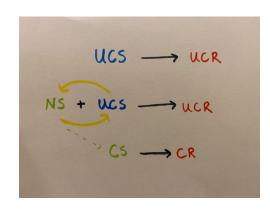




- √ 4.C Describe the essential characteristics of insight learning, latent learning, and social learning.
 - Kohler insight (chimpanzees and "aha" moments)
 - Tolman latent (rats learning maze...but info "hidden" until needed)
 - Bandura social (Bobo doll learning from watching others)
- √ 4.D Apply learning principles to explain emotional learning, taste aversion, superstitious behavior, and learned helplessness.
 - Watson emotional learning (Little Albert classically conditioned fear)
 - Garcia taste aversion (classical cond. to avoid foods after bad experience)
 - Skinner superstition (pigeon experiment operant cond. rewarded for random beh.s)
 - Seligman learned helplessness (dogs getting shocked...not moving when they could)
- √ 4.E Provide examples of how biological constraints create learning predispositions.
 - Instinctive drift some things can't be trained out of animals
 - Phobias of dangerous things are common meant to protect us

Classical Conditioning

- ✓ 4.F Describe basic classical conditioning phenomena.
 - Unconditioned stimulus
 - Unconditioned response
 - Neutral stimulus
 - Conditioned stimulus
 - Conditioned response
 - Acquisition
 - Extinction
 - Spontaneous recovery
 - Stimulus generalization vs. Stimulus discrimination
 - Higher-order conditioning



4.G Distinguish general differences between principles of classical conditioning, operant conditioning, and

observational learning.

o See diagram

Classical vs Operant conditioning				
	Classical conditioning	Operant conditioning		
Nature of response	Involuntary (reflexive)	Voluntary (usually) but can be both – Vol & Involuntary		
Timing of Stimulus	Precedes the response	After the desired response		
Timing of Response	After the stimulus	Before the stimulus		
Role of learner	<u>Passive</u>	<u>Active</u>		

Operant Conditioning

- ✓ 4.H Predict the **effects of operant** conditioning.
 - Positive Reinforcement
 - Negative Reinforcement
 - Positive Punishment
 - Negative Punishment
- ✓ 4.1 Predict how practice, schedules of reinforcement, other aspects of reinforcement, and motivation will influence quality of learning.
 - primary vs. secondary reinforcer
 - generalized secondary reinforcer
 - shaping vs. chaining
 - premack principle
 - continuous vs. partial reinforcement
 - Schedules of Reinforcement (see diagram)

Fixed Variable Completion of a constant Completion of a changing Ratio number of number of responses responses Reinforces the Reinforces the first response first response Interval after a constant after a changing amount of time amount of time

Social and Cognitive Factors in Learning

- ✓ 4.J Suggest how behavior modification, biofeedback, coping strategies, and self-control can be used to address behavioral problems.
 - Behavior Modification
 - o token economy
 - Applied Behavior Analysis (ABA)

UNIT 5 – COGNITIVE PSYCHOLOGY

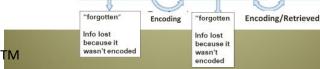
Introduction to Memory

- ✓ 5.A Compare and contrast various **cognitive processes**.
 - Effortful vs. Automatic processing *Stroop effect
 - Deep vs. shallow processing
 - Deep = encoding meaning (semantic encoding)
 - Shallow = encoding look or sound of something only (visual or acoustic encoding)
 - Selective vs. divided attention
 - Metacognition (thinking about your own thinking)
- √ 5.B Describe and differentiate psychological and physiological systems of memory.
 - 3 **processes** of memory
 - Encoding, storage, retrieval (more below)
 - <u>Computer metaphor</u>:
 - Encoding = typing document on computer
 - Storage = hitting "save"
 - Retrieval = opening the document later
 - 3 box model of memory
 - Sensory memory (echoic, iconic)
 - Short-term memory (STM)
 - Long-term memory (LTM)
 - STM/Working Memory model
 - Central executive
 - Phonological loop
 - Visual-spatial sketchpad
 - Know the hippocampus in brain helps convert STM to LTM
- Information from environment

 Sensory memory 1. Large capacity 2. Contains sensory information 3. Very brief retention of images (up to 1/2 second for visual; 2 seconds for redeation of information 1. Involved in conscious processing of information or information 1. Information or information 1. Information or informati

3 Box/Info Processing/Multi Store

Model of Memory



- √ 5.C Identify the contributions of key researchers in cognitive psychology.
 - Noam Chomsky (language acquisition device)
 - Ebbinghaus (the forgetting curve)
 - Kohler (insight learning with chimps)
 - Elizabeth Loftus (misinformation effect/ problems with eyewitness testimony)
 - Bartlett (memory not a recording device War of the Ghosts study)
 - George A. Miller (STM "magic number" → 7 +/- 2 item limit)

Encoding

- \checkmark 5.D Outline the principles that underlie construction and **encoding** of memories.
 - Encoding = changing sensory info into something the brain can use/interpret (getting it into memory)
 - Encoding can only happen if you pay attention
 - Some encoding takes work (effortful processing), some doesn't (automatic processing)
 - Visual encoding is usually superior to auditory encoding
 - Tips to encode things into memory are under section 5.G

Storing

- ✓ 5.E Outline the principles that underlie effective **storage** of memories.
 - Storing = retaining information in your memory
 - Sensory memory first stop for sensory information coming in
 - Shallow processing (iconic = visual / echoic = auditory)
 - Very short retention (1/2 to 2 seconds)
 - STM a.k.a. working memory (what we use to currently process/think about something)
 - about a 30 second retention
 - o Info in STM needs to be encoded into LTM to be used later
 - George Miller (we can only hold 7 +/- 2 objects in our STM at a time)

- o LTM
 - o has an indefinite retention (most LTMs are there forever)
 - o LTMs can be retrieved back to STM to help us understand current situations
 - Types of LTMs:
 - Explicit memory (a.k.a. declarative memory)
 - Episodic
 - Semantic (facts)
 - Implicit memory (a.ka. non-declarative memory)
 - Procedural memories
 - Information that has been primed
 - Prospective memory
 - Flashbulb memory
 - Eidetic/photographic memory VERY rare

Retrieving

- ✓ 5.F Describe strategies for retrieving memories.
 - Retrieving = getting memories OUT of storage to use them
 - Recall vs. recognition
 - Cue-dependent memory
 - State-dependent memory
 - Mood-congruent memory

Forgetting and Memory Distortion

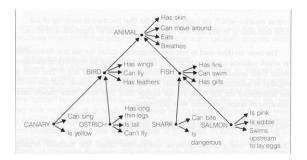
- ✓ 5.G Describe **strategies for memory improvement** and typical **memory errors**.
 - Ways to remember:
 - Chunking
 - Mnemonics
 - Maintenance rehearsal
 - o Elaborative rehearsal
 - Distributed practice
 - Ebbinghaus' forgetting curve
 - Tip of the tongue phenomenon
 - \circ Connected to semantic network theory (see diagram \rightarrow)
 - Serial position effect
 - o Combo of primacy and recency effect
 - Proactive vs. retroactive interference
 - Anterograde vs. retrograde amnesia
 - Reconstructed memories
 - Bartlett War of the Ghosts study
 - Loftus Misinformation effect

Biological Bases for Memory

- ✓ 5.H Describe and differentiate psychological and physiological **systems of short- and long-term memory**.
 - Hippocampus STM to LTM declarative memories
 - o Case study of H.M.
 - Cerebellum procedural memories
 - Long-term potentiation neuron connections strengthened with use

Introduction to Thinking and Problem Solving

- √ 5.1 Identify problem-solving strategies as well as factors that influence their effectiveness.
 - General thinking terms:
 - Concept vs. prototype
 - mental maps (Tolman)



- Problem solving strategies (and effectiveness):
 - Trial and error (not very efficient)
 - Algorithm (ensures a solution but may take a long time)
 - Insight (aha! Moments...Kohler's chimps)
 - Deductive reasoning
 - Inductive reasoning
 - Dialectical reasoning
 - Heuristics (quick but not always accurate)
 - availability heuristic
 - representativeness heuristic
 - *many others
- ✓ 5.J List the characteristics of **creative thought** and creative thinkers.
 - Divergent thinking (as opposed to convergent thinking)
 - Sternberg's 5 components of creativity
 - 1. Expertise
 - 2. Imaginative thinking skills
 - 3. Venturesome personality
 - 4. Intrinsic motivation
 - 5. Creative environment

Biases and Errors in Thinking

- ✓ 5.K Identify problem-solving strategies as well as factors that create **bias and errors in thinking**.
 - Mental set (type of convergent thinking) can get us stuck in a way of thinking
 - Functional fixedness
 - Confirmation bias
 - Belief bias/belief perseverance
 - Framing effect

Introduction to Intelligence

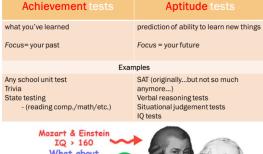
- ✓ 5.L Define intelligence and list characteristics of **how psychologists measure intelligence**.
 - Intelligence the ability to learn from one's experiences, acquire knowledge, and use resources effectively in adapting to new situations or problem solving.
 - Crystalized vs. Fluid intelligence
 - Flynn Effect
 - IQ formula →

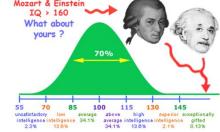
$$IQ = \frac{\text{mental age}}{\text{chronological age}} \times 100$$

- ✓ 5.M Discuss how **culture** influences the **definition of intelligence**.
 - Different cultures define intelligence in different ways
 - *Stereotype threat if you fear a stereotype might be made against you on a test, you may subconsciously perform worse because of the stress and prove it "true"
- ✓ 5.N Compare and contrast historic and contemporary **theories of intelligence**.
 - Spearman- g factor
 - Gardner multiple
 - Sternberg triarchic
 - Goleman emotional
- ✓ 5.0 Identify the contributions of **key researchers** in intelligence research and testing.
 - Above theorists AND....
 - Binet French IQ tests
 - Terman U.S. IQ tests (*racist motivations)
 - Galton factor analysis, using stats to come up with standardized scores

Psychometric Principles and Intelligence Testing

- ✓ 5.P Explain how psychologists design tests, including standardization strategies and other techniques to establish reliability and validity.
 - Reliable can it be repeated and get similar results?
 - Valid does it actually measure what you aim to test?
 - Face validity
 - Construct validity
 - Criterion-related validity
 - Concurrent validity
 - Predictive validity
 - Standardization
 - Achievement test (see diagram →)
 - Aptitude test
- ✓ 5.Q Interpret the meaning of scores in terms of the **normal curve**.
 - Normal distribution (see Unit 1 and diagram →)
- ✓ 5.R Describe relevant **labels** related to intelligence testing.
 - Gifted
 - Savant
 - Intellectual/cognitive disability





- \checkmark 5.T Debate the appropriate testing practices, particularly in relation to **culture-fair test** uses.
 - Maybe best culturally-fair tests don't have words or stories at all...just puzzles

Components of Language and Language Acquisition

- ✓ 5.S Synthesize how biological, cognitive, and cultural factors converge to facilitate acquisition, development, and use of **language**.
 - Building blocks of language:
 - o phonemes
 - o morphemes
 - o syntax
 - o semantics
 - pragmatics
 - Stages of language development:
 - 1. cooing
 - 2. babbling
 - 3. one-word (holographic speech)
 - 4. two-word (telegraphic speech)
 - 5. full sentences
 - Language acquisition theorists:
 - Chomsky
 - LAD, overgeneralization
 - Fernald
 - Parentese
 - Skinner
 - Conditioning
 - Critical period of language acquisition? (Genie case)
 - Linguistic relativity hypothesis (Whorf)

UNIT 6 – DEVELOPMENTAL PSYCHOLOGY

The lifespan and Physical Development in Childhood

- ✓ 6.A Explain the process of conception and gestation, including factors that influence successful pre-natal development.
 - Phases of fetal development
 - o Fertilization, germinal, embryonic, fetal
 - Teratogens
- ✓ 6.B Discuss the interaction of nature and nurture (including cultural variations). Specifically, physical development, in the determination of behavior.
 - Nature/nurture debate
- √ 6.C Discuss maturation of motor skills.
 - Cephalocaudal (head to toe growth)
 - Proximodistal (center of body and outward growth)
 - o Gross motor skills develop before fine motor skills

Social Development in Childhood

- ✓ 6.D Describe the influence of temperament and other social factors on attachment and appropriate socialization.
 - Thomas and Chess (temperament)
 - o Easy, difficult, slow to warm-up
 - Harlow
 - monkey experiment details
 - contact comfort
 - Ainsworth (&Bowlby)
 - o attachment styles
 - strange situation
 - secure
 - insecure-avoidant
 - insecure-ambivalent
 - effects of attachment types later in life
- ✓ 6.E Identify the contributions of major researchers in developmental psychology in the area of social development in childhood.
 - Bandura (observational learning)
 - Baumrind (parenting styles)
 - Lorenz (imprinting)
 - Harlow (contact comfort)
 - Ainsworth (attachment)
 - Freud (personality)
 - Erikson (social development...8 stages)
- ✓ 6.F Discuss the interaction of nature and nurture (including cultural variation), specifically social development, in the determination of behavior.
- ✓ 6.G Explain how parenting styles influence development.
 - Diana Baumrind
 - Authoritarian
 - Permissive Indulgent/Neglectful
 - Authoritative
 - importance of matching parenting style to temperament to form healthy attachments

Cognitive Development in Childhood

- ✓ 6.H Explain the Maturation of cognitive abilities (Piaget's stages, Information process).
 - Piaget
 - o assimilation
 - accommodation
 - how both of these work with schemas
 - Stages:
 - Sensorimotor
 - o infant reflexes
 - object permanence
 - o Preoperational
 - egocentric
 - Should develop...
 - theory of mind
 - conservation
 - Concrete Operations
 - o can conserve, reverse
 - o rule bound
 - Formal Operations
 - abstract thinking
 - Vygotsky
 - o ZPD
 - scaffolding
- ✓ 6.I Identify the contributions of major researchers in the area of cognitive development in childhood.
 - Piaget and Vygotsky

Adolescent Development

- 6.J Discuss maturational challenges in adolescence, including related family conflicts.
 - Teen identity development
 - James Marcia
 - Identity achievement
 - Identity foreclosure
 - Identity diffusion
 - Identity moratorium
 - Why family conflicts happen often at this age (see readings online)
 - Puberty (primary vs. secondary sex characteristics)

Adulthood and Aging

- 6.K Characterize the development of decisions related to intimacy as people mature.
 - Erikson's stages and ages (see chart next page)
- ✓ 6.L Predict the physical and cognitive changes that emerge through the lifespan, including steps that can be taken to maximize function.
 - More feelings of control lead to better health outcomes in seniors (study summary "Effects of Choice...")
 - Keeping mind active with mental puzzles helps stay sharp
- ✓ 6.M Identify the contributions of key researchers in the area of adulthood and aging
 - Erik Erikson

Moral Development

- √ 6.N Identify the contributions of major researchers in the area of moral development.
 - Kohlberg and Gilligan

- ✓ 6.0 Compare and contrast **models of moral development**.
 - Kohlberg
 - o Heinz Dilemma basics...what he looked for in answers
 - Preconventional
 - Conventional
 - Postconventional
 - Gilligan's criticisms (K. only focused on males)

Gender and Sexual Orientation

- \checkmark 6.P Describe how **sex** and **gender** influence socialization and other aspects of development.
 - Where gender roles and/or stereotypes develop
 - Research on influences on sexual orientation
 - What the Kinsey study was



Erikson's Psychosocial Stages Summary Chart



Stage	Basic Conflict	Important Events	Key Questions to be answered	Outcome
Infancy (0 to 18 months)	Trust vs. Mistrust	Feeding/ Comfort	Is my world safe?	Children develop a sense of trust when caregivers provide reliability, care and affection. A lack of this will lead to mistrust.
Early Childhood (2 to 3)	Autonomy vs. Shame and Doubt	Toilet Training/ Dressing	Can I do things by myself or need I always rely on others?	Children need to develop a sense of personal control over physical skills and a sense of independence. Success leads to feeling of autonomy, failure results in feelings of shame and doubt.
Preschool (3 to 5)	Initiative vs. Guilt	Exploration/ Play	Am I good or bad?	Children need to begin asserting control and power over the environment. Success in this state leads to a sense of purpose. Children who try to exert too much power experience disapproval, resulting in a sense of guilt.
School Age (6 to 11)	Industry vs. Inferiority	School/ Activities	How can I be good?	Children need to cope with new social and academic demands. Success leads to a sense of competence, while failure results in feeling of inferiority.
Adolescence (12 to 18)	Identity vs. Role Confusion	Social Relationships/ Identity	Who am I and where am I going?	Teens need to develop a sense of self and personal identity. Success leads to an ability to stay true to yourself, while failure leads to role confusion and a weak sense of self.
Young Adult (19 to 40)	Intimacy vs. Isolation	Intimate Relationships	Am I loved and wanted?	Young adults need to form intimate, loving relationships with other people. Success leads to strong relationships, while failure results in loneliness and isolation.
Middle Adulthood (40 to 65)	Generativity vs. Stagnation	Work and Parenthood	Will I provide something of real value?	Adults need to create or nurture things that will outlast them, often by having children or creating a positive change that benefits other people. Success leads to feelings of usefulness and accomplishment, while failure results in shallow involvement in the world.
Maturity (65 to death)	Ego Identity vs. Despair	Reflection on life	Have I lived a full life?	Older adults need to look back on life and feel a sense of fulfillment. Success at this state leads to a feeling of wisdom, while failure results in regret, bitterness, and despair.

UNIT 7 – MOTIVATION, EMOTION, AND PERSONALITY

Theories of Motivation

- ✓ 7.A Identify and apply basic motivational concepts to understand the behavior of humans and other animals.
 - Instincts
 - Incentives
 - Needs vs Drives
 - Primary vs. secondary
 - Intrinsic vs. extrinsic motivation
 - Overjustification effect
 - Self-efficacy
 - Achievement motivation



and interest

Optimal performance

Impaired performance

High

ause of strong anxiety

Strong

- \checkmark 7.B Compare and contrast **motivational theories**, including the strengths and weaknesses of each
 - Evolutionary theory of motivation
 - Drive reduction theory
 - Homeostasis (see diagram above)
 - (Optimum) Arousal theory (including the Yerkes-Dodson law) (see diagram →)
 - McClelland's theory
 - o Needs for: affiliation, power, achievement
 - Maslow's hierarchy of needs theory
 - Cognitive dissonance theory (in social psych) we are driven to align our thoughts and behaviors. We feel uncomfortable when our beliefs about ourselves and actions don't line up, then we change our thoughts or actions to make them match.
- ✓ 7.C Describe research findings in specific motivations.
 - Hunger
 - Hypothalamus (hunger center)
 - Lateral hypothalamus makes you feel hungry
 - Ventromedial hypothalamus controls feeling full
 - Eating disorders (bulimia, anorexia)
 - Sex
- Sexual response cycle (excitement, plateau, orgasm, resolution)
- Kinsey study
- Social
 - o Affiliation
 - Ostracism
- ✓ 7.D Identify contributions of key researchers in the psychological field of motivation and emotion.
 - Darwin
 - Ekman universal expressions, micro-expressions
 - Schacter-Singer, James and Lange, Cannon-Bard
 - McClelland
 - Maslow

Specific Topic in Motivation

- √ 7.E Discuss the biological underpinnings of motivation, including needs, drives, and homeostasis.
 - See 7.A

Theories of Emotion

- √ 7.F Compare and contrast major theories of emotion
 - Evolutionary theories (primary emotions)
 - Paul Ekman's research on cross-cultural displays of emotion

- James-Lange Theory
- Cannon-Bard Theory
- Schachter two-factor theory
- Richard Lazarus's appraisal theory
- Joseph LeDoux's theory
- Facial feedback hypothesis
- ✓ 7.G Describe how **cultural influences shape emotional expression**, including variations in body language.

Stress and Coping

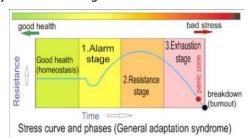
- ✓ 7.H Discuss theories of stress and the **effects of stress** on psychological and physical well-being.
 - General adaptation theory (see diagram →)
 - Alarm
 - Resistance
 - exhaustion
 - Stress-related illnesses
 - Heart disease
 - Ulcers
 - Weakened immune system
 - Lewin's motivation conflicts theory
 - Approach-approach
 - Avoidance-avoidance
 - Approach-avoidance
 - Unhealthy behaviors
 - Self-medicating

Introduction to Personality

- ✓ 7.1 Describe and compare **research methods** that psychologists use to investigate **personality**.
 - Case studies
 - Surveys
 - Personality inventories (see 7.P)
- ✓ 7.J Identify the contributions of **major researchers in personality theory**.
 - Adler
 - Bandura
 - Costa &McCrae
 - Freud
 - Jung
 - Maslow
 - Rogers

Psychoanalytic theories

- ✓ 7.K Compare and contrast the psychoanalytic theories of personality with other theories of personality.
 - <u>Freud</u>
 - o Conscious, preconscious, unconscious
 - o Id, ego, superego
 - Psychosexual stages of personality development
 - *fixations
 - Oral
 - Anal
 - Phallic (Oedipus complex, penis envy)
 - Latency
 - Genital
 - Defense mechanisms (see chart next page)





- Neo-Freudians (less sex-centered):
 - Horney womb envy
 - Jung archetypes
 - o Adler compensation
 - Erikson *see developmental

Behaviorism and Social Cognitive Theories of Personality

- ✓ 7.L Compare and contrast the behaviorist and social cognitive theories of personality with other theories of personality.
 - Bandura self-efficacy
 - Rotter locus of control

Humanistic Theories of Personality

- ✓ 7.M Compare and contrast humanistic theories of personality with other theories of personality.
 - Rogers
 - o real vs. ideal self (congruence)
 - o conditional vs. unconditional positive regard
 - Maslow
 - Self-actualization
- √ 7.N Speculate how cultural context can facilitate or constrain personality development, especially as it relates to self-concept.
 - Collectivistic versus individualistic cultures

Trait Theories of Personality

- 7.0 Compare and contrast trait theories of personality with other theories of personality.
 - Seen as most valid measurement of personality
 - McCrae and Costa
 - Big 5 Traits
 - O openness
 - C conscientiousness
 - E extraversion
 - A agreeableness
 - N neuroticism

Measuring Personality

- √ 7.P Identify frequently used assessment strategies, and evaluate relative test quality based on reliability and validity
 of the instruments.
 - Personality inventory
 - Like Myers-Briggs
 - Projective tests
 - Rorschach inkblots, TAT (thematic apperception test)

Projective Tests Psychoanalysts Rorschach Thematic Apperception Test Behavioral Assessments Direct observation Rating scales Frequency counts Personality Inventories Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	TYPE OF ASSESSMENT	MOST LIKELY USED BY
Rorschach Thematic Apperception Test Behavioral Assessments Direct observation Rating scales Frequency counts Personality Inventories Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	nterviews	Psychoanalysts, humanistic therapists
Thematic Apperception Test Behavioral Assessments Direct Observation Rating scales Frequency counts Personality Inventories Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Projective Tests	Psychoanalysts
Behavioral Assessments Direct observation Rating scales Frequency counts Personality Inventories Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Rorschach	
Direct observation Rating scales Frequency counts Personality Inventories Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Thematic Apperception Test	
Rating scales Frequency counts Personality Inventories Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Behavioral Assessments	Behavioral and social cognitive therapists
Frequency counts Personality Inventories Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Direct observation	
Personality Inventories Trait theorists Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Rating scales	
Sixteen Personality Factor Questionnaire (16PF) Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Frequency counts	
Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R) Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Personality Inventories	Trait theorists
Myers-Briggs Type Indicator (MBTI) Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Sixteen Personality Factor Questionnaire (16PF)	
Eysenck Personality Questionnaire (EPQ) Keirsey Temperament Sorter II	Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R)	
Keirsey Temperament Sorter II	Myers-Briggs Type Indicator (MBTI)	
	Eysenck Personality Questionnaire (EPQ)	
California Psychological Inventory (CPI)	Keirsey Temperament Sorter II	
	California Psychological Inventory (CPI)	

12 Defense Mechanisms: Sigmund Freud			
	Compensation: Strengthen one to hide another.		
2	Denial: Refuse to face a negative behavior.		
	Displacement: Take it out on someone else.		
4	Identification: Attach to something positive.		

- Introjection: Conform feelings for approval.Projection: See your faults & foibles in others.
- 6 Projection: See your faults & foibles in others
- 7 Rationalization: Excuse and justify mistakes.
- 8 Reaction Formation: Pretend you are different.
- **9 Regression:** Act much younger to feel better.
- **10 Repression:** Putting things into darkness.
- 11 Ritual & Undoing: Override negative with habit.12 Sublimation: Divert negative into acceptable.
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