BENCHMARK AP PREP

AP Psychology Units 1 & 2: Biological Bases & Cognition

New 5-Unit CED Print Workbook, Stimulus Drills & Practice Exams

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Built from the ground up for the redesigned 5-Unit College Board AP Psychology Course and Exam Description (CED). Together, Unit 1 (Biological Bases of Behavior, 15%-25%) and Unit 2 (Cognition, 15%-25%) represent **30% to 50% of your total AP exam score**.

Workbook Component	Coverage & Alignment	Pages
Part I: Unit 1 Guided Modules	Topics 1.1 - 1.6: Notes, Vector Diagrams, Research Labs & 18 Stimulus MCQs	7 - 30
Part II: Unit 2 Guided Modules	Topics 2.1 - 2.8: Notes, Cognitive Models, Design Tables & 24 Stimulus MCQs	31 - 62
Part III: New CED FRQ Workshop	Worked AAQ (6-pt) & EBQ (7-pt) Exemplars, Student Prompts & Scoring Rubrics	63 - 74
Part IV: Full Timed Practice Exam	40 Cumulative Stimulus MCQs + 1 Timed Exam AAQ + 1 Timed Exam EBQ	75 - 94
Part V: Complete Keys & Rationales	All Topic Keys + Option-by-Option (A)-(D) Exam Diagnostics + Error Tracker	95 - 116

WHY BACKWARD-DESIGNED PRACTICE WINS ON EXAM DAY

Every topic in this 116-page 8.5 x 11 print workbook follows Grant Wiggins and Jay McTighe's 3-Stage Understanding by Design (UbD) progression: Stage 1 locks transfer goals, Stage 2 establishes empirical data and FRQ evidence criteria, and Stage 3 guides active retrieval before timed simulation.

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QUALITY ASSURANCE & TRANSPARENT AI PRODUCTION NOTE

Curriculum scope, 3-Stage UbD blueprints, vector diagrams, and FRQ rubrics were designed and edited by Joshua Durey. Practice stems and structured study organizers were drafted with AI assistance from Stage-0 UbD specifications and independently verified by a separate cross-family blind solver model requiring 100% answer-key agreement prior to editorial sign-off.

CLASSROOM & INDIVIDUAL STUDY REPRODUCTION POLICY

Individual purchasers and classroom teachers may annotate this print workbook directly. Schools seeking projection slide decks, editable digital packets, and 1-click LMS quiz banks can visit **https://benchmark-ap.pages.dev**.

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RAPID-REVIEW ANCHOR // UNIT 1

Biological Bases of Behavior Reference Sheet

Neurotransmitter	Core Psychological Function	Excess / Deficit Clinical Link
Acetylcholine (ACh)	Motor muscle contraction, cortical attention & memory	Deficit linked to Alzheimer's dementia; blocked by curare
Dopamine	Reward prediction, motivation & basal ganglia movement	Excess activity in schizophrenia; deficit in Parkinson's
Serotonin	Mood regulation, emotional stability, sleep & appetite	Undersupply linked to depression; SSRIs block reuptake
GABA / Glutamate	Major CNS inhibitory (GABA) vs. excitatory (Glutamate)	GABA drop -> seizures/anxiety; Glutamate surge -> migraines
Norepinephrine	Sympathetic alertness, heart rate & arousal	Undersupply depresses mood; surge drives fight-or-flight
Endorphins / Sub. P	Endogenous opioid pain relief vs. pain transmission	Endorphins inhibit spinal pain gates; Substance P opens

Neuroimaging Tool	Type	Mechanism & Diagnostic Strength
EEG	Functional	Scalp electrodes track millisecond electrical waves (sleep stages, seizures).
CT / Structural MRI	Structural	X-ray slices (CT) or magnetic fields (MRI) reveal tumors, lesions, ventricles.
PET / fMRI	Functional	Glucose tracer (PET) or BOLD blood oxygen (fMRI) maps active brain regions.

RESEARCH METHODS & DATA LAB: SYMPATHETIC VS PARASYMPATHETIC ACTIVATION EFFECTS

In a study with 60 adults, heart rate and skin conductance were measured during stress (sympathetic activation) and relaxation (parasympathetic activation) phases. Participants gave informed consent and could withdraw anytime.

Group / Condition	n	Primary Measure	Secondary Measure
Stress Phase (Sympathetic)	30	Heart Rate (bpm)	Skin Conductance (S)
Relaxation Phase (Parasympathetic)	30	Heart Rate (bpm)	Skin Conductance (S)
Control (Baseline)	30	Heart Rate (bpm)	Skin Conductance (S)

Lab Analysis 1: Identify the independent and dependent variables in this study.

Lab Analysis 2: How is sympathetic activation operationally defined here?

Lab Analysis 3: What trend in heart rate would support sympathetic activation?

Lab Analysis 4: What ethical considerations ensure participant safety?

RESEARCH METHODS & DATA LAB: LIGHT EXPOSURE EFFECTS ON SLEEP CYCLE AND MEMORY

A study with 60 adults randomly assigned to bright or dim light before sleep. Sleep stages measured by EEG; memory tested next day. Ethics ensured informed consent and no harm.

Group / Condition	n	Primary Measure	Secondary Measure
Bright Light	30	REM duration (minutes)	Memory recall (%)
Dim Light	30	REM duration (minutes)	Memory recall (%)
Control (No Light)	30	REM duration (minutes)	Memory recall (%)

Lab Analysis 1: What is the independent variable in this study?

Lab Analysis 2: How is REM sleep operationally defined?

Lab Analysis 3: Which group showed the longest REM duration?

Lab Analysis 4: Were ethical standards adequately addressed?

RESEARCH METHODS & DATA LAB: WORKING MEMORY COMPONENTS AND RECALL ACCURACY

N=60 adults performed verbal and visual recall tasks under dual-task conditions. Ethics ensured informed consent and confidentiality. Measures included accuracy and reaction time.

Group / Condition	n	Primary Measure	Secondary Measure
Phonological Loop Task	20	Verbal recall accuracy	Reaction time (ms)
Visuospatial Sketchpad Task	20	Visual recall accuracy	Reaction time (ms)
Dual Task (Both Loops)	20	Combined recall accuracy	Reaction time (ms)

Lab Analysis 1: What is the independent variable in this study?

Lab Analysis 2: How is verbal recall accuracy operationally defined?

Lab Analysis 3: Does dual-task condition reduce recall accuracy compared to single tasks?

Lab Analysis 4: Were ethical standards like consent and confidentiality maintained?

RESEARCH METHODS & DATA LAB: IMPACT OF STEREOTYPE THREAT ON FLUID INTELLIGENCE SCORES

N=90 college students randomly assigned to stereotype threat or control. Administered fluid intelligence test twice, one week apart. Scores analyzed for reliability and group differences. Ethics ensured informed consent and debriefing.

Group / Condition	n	Primary Measure	Secondary Measure
Stereotype Threat	45	Fluid IQ Score (Time 1)	Fluid IQ Score (Time 2)
Control	45	Fluid IQ Score (Time 1)	Fluid IQ Score (Time 2)
Combined	90	Test-Retest Correlation	Mean Score Difference

Lab Analysis 1: What is the independent variable and dependent variable in this study?

Lab Analysis 2: How is fluid intelligence operationally defined in this experiment?

Lab Analysis 3: What trend would support stereotype threat affecting test scores?

Lab Analysis 4: What ethical considerations are important for this study?