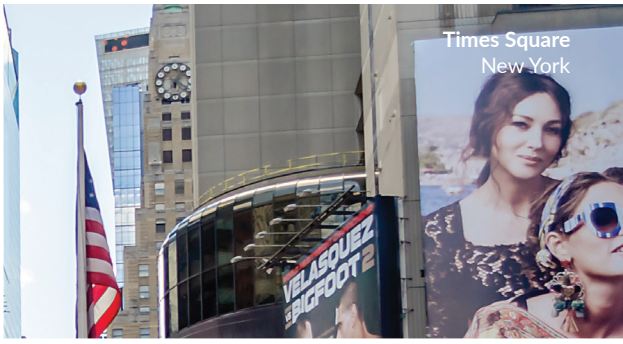
INTERACTIVE WORKBOOK & DIARY

PSYCHOLOGY

Level 690



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Ages 16–18
Grades 10–12

Psychology

Psychology, Interactive Workbook and Diary

By Jeffrey G. Corson

WORKBOOK & DIARY

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Let Me Introduce Myself

Why I Wrote This Book

Psychology is defined as the scientific study of behavior and mental processes. While it is easy to define psychology, we shouldn't let psychology define us. We must not forget to ask who created psychologists. I wrote this book to remind students that regardless of the myriad of research, discoveries, and terms that psychologists produce, the God of heaven and earth is responsible for it all.

As psychology professionals, we tend to pat ourselves on the back and feel self-important because we can use a term that accurately describes a behavior or a mental process. But our effort can be likened to the role of a junior photographer. Yes, we can be proud of observing beautiful images, but our accomplishments are wholly dependent on God's gifts. All we are really doing is capturing a tiny piece of what He already created. In other words, psychology is the study of God's wonderful creation.

Before I began reading each chapter in Myers' textbook *Psychology*, I simply asked God to show me what He wanted me to learn. When the true teacher is the Lord, every class can be special. You can ask God to teach you in all your courses, but let's start with this one.

Disclaimer

I do not pretend for one minute to be the sole authority on God's view of psychology. I am on a journey of following God and using God's blessings in order to bless others.

I am committed to asking the hard questions, being confident that Christ Jesus has the answers and that my faith in him will lead me to the truths he allows us to know. So take whatever you read in this book and line it up with God's Word. If my comments at any point do not line up, throw them out. This skill, more than any "knowledge" you might gain, is what I hope to help grow in you.

I hope my discussion questions and comments will balance the textbook with a more biblical perspective so you can practice thinking through and standing firm in your faith. This is the single most important aspect of your education because once you establish a strong faith foundation, you are free to succeed academically without the risk of falling into the pitfalls of higher education. I should know, I fell in a big one.

My Story

I grew up in a Christian home and gave my life to the Lord at an early age. I had a real relationship with the Lord in junior high, but I didn't grow that relationship in high school. I was, as Paul mentions in Ephesians, really an infant in Christ. While still very "moral," I prided myself as being a good kid and avoiding the major temptations of high school like drinking, smoking, and poor grades. But soon my lack of growth would be tested.

I went to college at an academically excellent but liberal school. When history and psychology professors questioned God, mocked Him, or didn't even consider His existence, my faith was not strong enough and I didn't know how to react. Picture me with the pathetic look of a deer in the headlights. In this environment, I could always find someone to point to and tell myself "now there is a real sinner." In my own eyes, I looked pretty good in comparison. But unfortunately, that errant line of thinking was a recipe for disaster. I justified my sinful ways and promptly wondered pretty far from God's will for my life.

Fortunately, God is merciful. Through a series of events, God got my attention and I took Him up on His offer for a new beginning. Life has since thrown me some pretty significant curve balls, yet those challenges have ultimately served to strengthen my faith rather than weaken it.

That leads me to the primary purpose of this book, to inoculate you in your faith. Just as immunizations introduce new bacteria in order for your body to learn to resist them, it is important for you to tackle difficult questions and prepare yourself now for the challenges you will face in college and in the workplace. God created us with amazing brains (which we will soon better appreciate) and we should never shy away from using them. Though some Christians are accused of refusing to think, let that never be true of you. In fact, it should be exactly the opposite; the more we think, the better prepared we will be to stand firm against challenges to our faith. Using our brains also allows us to multiply our appreciation of God's workmanship. In the photography metaphor, we saw that pressing the shutter button when you see something you like is fun. But merely capturing a picture of what God has created is nothing compared with the joy of taking a personal walk with the creator of the universe. Even so, it is not always an easy road.

—Jeffrey G. Corson ■

Note to Parents

The primary goal of this class is to help your student grow in his or her relationship with the Lord by learning more about how He made us. I hope your students will be able to better appreciate God's workmanship and understand how His Word has provided countless truths that science is just now beginning to confirm.

Additionally, it is my hope that this class will not only help your student prepare for the AP test, but will also reinforce his or her love of learning in a very social context. Throughout each chapter I give many exercises that require the student to work with others. I hope that many of these mini-experiments can be done with you, will be interesting, educational, and fun, and will serve as launching points for valuable discussions about eternal truths.

This curriculum is intended for the self-directed learner and does not require heavy (if any) oversight from the parent. However, I very much value parental involvement and I encourage the student to initiate discussions with his or her parents and to invite parental participation in the multitude of experiments/exercises. If you would like to look at the National Standards for High School Psychology Curricula from the American Psychological Association, they can be found at http://www.apa.org/ed/natlstandards.html.

A word of caution about the exercises: please ensure that your student can articulate the purpose of each experiment and what it illustrates. Although I hope students enjoy the exercises, it is more important that they learn from them.

Please note a warning regarding grading and tests. This is perhaps the best Advanced Placement class to start with because the class is rigorous, but still interesting and doable; success is very attainable. Because this is the first AP class for many students, however, they often receive a big reality check after the first test. Please be aware that it is not uncommon for students to get very low scores on the first few tests. It often takes them a while to bump up to the next level of preparation required for this class. But hang in there; it will better prepare them for life and college. These tests are even harder than the AP test, so if students make it through the whole class, they should be well prepared for the AP test at the end of the year. As referenced in the text, additional multiple-choice self-tests and other valuable learning tools can be found at http://www.macmillanlearning.com/Catalog/studentresources/MyersAP2e which can provide supplemental preparation/practice if desired.

I also give grace and latitude when grading the Daily Opportunity Quizzes (OQs). If students' answers show they completed and understood the reading for that section, I tend to give them the benefit of the doubt. If I ask a two-part question on the quiz, each part is worth a half point. I care about learning more than points.

I also bring in a newspaper clipping/online research article each day about new research or a current event related to psychology and I ask a question for extra credit. This helps students' OQ scores, but more importantly, gets them interested in research. It might be a good idea to offer that point of extra credit if your student shows he or she has read one outside article before a quiz.

In order for your student to take the AP exam, he or she must first register for the test. You can find specific information on registration for homeschooled students on the College Board's website at https://apstudent.collegeboard.org/takingtheexam/registering-for-exams. All you need to do is sign up with a local school that is administering the AP Psychology test, ask that you be included, and pay the testing fee. You must register for the test by March 16th. If you don't know of (or feel comfortable with) a local school that offers the test, simply call AP Services at 609-771-7300 or 888-225-5427 to locate an appropriate AP Coordinator.

Finally, I provided all the test, OQ, Unit and Module Reviews, and visual metaphor answers in the Appendices. Questions for which I do not provide answers are either subjective or found easily in the text.

Please make sure that the student attempts all the questions (especially the subjective ones) and that he or she completes this workbook in its entirety. I simply ask that students try their best! ■

AP Psychology Syllabus

Course Objectives

- To learn about the field of psychology through in-depth study, discussion, and hands-on activities.
- To specifically assess some of the differing approaches adopted by psychologists, including the biological, behavioral, cognitive, humanistic, psychodynamic, and social-cultural perspectives.

Prerequisites

A strong work ethic is the only requirement for this course.

Course Materials

Psychology Interactive Workbook and Diary closely follows the textbook, *Myers' Psychology for AP, Third ed*., by David G. Myers (Holland, MI: Worth Publishers, 2018)

Grading Policy

The course grade is a weighted average consisting of the following elements:

- Review Questions: 20% (graded on completion since answers are provided in footnotes)
- Opportunity Quizzes (OQs): 20%
- Chapter Tests: 20% (each score is converted to a percentage since different tests have different numbers of questions)
- Workbook and Diary Activities: 20% (graded on completion and ability to explain each activity's purpose)
- Workbook and Diary Questions/Responses: 20% (graded on completion because of their subjective nature)

Chapter scores will be recorded in the grade book located in Appendix 5.

Grading Scale:

90%+ = A

80-89% = B

70-79% = C

60-69% = D

Daily Opportunity Quiz (OQ)

Since this is a college course, I have simply provided a weekly assignment schedule. This should allow flexibility, but also provide mile markers to make sure you keep on pace. The most important thing is to try to finish a particular chapter (including finishing quizzes, projects and tests) at approximately the proper time.

Having said this, I do value daily reading checkups. This is the purpose of each OQ (Opportunity Quiz). Each section will begin with a five question quiz from the reading homework. Students will be expected to have read the material as well as completed the review questions before class so they are well-prepared for these quizzes. The questions will not be multiple choice, but instead will be short answer questions that test students' recall and deeper understanding. I have also added some crazy humor in the quizzes and exercises as well. Even though I can't be there in person, I hope we can still learn and have fun together.

The course is divided into eighty-three modules, or reading sections, each with a corresponding quiz (OQ). This roughly equates to three reading sections per week, excluding test prep days. Simply read the quiz title (for example, OQ Module 7) to make sure that you have done the proper reading and then take the quiz and do the corresponding exercises. Once you understand the material, the exercises will me much more meaningful.

Please monitor your pace according to the following course plan to make sure that you don't fall behind. It is important that you finish the material in time to allow at least a full week or two devoted solely for review prior to the AP test.

Scheduled Breaks

We schedule three week-long breaks sprinkled throughout this year-long program. We schedule them during Weeks 15, 19, and 30. If you would prefer time off in different weeks, simply keep working through the schedule (i.e., move on to the following week). Then, take the break when it works best with your family's schedule. ■

Section Two

Schedule and Notes

Week 1

Date:	Day 1	Day 2	Day 3	Day 4	Day 5
Myers' Psychology for AP	**Module 1** pp. 1–12 & note/flashcards	**Module 2** pp. 13–23 & note/flashcards	**Module 3** pp. 24–32 & note/flashcards		
Review Questions	p. 12 Multiple-Choice Questions 1–5	p. 23 Multiple-Choice Questions 1–5	p. 32 Multiple-Choice Questions 1–7	**Unit I Review** pp. 33–35	
Psychology Interactive Workbook and Diary (IG)					
	Module 1 OQ then questions and exercises	Module 2 OQ then questions and exercises	Module 3 OQ then questions and exercises		
Other Notes					

How to Use This Interactive Workbook & Diary

The Basics

This Schedule and *Interactive Workbook Diary* is not intended to be a stand-alone textbook. It can be used with any Psychology text, but it closely follows David G. Myers' *Psychology for the AP Course*, 3rd ed.[1]

After reading each corresponding section in your textbook, please go through the review questions before doing the OQs, activities, and questions in *Psychology Interactive Workbook and Diary*.

Using Psychology Interactive Workbook and Diary

This *Psychology Interactive Workbook and Diary* is meant to be personal, private, and meaningful, so please don't hold back. Psychology is, by its very nature, a very personal study. On many occasions I have stepped out and used personal illustrations, and I hope you can also take some risks and be perfectly honest in your psych diary. The more you personalize this material, the more you will remember it. *Psychology Interactive Workbook and Diary* is my attempt to make this journey through psychology class both meaningful and personally applicable. Reading a textbook can be dry and boring, but when you do the exercises, ponder my questions, and apply the learning to your everyday life, you can't help but have a blast!

Use this same technique with your textbook. Don't be afraid to highlight and make notes in your book. If you are reading a section on personality and the text perfectly describes a friend of yours, write his or her name in the margin of your book. The more that you interact with the material the better.

Use this *Psychology Interactive Workbook and Diary* like a diary. Don't be afraid to express yourself and go deep. This is not a regular classroom and I will not tell your friends what you write. Be honest and detailed, but please don't pick and choose what to respond to. Tackle everything, doing your best with questions that might seem vague. I'm sorry that I can't be there to personally clarify your questions.

Although you may be working toward your goal of scoring well on the AP exam, always keep in mind Paul's advice about your overarching purpose: "Whatever you do, work at it with all your heart, as working for the Lord, not for men."[2] In other words, no one is asking you to be perfect, but please try your best. I will hold you accountable to that at the very end.

In your journey through this *Psychology Interactive Workbook and Diary*, I hope you will have fun, use your mind, and get into the practice of testing everything you learn against the Word of God. Think about the following story as you prepare to work through this material.

1. (Holland, MI: Worth Publishers, 2018).

2. Colossians 3:23.

The Butterfly: A Story about Hard Work

> A father and daughter found a butterfly cocoon in the backyard. The tender-hearted girl carefully watched the cocoon every day and became very excited when a small opening finally appeared. For several hours, the butterfly struggled to force its big body through the little hole. Then there was no movement at all. The daughter feared for the butterfly's life, so she decided to take a pair of scissors and cut off the remaining cocoon. The butterfly then easily emerged. Unfortunately, it had a swollen body and small shriveled wings.
>
> When the father saw what had happened, he had her put down the scissors and watch. The butterfly's ill-formed wings could not support the body and therefore the creature could only helplessly crawl along the ground. Although she had intended to help, the father explained that cutting the cocoon did just the opposite. The struggle required to break out of the cocoon was actually God's way of forcing fluid from the body of the butterfly into its wing so that it would be ready to fly. As he said this, a bird swooped down and had its lunch.

What is the moral of the story? Hint: it reminds me of something Paul said![3]

Sorry to be so graphic, but I don't want any of you to be lunch. Sometimes struggles are exactly what we need in life, and taking shortcuts will only cause bigger problems. Therefore be forewarned: I'm not going to snip your cocoon. I want you to fly!

Note Cards

Speaking of hard work, please make note cards for the vocabulary terms before you begin reading each chapter. They are highlighted in the reading on the right hand margin of the Myers textbook and again on each unit review.

In many ways, studying psychology is like learning a new language because you will learn hundreds of new terms. I prefer note cards because this method enables you carry them around with you and practice when you are in line at the grocery store or during commercial breaks in your favorite television show. Practice them in small chunks, gradually organizing them into piles of words that you know and ones that need more work. Because there are so many terms to remember, you may need a shoe box to organize them all, but you will thank me by the end of the course! If you are not a note card person, you can use the electronic flash cards available on the publisher's website which provides all kinds of educational tools. The website is https://www.macmillanlearning.com/Catalog/studentresources/MyersAP2e.

Opportunity Quizzes

After reading the next section in the chapter and doing the corresponding section in the workbook, you will take a brief quiz and grade yourself according to the answer key in **Appendix 1** and the text. In my class, the students take this quiz as soon as they walk in the door so I can be sure they have done the reading and have a basic understanding of the material. Only then can we move on, have a meaningful discussion, and apply the principles. The same is true in this class. If you find you are doing poorly on the OQs, slow down and go over the review questions again before taking the next OQ.

Most of the answers come straight from the textbook, but I never expect you to regurgitate exact language from the text. It is far better if you answer in your own words. When grading your quizzes, don't be too hard on yourself; look for ideas instead of specific words. With subjective questions, give yourself the point as long as you can explain your opinion.

Answer each OQ after reading the module.

Scope and Sequence

This course is easy to follow because it is organized by modules and units. Follow the course schedule and complete the accompanying text reading, review questions, and *Interactive Workbook and Diary* sections. The learning objectives are stated clearly at the beginning of each module.

If you plan to take the AP Psychology Test, which is in the first two weeks of May, schedule your time accordingly. Most students begin this course in the second week of August, as there are 36 Weeks in this schedule.

Psychology is very broad. Some chapters will naturally appeal to those students who love biology. Other material will be less of a hard science and will use difficult-to-quantify data to study why people do what they do. Don't worry if you don't like one chapter; the next couple probably will be very different. Let's begin with Unit 1/ Module 1.

Additional Resources

There are all kinds of helpful study tools that you have access to with the purchase of this book available from the publisher's website: https://www.macmillanlearning.com/Catalog/studentresources/MyersAP2e. My personal favorites are the "Flip It Videos," "Animations," and "PsychSim Tutorials." I can't emphasize this enough, please utilize these each unit!

If you experience any expired links or simply want additional resources, please feel free to visit my school website at: https://sites.google.com/a/lps.k12.co.us/mr-corson-we/ap-psychology.

Day **1** | Module 1

Introduction to Unit I: History and Approaches

Many Christians are hesitant to even use the term *psychology* with fellow believers. It is understandable, because unfortunately, the discipline has been dominated by those who have no faith in God. It at least appears that these psychologists have dominated the field, because they are the ones who often get the headlines. But this

3. "Not only so, but we also rejoice in our sufferings, because we know that suffering produces perseverance; perseverance, character; and character, hope. And hope does not disappoint us" Romans 5:3–5.

should not be the case. Psychology, by definition, is the study of the mind (specifically, the scientific study of our behavior and mental processes). As believers, we have access to the creator of the mind and therefore we should take advantage of this privilege in order to better appreciate the magnificence of His creation.

This chapter introduces you to the big picture of psychology. It explains psychology's history, its position as a science, and some of the major debates within the field. After reading your text, you should have a basic understanding of each of psychology's perspectives so you will be in a better position to critique them. They represent humans' best effort to break down and systematically study the infinite complexity of how God made us.

Before I jump into a few exercises from each module, I first check to see your basic understanding from the reading with a few OQ questions. If you are ready for your first OQ, let's begin. Provide your answers in the spaces below each question, and record your score at the end of each OQ section. Don't forget you can get an extra credit point by finding a psychology current event.

Opportunity Quiz, Module 1 (1 pt. each)

Read the text, then take the Opportunity Quiz (OQ). Read the notes that follow.

1. What is psychology? (The text was holding out on the definition, but I am not. Make sure you read my intros for the big picture).

2. Is psychology a science? Explain.

3. How did the behaviorists like Skinner feel about *introspection*?

4. Where can you find a ton of helpful complimentary resources (like demonstrations, flash cards and online demonstrations) specifically made for this textbook?

5. What is the culminating activity for this class?

OQ Module 1 Total pts (5 pts possible) _____

* * *

The purpose of the history section is to explain how psychology arrived it's current definition, the scientific study of mental process and behavior.

I like to simplify the history section into three basic steps.

1. Structuralists and Functionalists both utilized the method of introspection which gets us to the first part of psychology… the science of mental life.
2. The Behaviorists didn't believe in introspection and just cared about observable behavior, which gets us to the second part of psychology…the science of behavior. (which is why they will focus on conditioning to modify behavior)
3. The cognitive revolution brings us full circle. With technology like MRI's and SPECT images which allow us a deeper scientific study of the brain's physiology and inner workings.

Day **2** Module 2

Opportunity Quiz, Module 2 (1 pt. each)

1. Explain the nature-nurture debate.

2. What is the *biopsychosocial approach*?

3. What is the difference between *basic research* and *applied research*?

4. What is the big legal difference between *psychologists* and *psychiatrists*?

5. What is the focus of the *social-cultural perspective*?

OQ Module 2 Total pts (5 pts possible) _____

* * *

Psychology's Big Debate: Nature v. Nurture

We will delve into the details more extensively in later chapters, but as a Christian, all this talk about the nature-nurture debate and evolution probably has caused you to wonder "where is God in all this?" Good question. This is the point where some believers, afraid to wrestle with these issues, run away from the whole scene. Others, like the proverbial frog, don't notice the change occurring around them and have their faith boiled away before they know it. I believe neither of these responses is biblical because God has created us with the responsibility to think and seek the truth. Because our Lord is truth personified, we should never be afraid to seek the truth. He also calls us to walk in faith, and as a believer on a college campus or in the world, we will be surrounded with intelligent and intimidating professors and students who will seek to discredit our beliefs. But if we ask the Father to show us the light of truth, it will shine even brighter in the darkness. If we ask to see things through His eyes, we will enjoy a perspective not mentioned in traditional psychology textbooks.

For instance, in the nature-nurture debate, we can see a glimpse into the beauty of God's plan for us and why this overlap of nature and nurture is so necessary.

For starters, if nurture were completely dominant, we would (even more than we do already) act as though we were God. In other words, if humans were 100 percent responsible for all aspects of who they become, then we would assume full credit and push God out of the picture all together.[4]

For example, you may have already read about how John B. Watson boasted that if he were given an infant, he could mold the child, according to the child's own will, into the occupation of Watson's choosing.[5] Such a statement perfectly illustrates how dangerous such power would be. On the other hand, if God created us completely dominated by nature, then genetics would govern our behavior and there would be no free will whatsoever. Without free will, we could not make the choice to submit and therefore worship God fully; nor, for that matter, would humans ever be capable of true love and sacrificial service.

I would never assume to know the deepest secrets of the mind of God, but I think that through His Word, He has made it clear that our purpose is to serve Him and not ourselves.[6] While psychologists debate the relative contributions of nature and nurture, we can gain insight not only into that question, but also to the larger one: "why were we created in such a fashion?"

Ask Your Parents about Nature vs. Nurture

I hope this course sparks a lot of conversation with your parents. Please be sensitive to the fact that any conversation about parenting is probably strange for them. Sandra Scarr's research about parenting says that "parents should be given less credit for kids who turn out great and blamed less for kids who don't." Before I became a parent, I was offended on behalf of parents everywhere. Emphasizing the limits of parental significance was, I felt, a slap in the face against their God-given responsibility. But now as a parent of four and someone who wants to read more of the Bible than just the parts that give me a feel-good buzz, I have to acknowledge that this parenting thing is way bigger than me. Brew some coffee, and if you can muster up the courage, sit down with your parents or other adults and ask them their thoughts. Ask them specifically how much credit or blame they take for your choices.

What did they say?

Also ask them: Does what I do reflect on your parenting? How so? Record their response.

4. "Not by works, so that no one can boast" Ephesians 2:9.

5. "Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select - doctor, layer, beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors" John B. Watson (1924).

6. "It does not, therefore, depend on man's desire or effort, but on God's mercy. For the Scripture says to Pharaoh: 'I raised you up for this very purpose, that I might display my power in you and that my name might be proclaimed in all the earth' " Romans 9:16–17.

How do their responses compare to the research you read about?

How much responsibility can you take for all the details? (Consider issues like hard work and dedication.)

Think of the groups/communities that you belong to such as your neighborhood, school, church, sports team, or musical group.

How is that also true in our relationship with the Lord? He chose what family we grow up with, but we decide how we are going to live within that family. Give two specific examples of what it is like to grow up in your family, and the choices you have made within that structure.

To what degree did your parents participate in the big-picture decisions that led you to these groups, such as providing exposure to different types of activities and encouraging your efforts?

Remember, God created us and therefore He knew "psychology" before it was invented. In fact, an often-quoted Proverb summarizes this discussion nicely: "Train a child *in the way he should go*, and when he is old he will not turn from it" (italics mine)[7]. In the original language, it actually refers to raising a child in accordance with his or her God-given temperament. God was telling parents that nature and nurture go hand in hand and that nowhere is that more obvious than in parenting.

7. Proverbs 22:6.

The Perspectives in General

In my classroom, I demonstrate the importance of the different psychological perspectives by bringing in a big empty can with a beautiful label depicting the appealing content of fruit. To make a point (and because I'm somewhat of an obnoxious teacher), I purposely push the empty can closer and closer into the face of an unsuspecting student and ask what she sees. She quickly realizes that the closer it gets to her nose, the less of the can she sees, but she also notices the nervous laughter from the other side of the class where those students can see what is written on the back of the can: Do not drink! Poison. Keep away from children! The point is that in psychology (and life in general), there are many perspectives or areas of focus, and we can learn something from each of them, even if it is just to strengthen our argument against them. Students on each side of the class thought they had it right, but only God sees the whole picture. Only an aerial view revealed that the can was empty, except for a valuable jewel inside. In other words, each perspective is a necessary, though not sufficient, means to study psychology.

At this point, I would like to quickly address the concerns of those readers who are afraid to read about the evolution perspective. I say to you, "Fear not!" Every argument made for natural selection makes even more sense under the heading of "divine design." For instance, with microevolution (exemplified by insects adapting to be able to camouflage to their environment), it is clear that a brilliant creator interwove such flexibility into His workmanship. This is very different from, and must not be confused with macroevolution (such as a single cell becoming a plant, a fish, an ape, and then a human).

Make sure you understand each of psychology's current perspectives. Remember, you do not have to agree with all of them, but you do need to understand them.

Apply the Perspectives

For your first assignment, practice interpreting an event through the lens of each perspective. Please complete the following:

1. Read my fictional news on the next page. (No animals were actually hurt in the making of this example!)
2. Complete the chart on the next page to demonstrate your understanding of each of the perspectives. Fill in each perspective's focus and then briefly explain what areas of interest/questions/approach would be used for each perspective.
3. Do the same for another news story or your own event.

Event #1

The police were called to a residence in response to a neighbor's call regarding a domestic dispute. They were told that the mother promised the car to the teenage son and the father promised it to the twenty-one-year-old daughter. Apparently, things got out of hand when each accused the other of playing favorites. The father allegedly lost his cool by hitting the son and throwing the toy poodle Mi Mi across the room. Police and animal welfare officers became involved. The father admitted that "I was accused of being unfair, I saw red, and just went ballistic!"

Follow my example and fill in the remaining spaces.

Perspective	Focus	Questions/approach/area of interest
Biological	How the body and brain enables emotions and sensory experiences	Is there a brain or chemical deficiency that enabled such a sudden rage response?
Evolutionary		
Humanistic		How we work toward fulfilling our potential.
Psychodynamic	How behavior is linked to unconscious drives and conflicts	What repressed memory/thought has created an unconscious struggle which burst through the surface when triggered by this accusation?
Behavioral		
Cognitive		
Social-cultural		

Event #2

Now do the same thing for a more realistic news story or your own personal situation.

Write out a summary of "Event #2":

Perspective	Focus	Questions/approach/area of interest
Biological		
Evolutionary		
Humanistic		
Psychodynamic		
Behavioral		
Cognitive		
Social-cultural		

If this is a bit confusing now, don't give up. Persevere because it is a very important assignment as it sets the organizational framework for the rest of the class.

Although approaches are necessarily presented separately in a textbook, in real life an integrated approach is often used in order to focus on the interaction of several perspectives at once.

Ridiculous Example of an Integrated Biopsychosocial Approach

Warning: The following is a fictional dramatization for your educational benefit only. Any resemblance to reality is not only unintended, but sick and wrong.

To give you another of my overdone examples, picture a cute baby, all decked out in a new pink outfit complete with a matching little bow. Everyone who comes across the beautiful little girl gushes over her and does that silly talk-like-a-baby thing. Of course the little girl loves all the attention and responds with smiles and coos, which then elicit even more of an enthusiastic reaction, and the cycle continues.

Contrast this sequence of reactions with those set in motion with baby Bo-Bob. Unfortunately, little Bo-Bob was born with, how does one say this . . . buck teeth, a birdlike beak of a nose, and monstrous elephant ears. (Can you see I'm making this so ridiculous that it can't offend anyone? Did you catch the part about the buck teeth? You know that is developmentally impossible!)

When people took one look at little Bo-Bob, they usually let out a scream and ran the other way. This of course scared little Bo-Bob half to death. This happened so frequently, he began to anticipate it and began to scream every time anyone approached him. If you thought it couldn't get any worse for Bo-Bob, his little nervous system got so upset that he produced and distributed some exceptionally foul smelling expulsions. You can see how things might continue to go south.

I apologize about the graphic description, but it helps explain how our genes (bio), learned fears/emotional responses (psych), and cultural expectations (social) all influence each other and account for our differences.

A Final Word on Perspectives

We may think we have it all figured out, but we could use a dose of humility and eternal perspective. For true perspective, read Isaiah 44:24 to 45:10. Which verse puts it into proper perspective for you?

I am particularly reminded about my position as a psychology teacher when I read the words: "Does the clay say to the potter, 'What are you making?[8]'" God is glorified as we study His creation from all different perspectives, but we must be careful of crossing a line and thinking we know more than our maker.

Day 3 | Module 3

Opportunity Quiz, Module 3 (1 pt. each)

1. What do developmental psychologists focus on?

2. Which psychologist would investigate and compare the relative attention spans of twelve year-old girls and twelve year-old boys?

3. Which psychologist would update or design a new personality or IQ test to be used in a new school or workplace?

8. Isaiah 45:9. Also used by Paul in Romans 9:20–21.

4. What type of psychologists are featured on TV shows like *CSI* where they help law enforcement agencies in criminal investigations?

5. What type of psychologist might I want to become in order to help my Denver Broncos finally win another Super Bowl?

OQ Module 3 Total pts (5 pts possible) _____

* * *

Day **4** Unit I Review

Complete the Unit I Review questions on pp. 33–35 of *Myer's Psychology for AP*. You will find the answers to the Multiple-Choice Questions and Free-Response Questions in **Appendix 2: Textbook Module & Unit Review Answer Keys** of the *Psychology Interactive Workbook and Diary*. Answers for the first question in the Unit Review Free-Response Questions are in the textbook. The answers for all the second question in each of the Unit Review Free-Response Questions are in Appendix 2. ■

Week 2

Date:	Day 6	Day 7	Day 8	Day 9	Day 10
Myers' Psychology for AP	**Module 4** pp. 36–41 & note/flashcards	**Module 5** pp. 42–49 & note/flashcards	**Module 6** pp. 50–58 & note/flashcards	**Module 7** pp. 59–65 & note/flashcards	
Review Questions	p. 41 Multiple-Choice Questions 1–4	pp. 48–49 Multiple-Choice Questions 1–7	p. 58 Multiple-Choice Questions 1–6	pp. 64–65 Multiple-Choice Questions 1–4	
Psychology Interactive Workbook and Diary (IG)					
	Module 4 OQ then questions and exercises	Module 5 OQ then questions and exercises	Module 6 OQ then questions and exercises	Module 7 OQ then questions and exercises	
Other Notes					

Day **6** Module 4

Introduction to Unit II: Thinking Critically With Psychological Science

"Be careful what you think, because your thoughts run your life" Proverbs 4:23 (NVC).

This chapter is another great example of how the world may think it owns psychology, but it doesn't. Almost three thousand years ago, Solomon was inspired to write the above proverb, and it perfectly explains the true cognitive perspective. Or, as another biblical writer puts it, we are to "take captive every thought to make it obedient to Christ."[1]

Yet it is not a simple task. Sin, self, and Satan all vie for control of our thought lives, yet as the proverb reveals, we do have control over our thoughts. But we need to be aware that there are several forces doing battle to influence our thinking.

This chapter is all about becoming aware of the limitations of our thinking. Common sense is (unfortunately), not so common or reliable. Bias, cultural forces, and even the *placebo effect* all interact to influence our thinking. As Christians, we should be governed by a biblical sense of humility, because overconfidence and pride distort our thinking. An awareness of our limitations allows us to step back and use our God-given observation, reason, and analysis skills along with statistics to test our assumptions. As you work through this section, ask yourself "how do I know this is true?" As Christians, we not only have access to special insight from the Holy Spirit, but we should possess an extra dose of humility and awe for our creator.

What challenges do you face in taking control of your thought life?

What strategy do you use to try to "take captive every thought"?

In Ephesians 4:17–18, Paul refers to those who live apart from Christ as living "in the futility of their thinking" and being "darkened in their understanding and separated from the life of God because of their ignorance that is in them due to the hardening of their hearts." I find it interesting

1. 2 Corinthians 10:5.

how Christ clearly integrates one's heart and mind. Things are not as easily separated as a textbook might indicate.

Opportunity Quiz, Module 4 (1 pt. each)

1. A quick review question. Which perspective means *thinking*?

2. Explain *hindsight bias*.

3. Give an example from the text illustrating *overconfidence*.

4. Give an example of *overconfidence* from your own life.

5. True or false, random sequences often don't look random.

OQ Module 4 Total pts (5 pts possible) _____

* * *

Humility and Preparedness

Scientists these days don't exactly have the reputation for humility, but in the sixteenth and seventeenth centuries, scientists who were Christians fueled the Scientific Revolution because they understood that "in order to love and honor God, it is necessary to fully appreciate the wonders of his handiwork."[2] Again, our faith is not one of timidity,[3] but one of freedom to seek truth about the God who created the universe.

2. Stark A & B R -72).

3. "For God did not give us a spirit of timidity, but a spirit of power, of love and of self-discipline" 2 Timothy 1:7.

Yet the Bible is clear that we are not to go out into the world unprepared. That is why Paul tells us we are to first arm ourselves with God's gear.[4] This will prepare you for the inevitable and sometimes invaluable late-night, soul-searching coffeehouse conversations that might, momentarily, open the door to an unbeliever's heart. It is true that science cannot answer the deepest questions such as "what is the meaning of life?" Nor can it prove the existence of God. Jesus made it clear that faith is a critical part of our relationship with the Father[5] and can never be replaced. But the humble and inquisitive approach to this material often leads non-believers to ask questions they have never asked before. It is therefore imperative to be ready, not with quick one-line religious platitudes, but with respect for and humility before your fellow students and God. No one can argue with your testimony, your story of your own encounter with God.

But beware: some caffeine encounters only serve as a platform for self-aggrandizement and as a new forum for some people to listen to themselves wax eloquent. Ask God for discernment, and don't get sucked in.[6] Be prepared because it is easy to be intimidated by a confident and seemingly educated argument.[7] Remember what you have learned about overconfidence. Extreme confidence does not correlate with accuracy.

Ponder This

What is an example of hindsight bias in your Christian walk?

Has your overconfidence ever led you into trouble? Explain.

I lived and studied in Hungary in 1988 just before the fall of the Iron Curtain. Upon my return a friend asked me if I thought Eastern Europe would ever free itself from communist control. Almost without thinking I told him the same answer that nearly everyone would have given: "No way!" Less than three months later the bottom dropped out. Looking back, there were plenty of signs of chinks in the armor of the communist government, but I wasn't looking for them and therefore didn't notice any.

Day 7 | Module 5

Opportunity Quiz, Module 5 (1 pt. each)

1. The example of referring to oneself as pro-choice (rather than pro-abortion) or pro-life (rather than anti-abortion) is an example of what *effect*?

2. What is the difference between a *theory* and a *hypothesis*?

3. Which is better: a *random sample* of 150 or an unrepresentative sample of 800?

4. "With the belt of truth buckled around your waist, with the breastplate of righteousness in place, and with your feet fitted with the readiness that comes from the gospel of peace. In addition to all this, take up the shield of faith, with which you can extinguish all the flaming arrows of the evil one. Take the helmet of salvation and the sword of the Spirit, which is the word of God" Ephesians 6:14–17.

5. Matthew 23:23.

6. "And if any place will not welcome you or listen to you, shake the dust off your feet when you leave, as a testimony against them" Mark 6:11.

7. "I am sending you out like sheep among wolves. Therefore be as shrewd as snakes and as innocent as doves" Matthew 10:16.

4. What is the difference between a *survey* and a case study?

Description

Explain the following.

Case study:

Survey:

5. If you were conducting a *naturalistic observation*, how would you ensure you were actually observing natural behavior?

Naturalistic observation:

Learn by Doing!

Go out and conduct your own naturalistic observation. Spend at least fifteen minutes observing and recording the behavior of organisms in their natural environment. This can range from watching students or your family perform their eating rituals, to observing the courting practices of crickets.

Record your observations on the next page. For example, you might note how people choose a seat, eat, socialize, or leave. Quantify wherever you can; record things such as size and number of helpings, amount of carbohydrates, or number of drinks. You may also describe emotional responses or make comparisons between groups based on *variables* such as gender or social status. Please make sure you specify your *population* and *sample size*.

OQ Module 5 Total pts (5 pts possible) _____

* * *

Population:

Sample size:

Location:

Time:

Observations:

Observational data can often be easier to grasp when it is displayed visually. In the space below, please create a *scatterplot* or any other graphic representation of the data that you collected.

Describing behavior is the first step in trying to predict it, but there is more involved. Next, try to establish a correlation in order to make a prediction. After you have observed two related behaviors (like the amount of food taken and the size or age of the person), think about how each variable might influence the other. Develop a theory (an explanation that organizes your observations) about how two variables are related. An example of a theory is "eating habits affect weight." You try.

Your theory:

Next, form a specific hypothesis (a testable prediction) about the relationship between the same two variables in your theory. For example, "students who eat double cheeseburgers will be heavier than those who eat salads."

Your hypothesis:

Day **8** Module 6

Opportunity Quiz, Module 6 (1 pt. each)

1. What is the defining characteristic of an *experiment*?

2. Explain the *double-blind procedure* and define the term *control group*.

3. What is the difference between the *independent variable* and the *dependent variable*?

4. Explain a *confounding variable*.

5. What is more important, the *number* of participants in an experiment or whether or not they were *randomly assigned*?

What does the term *negative correlation* mean?

Draw a graph of what a negative correlation looks like.

OQ Module 6 Total pts (5 pts possible) _____

* * *

Correlation

Another statistical concept you must understand is that of correlation. Complete the following questions:

What does the term *positive correlation* mean?

Draw a graph of what a positive correlation looks like.

Graphically represent the relationship between your time spent with God and how often you beat up your sibling.[8]

8. This would be a negative correlation because theoretically, the two variables should go in opposite directions. The more time you spend with God, the less often you will beat up your sibling.

Don't worry, you will eventually get used to my quirky sense of humor. (But graph it anyway!) Let's try one more.

Graphically represent the theoretical relationship between the time spent doing homework and your scores on tests.[9]

Correlation Does Not Mean Causation!

I give my students a couple of examples to illustrate how correlation does not mean causation. Try to figure out the answers to the following questions before checking the answers:

> A Good News Survey (GNS) found that people who often ate Frosted Flakes when they were children had half the cancer rate of those who never ate the cereal. But those who often ate oatmeal as children were four times more likely to develop cancer than those who did not. Why is this?

Many students erroneously think that means that Frosted Flakes prevents cancer while oatmeal causes it. Absolutely not! There is another variable at work here. Try again to figure it out.[10]

> A GNS also found that children who took vitamins were more than twice as likely to go on to use marijuana and cocaine. Why?
>
> Why is there a negative correlation between the length of a man's marriage and the length of his hair?

These correlations are true for exactly the same reason.[11]

> In the former New Hebrides Islands (now part of the nation of Vanuatu), body lice were at one time thought to produce good health. In other words, there was a strong positive correlation between body lice and good health. Why?[12]

Experimentation

Once you have a hypothesis, you are now ready to test it. An experiment is a way to determine cause and effect by manipulating one variable at a time in order to isolate and observe its effect. Right now, you don't have to actually conduct an experiment; it will be enough to identify each type of variable.

Use your textbook to understand the difference between the two types of variables. If I were to do an actual experiment to test my hypothesis, I might feed one group of randomly selected subjects a fatty diet of cheeseburgers and feed the other group salads while controlling for exercise (keeping the two groups on the same exercise routine). In my example, the *independent variable* would be the fat content of the food, and the *dependent variable* would be the weight of the subjects. Now it is your turn. Think of your own experiment, and without actually conducting it, explain the variables.

Your experiment:

Independent variable:

Dependent variable:

9. This would be positive correlation: as one goes up, so does the other.

10. The answer is time. Cancer tends to be a disease of later life, and those who ate Frosted Flakes are younger; the cereal was not even around when the older respondents were children, so they are much more likely to have eaten oatmeal.

11. J. Tierney, "Good News! Better Health Linked to Sin, Sloth," *Hippocrates* (September–October 1987):

12. Ibid. When people became ill, their temperatures rose and caused the body lice to seek more hospitable abodes. Both the lice and good health departed with the onset of the fever.

The Placebo Effect

As you have read, the placebo effect describes experimental results caused by expectations. In fact, the word *placebo* is Latin for *I shall please*. Since it is a goal of this class to help you anticipate, honestly respond to, and help a world of skeptics, let me rock your boat a little.

What would you say to someone who claimed that the documented, significant effects of the healing power of prayer could be explained entirely through the placebo effect?

Party Placebo

Some of my students gave me an example of the placebo effect at a party. Some of the football players were drinking alcohol and acting like belligerent knuckleheads. At some point, they ran out of rum, so they made a new batch of the punch everyone was drinking, but without any alcohol. A new group of kids then arrived at the party, slammed down the new punch, and joined their friends in an apparent drunken stupor. When they were later told that they had not really consumed any alcohol, they couldn't believe it. Their expectations, paired with the force of the social situation, created almost the same effect as real alcohol.

What does this example suggest about how our brains operate?

Give a one-sentence example of the placebo effect using aspirin, a little kid, and vitamin C.

Experimental Design

In terms of science, the only dependable way to determine cause and effect is the experiment. If everything is held constant and only one variable (the IV, or independent variable) is changed, then we can be confident that the change in the result (the DV, or dependent variable) must be due to the change in the independent variable.

Shredding This Lousy Experiment

In order to apply these principles, please critique the following experiment.[13] I hope that you can find lots of problems.

Dr. Moesteler has long been interested in the effects of alcohol on human behavior. His latest experiment involved giving college students one of three kinds of drinks:

- 3 oz. of 100 proof vodka mixed with a standard sized glass of orange juice,
- 2 oz. of 100 proof vodka mixed with a small glass of orange juice, or
- 3 oz. of a nonalcoholic, vodka-flavored substance mixed with a standard sized glass of orange juice.

Dr. Moesteler recruited some of his subjects from the school's track team, which was easy because he is the assistant coach. He recruited the rest of his subjects from his introductory psychology class. Dr. Moesteler assigned the women on the track team to the 2 oz. vodka group, the men from his class to the 3 oz. vodka group, and the women from his class to the nonalcoholic group.

The women on the track team participated right after they finished practicing, and students from his class participated at various times during the day. After each group drank the beverage, Dr. Moesteler had them sit in an automobile simulator where their task was to step on the brake every time they saw a red light.

Much to his surprise, the 2 oz. group showed slower reaction times to the red light than the 3 oz. group did. The nonalcoholic group was the quickest to react. As soon as the experiment was over, he explained to the subjects the true purpose of the experiment and had them sign an informed consent form. From his analysis of the results, Dr. Moesteler concluded that drinking alcoholic beverages can slow reaction times for braking in college students who drive after drinking.

Use your *critical thinking* skills and list as many problems as you can with this experiment.

13. Eva Conrad and Mark Rafter, *"Instructor's Resource Kit to accompany Wade/Tavris Psychology, 3rd Edition."* (New York: HarperCollins, 1993), pp. 69–70.

Your Turn

Now that you are an expert at critiquing others' experiments, it is time to go to the next level and design your own. Be sure to avoid all the mistakes that you just pointed out with Dr. Moesteler's method.

Please design an experiment to test popular advertising claims. To help you do a good job, I am hereby giving you a $25,000 budget. With that money, please design an experiment to test the claim that "White Cloud toilet paper is the softest bathroom tissue on earth."[14]

It is your job to determine each component of the experiment, eliminating as many confounding variables as possible. There are many choices to make about how to design an experiment to test this claim, but you are responsible for them all. Label your IV and DV, and above all, make sure you have an appropriate sample!

Sample:

IV:

DV:

Methodology:

Critique: No experiment is perfect. What problems do you see in your own experiment?

14. Martin Bolt, *Instructor's Resources to Accompany David G. Myers Psychology Sixth Edition*. (Holland, MI: Worth Publishers, 2001), chap. 1, p. 17.

Day 9 | Module 7

Opportunity Quiz, Module 7 (1 pt. each)

1. Can a laboratory experiment can illuminate everyday life? How?

2. Do psychologists ever use deception, and if so, what is the purpose of *debriefing*?

3. Explain the ethical principle of *informed* consent?

4. According to the APA, is it ever *ethical* to experiment on animals?

5. Just checking to see if you are reading the quotes in the margins. According to humorist Dave Berry, what is the difference between humans and rats?

OQ Module 7 Total pts (5 pts possible) _____

* * *

A Word about Ethics

Secular university ethics committees have the unenviable job of delineating right from wrong without the Bible. Your job, however, in life and in this course is to use God's Word to make better decisions, develop clearer analysis, and be more discerning about what is being taught.

Consider the ethical treatment of animals for starters. The first chapter of Genesis tells us that we are to "rule over" the animals.[15] What do you think it means to "rule over" the animals?

15. "And let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground" Genesis 1:26.

Proverbs 12:10 tells us: "a righteous man cares for the needs of his animal, but the kindest acts of the wicked are cruel." There is a reason that police departments keep records and pay close attention to those convicted of cruelty to animals.

Do you think any experiments on animals are morally justified? If so, where exactly would you draw the line between right and wrong? For example, some draw their moral line where it causes harm or pain to the animal; others balance factors such as the benefit to humans or the necessity/value of the research.

Give an example of what you think is acceptable and what you think is not acceptable.

Ethics Committee

Apply your ethics in these examples.[16] Imagine that you are on the ethics committee of your university. It is the committee's responsibility to evaluate and either approve or reject research proposals submitted by faculty members who want to use animals for research or instructional purposes in psychology, biology, or medicine. The proposals describe the experiment, the goals, and potential benefits of the research, and any discomfort or injury that the experiment may cause to the animal subjects. You must either approve the research or deny permission for the experiments. It is not your job to suggest improvements on technical aspects of the projects, such as the experimental design. You should make your decision based on the information given in the proposal.

Case One

Professor King is a psychobiologist working on the frontiers of a new and exciting research area of neuroscience: brain grafting. Research has shown that neural tissue can be removed from the brains of monkey fetuses and implanted into the brains of monkeys that have suffered brain damage. The neurons seem to make the proper connections and are sometimes effective in improving performance in brain-damaged animals. These experiments offer important animal models for human degenerative diseases such as Parkinson's and Alzheimer's. Dr. King wants to transplant tissue from fetal monkey brains into the entorhinal cortex of adult monkeys. In human brains, the entorhinal cortex is the area involved with Alzheimer's disease.

The experiment will use twenty adult rhesus monkeys. First, the monkeys will be subjected to ablation surgery in the entorhinal cortex. This procedure will involve anesthetizing the animals, opening their skulls, and making lesions using a surgical instrument. After they recover, the monkeys will be tested on a learning task to make sure their memory is impaired. Three months later, half of the animals will be given transplant surgery. Tissue taken from the cortex of monkey fetuses will be implanted into the area of the brain damage in the adult monkeys. Control animals will be subjected to sham surgery, and all animals will be allowed to recover for two months. They will then learn a task to test the hypothesis that the animals having brain grafts will show better memory than the control group.

Dr. King argues that this research is in the exploratory stages and can only be done using animals. She further states that soon, well over two million Americans will have Alzheimer's disease and that her research could lead to a treatment for the devastating memory loss that Alzheimer's victims suffer.

Approved or denied:

Explanation:

Case Two

Dr. Fine is a developmental psychobiologist. His research concerns the genetic control of complex behaviors. One of the major debates in his field concerns how behavior develops when an animal has no opportunity to learn a response. He hypothesizes that the complex grooming sequence of mice might be a behavior pattern that is put into the brain at birth, even though it is not expressed until weeks later. To investigate whether the motor patterns involved in grooming are acquired or innate, he wants to raise animals with no opportunity to learn the response. Rearing animals in social isolation is insufficient because the mice could teach themselves the response. Certain random movements could accidentally result in the removal of debris. These would then be repeated and could be coordinated into the complex sequence that would appear to be instinctive but would actually be learned. To show that the behaviors are truly innate, he needs to demonstrate that animals raised with no opportunity to perform any grooming-like movements make the proper movements when they are old enough to exhibit the behavior.

16. Martin Bolt, *Instructor's Resources to Accompany David G. Myers Psychology Eighth Edition*. (Holland, MI: Worth Publishers, 2007), chap. 1, p. 56.

Dr. Fine proposes to conduct the experiment on ten newborn mice. As soon as the animals are born, they will be anesthetized and their front limbs amputated. This procedure will ensure that they will not be reinforced for making random grooming movements that remove debris from their bodies. The mice will then be returned to their mothers. The animals will be observed on a regular schedule using standard observation techniques. Limb movements will be filmed and analyzed. If grooming is a learned behavior, then the mice should not make grooming movements with their stumps, as the movements will not remove dirt. If, however, grooming movements are innately organized in the brain, then the animals should eventually show grooming-like movements with the stumps.

In his proposal, Dr. Fine notes that experimental results cannot be directly applied to human behavior. He argues, however, that the experiment will shed light on an important theoretical debate in the field of developmental psychobiology. He also stresses that the amputations are painless and the animals will be treated well after the operation. ■

Approved or denied:

Explanation:

Week 3

Date:	Day 11	Day 12	Day 13	Day 14	Day 15
Myers' Psychology for AP	**Module 8** pp. 66–73 & note/flashcards			**Module 9** pp. 78–90 & note/flashcards	
Review Questions	p. 73 Multiple-Choice Questions 1–5	**Unit II Review** pp. 74–77		p. 90 Multiple-Choice Questions 1–8	
Psychology Interactive Workbook and Diary (IG)					
	Module 8 OQ then questions and exercises		**Course Test** **Unit I–II**	Module 9 OQ then questions and exercises	
Other Notes					

Day **11** Module 8

I just wanted to make sure you can still apply these statistical skills. Use the following data, which shows the number of hair flips (you know, where they dramatically flip their hair and head) during your favorite Netflix sitcom to answer questions 1–3.

215
202
207
202
205
199

Opportunity Quiz, Module 8 (1 pt. each)

1. Calculate the *mean*.

2. Calculate the *mode*.

3. What is the *range*?

4. If you did an experiment and the results showed a big gap between those that got the pain reliever and those that did not, you could say that the result was

   _____ _____.

5. Define *standard deviation*.

What is the mode of how many cookies you've eaten each day this week?[3]

Explain, in your own words, what the standard deviation measures.

OQ Module 8 Total pts (5 pts possible) _____

* * *

Statistics: A Tool Used to Apply Critical Thinking

Descriptive statistics organize and describe group data, whereas inferential statistics test for *statistical significance*.

Just to make sure you can apply these statistical concepts in real life, answer the following:

Which type of measure of central tendency is used to calculate one's GPA?[1]

Which type of measure of central tendency is used to calculate a baseball player's batting average?[2]

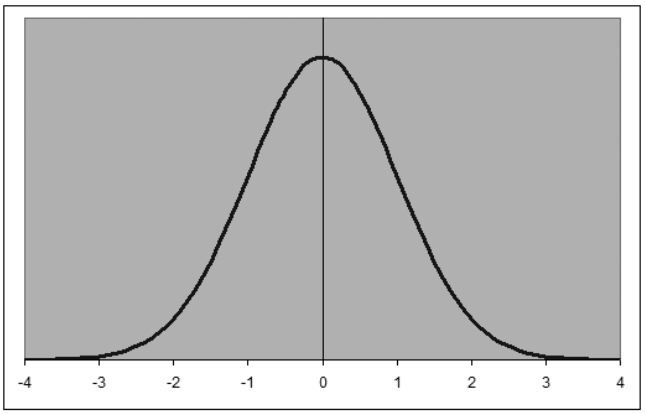
For most students, standard deviation is the most difficult concept in statistics, but it is really rather simple. It just measures consistency. For example, a basketball player might have a hot hand one game and score thirty points, but the next game score only five. From these two games it looks as if this player's scoring is fairly erratic. In order to statistically calculate his or her consistency, we use a measure of variation like standard deviation. For this course, you generally will not need to know how to calculate standard deviation, but if you are curious, it is calculated based on the following formula:

$$\text{Standard deviation} = \sqrt{\frac{\text{sum of (deviations)}^2}{\text{number of scores}}}$$

Extra Credit: Calculate the standard deviation of this player's scoring over these six games: 10, 34, 17, 8, 20, and 25.[4]

1. Mean.
2. Mean.
3. I can't answer that for you, but for me it is five!
4. 8.83. Note, if you got 9.67 you took a shortcut and used a calculator which calculates it differently.

Another important statistical concept is the normal bell curve. It graphically illustrates the idea that most things in life are not equal. Although it might not seem fair,[5] IQ, for instance, is spread out and looks like this:

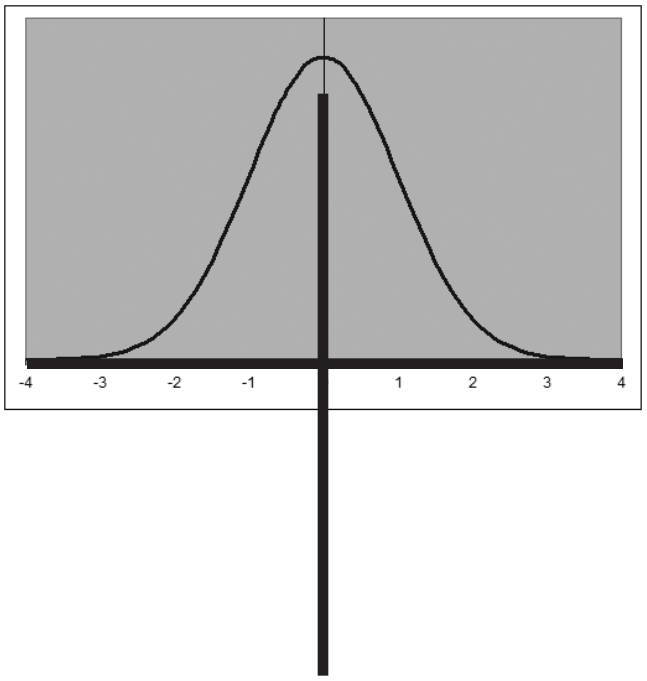


We can see that there are some scores on both the lower and upper ends, but statistically, most are congregated toward the middle. The curve is said to be symmetrical when it looks even on both sides. It is referred to as skewed if the curve is lopsided, revealing that the scores are not evenly distributed, but are higher on one side than the other.

In a perfectly even distribution (normal bell curve), the highest point on the curve illustrates that most scores fall exactly in the middle. In this case, the mean, median, and mode are all the same.

Think of a situation which could be represented by a curve that is skewed to right. As you draw it in the space below, make sure to label each axis and try to determine where the mean, median, and mode are situated along the curve.

Like a normal bell curve, God's gifts are spread out along the entire curve. Although God's gifting cannot be numerically quantified and some gifts are more common than others, all points along the curve are needed and serve special purposes. It struck me how the cross is visible even while plotting data.



Day 12 — Unit II Review

Complete the Unit II Review questions on pp. 74-75 of the textbook *Myer's Psychology for AP*. You will find the answers to the Multiple-Choice Questions and Free-Response Questions in **Appendix 2: Textbook Module & Unit Review Answer Keys** of this *Psychology Interactive Workbook and Diary.*

Day 13 — Course Test I–II

Multiple Choice (M/C) Tests

Love them or hate them, M/C tests are a part of life. Though they are not the only method (or even the best), they are an efficient way to test a student's grasp of information, and therefore remain an integral part of college assessments. To prepare you for the AP test, you will need to take a M/C test every chapter or two.[6]

In order to help students overcome their fear of M/C tests and to emphasize their relevance, I often remind them that M/C tests are a lot like dating. You may not believe me, but in both cases, the main objective is to eliminate bad options! I frequently see kids (in school and in life) get talked into bad decisions because they go straight to the choices set immediately in front of them instead of thinking through the question. It is the same with dating. Instead of asking God and dreaming about what God has for them, many teenagers limit themselves by picking the first thing that looks good.

I suggest that on M/C tests, you try to answer the question before looking at any of the choices so you don't get talked into a bad option. If you do your own thinking first, you will be in a better position avoid being misled.

5. "Does not the potter have the right to make out of the same lump of clay some pottery for noble purposes and some for common use?" Romans 9:21.

6. All test questions were generated from John Brink, *Test Bank* to accompany David G. Myers *Psychology Eighth Edition*. Used by permission. (Holland, MI: Worth Publishers, 2007).

And by the way, if you ever find yourself in a bad relationship and are having trouble getting out of it, feel free to use me as an excuse. You might laugh, but it has actually happened in real life. Simply tell the person that Mr. Corson said you need to eliminate bad options immediately and that is what you are now doing. It may be quite harsh, but just like with M/C tests, quite necessary.

When you feel you are ready, take the Course Test Unit I–II found **after this week's notes**, that covers the text, workbook, and the *Psychology Interactive Workbook and Diary* material from the preface through the chapter on thinking critically.

After you have taken the Course Test Unit I-II, score it using the answer key in **Appendix 3: Course Unit Test Answer Key** of this *Psychology Interactive Workbook and Diary*. Record all of your scores for the unit on the last page of this week's notes "Unit Grade Sheet." Then record your Total Unit Score in the grade book, located in **Appendix 5: Grade Book** of this *Psychology Interactive Workbook and Diary*.

Day **14** | Module 9

Introduction to Unit III: Biological Bases of Behavior

The Bible says, "Before I formed you in the womb I knew you, before you were born I set you apart."[7] God created us out of flesh and blood with real feelings, emotions, gifts, and abilities, and a unique purpose. My point is that the building blocks of creation go hand in hand with His purposes and therefore shouldn't be ignored. In fact, the human brain and *nervous system* is probably the most amazing created structure. In other words, the spiritual and the physical somehow come together in the brain. As psychologists pick apart and try to deconstruct the form and function of the brain, keep your eye on the big picture of how God actually created everything to work together for His glory.[8]

Opportunity Quiz, Module 9 (1 pt. each)

1. Multiple sclerosis is a disease rooted in the lack of the insulated material called

   _____ _____.

2. A "runner's high" is created when what *neurotransmitter* is released? (Hint: you don't need morphine to get this right.)

3. Which junction (space) has been referred to as the "protoplasmic kiss"?

4. Not that you're thinking of using it…yet, but please explain how Botox works.

7. Jeremiah 1:5.

8. "And we know that in all things God works for the good of those who love him, who have been called according to his purpose" Romans 8:28.

5. Becoming pregnant illustrates a vocabulary term about a response. (Hint: you can't be just a little bit.)

What was he partially right about?

OQ Module 9 Total pts (5 pts possible) _____

* * *

Does the Outside Reveal the Inside?

As soon as my students walk into the classroom each day, I greet them with the daily quiz about the previous night's reading. I usually start the particular quiz you just took by walking around the classroom and touching different parts of my students' heads while making various comments under my breath such as, "just as I expected," or "I bet he's a rather impulsive one." I probably shouldn't do that in a public school setting, but so far I haven't been sued. Anyway, as my students question my sanity, I begin the quiz by asking them what wrongheaded theory I am demonstrating. What is it?

This launches us into a discussion about the merits and demerits of Franz Gall's idea.

What was this practice called?

What was he wrong about?

Neuron Flush

The timing wasn't so good on my next demonstration. We had a brand new principal and vice principal, and nobody warned them about my antics. By chance, one of the security guards was patrolling the halls right after I took my whole class on a field trip into the boys' bathroom. I knew there was going to be trouble when I heard her radio make that beeping sound. Two minutes later the principal walked into the boys' bathroom and found me standing over one of the stalls flushing a toilet in order to demonstrate how a neuron works. You can do the same assignment with a friend or parent…but without all the drama.

How Is Flushing a Toilet Like a Neuron Firing?

You may not have made the connection on your own, but I hope this exercise will make it easier to recall the information.

Explain how each aspect of flushing a toilet is similar to how a neuron fires. Next to each neurological term write its toilet equivalent.

depolarization:

all-or-none response:

refractory period:

threshold:

resting potential:

action potential:

sodium-potassium pump:

Check your responses against the answers below.[9]

From now on, whenever you make a trip to the bathroom, give yourself a quick review of the function and structure of a neuron (or not)! ■

9. **Depolarization**: represented by the toilet flushing.
All-or-none principle: the toilet either flushes completely or not at all; it doesn't flush a little or a lot.
Refractory period: after you flush the toilet, it won't flush again for a certain period of time, even if you push the handle repeatedly.
Threshold: you can push the handle a little bit, but it won't flush until you push the handle past a certain critical point. This corresponds to the level of excitatory neurotransmitters that a neuron must absorb before it will fire.
Resting potential: the toilet is "waiting" to fire, and the water in the tank represents the overall negative charge inside the neuron waiting for depolarization.
Action potential: the action potential is represented by opening the flap in the tank and the water suddenly flowing into the toilet bowl.
Sodium-potassium pump: at resting potential, the water is a combination of negatively charged chloride and positively charged potassium. When the toilet is flushed, sodium that has not been able to enter the urinal rapidly comes flowing in and pushes the potassium out. During the refractory period, the potassium reenters and the sodium is pushed back in and balance and repolarization occurs.

Course Test Unit I & II – Psychology's History and Research Methods

Multiple Choice

Identify the choice that best completes the statement or answers the question.

1. _____ Wilhelm Wundt's laboratory work involved experimental studies of
   a. animal intelligence.
   b. personality development.
   c. learning and memory.
   d. reactions to sensory stimulation.
   e. association and generalization.

2. _____ Research participants who carefully observe and report their immediate reactions and feelings in response to different musical sounds are using the method known as
   a. spaced practice.
   b. psychoanalysis.
   c. introspection.
   d. natural selection.
   e. SQ3R.

3. _____ The early school of psychology known as functionalism was developed by
   a. Wilhelm Wundt.
   b. William James.
   c. René Descartes.
   d. John B. Watson.
   e. Sigmund Freud.

4. _____ Who would be most likely to emphasize the role of the unconscious in affecting behavior?
   a. Ivan Pavlov
   b. Carl Rogers
   c. William James
   d. John B. Watson
   e. Sigmund Freud

5. _____ Contemporary psychology is best defined as the scientific study of
   a. conscious and unconscious mental activity.
   b. observable responses to the environment.
   c. behavior and mental processes.
   d. thoughts, feelings, and perceptions.
   e. maladaptive and adaptive behaviors.

6. _____ Lissette wonders whether personality differences between her African-American and Asian-American friends result from biological or cultural influences. In this instance, Lissette is primarily concerned with the relative contributions of
   a. biology and cognition.
   b. nature and nurture.
   c. behavior and mental processes.
   d. conscious and unconscious thoughts.
   e. introspection versus structuralism.

7. _____ Who highlighted the reproductive advantages of environmentally adaptive traits?

   a. Plato
   b. Aristotle
   c. John Locke
   d. Charles Darwin
   e. William James

8. _____ Which statement best exemplifies contemporary psychology's understanding of the nature-nurture issue?

   a. Children learn grammar mostly from experience.
   b. Sexual behaviors are more "pushed" by inner biology.
   c. Depression is a disorder of the brain and of thought.
   d. Humans are alike because of our evolutionary history.
   e. Intelligence is purely an inborn trait.

9. _____ The biopsychosocial approach provides an understanding of social-cultural influences integrated within the larger framework of

   a. functionalism.
   b. introspection.
   c. humanistic psychology.
   d. multiple levels of analysis.
   e. structuralism.

10. _____ Janna has low self-esteem because she is often teased for being overweight. Appreciating the complexity of Janna's difficulties requires

    a. introspection.
    b. psychoanalysis.
    c. massed practice.
    d. a biopsychosocial approach.
    e. structuralism.

11. _____ Which approach is most directly concerned with assessing the relative impact of both nature and nurture on our psychological traits?

    a. biopsychosocial
    b. cognitive
    c. humanistic
    d. social-cultural
    e. psychodynamic

12. _____ Which perspective is most relevant to understanding the impact of strokes and brain diseases on memory?

    a. evolutionary
    b. behavioral
    c. psychodynamic
    d. biological
    e. humanistic

13. _____ Mr. Lopez believes that severe depression results primarily from an imbalanced diet and abnormal brain chemistry. Mr. Lopez favors a _____ perspective on depression.

    a. biological
    b. psychodynamic
    c. behavioral
    d. cognitive
    e. psychoanalytic

14. _____ The cognitive perspective in psychology focuses on how

    a. feelings are influenced by blood chemistry.
    b. people try to understand their own unconscious motives.
    c. behavior is influenced by environmental conditions.
    d. people encode, process, store, and retrieve information.
    e. how behaviors and thinking vary across cultures.

15. _____ The distinctive feature of the psychodynamic perspective is its emphasis on

    a. natural selection.
    b. brain chemistry.
    c. unconscious conflicts.
    d. learned behaviors.
    e. introspection.

16. _____ Mrs. Alfieri believes that her husband's angry outbursts against her result from his unconscious hatred of his own mother. Mrs. Alfieri is looking at her husband's behavior from a(n) _____ perspective.

    a. evolutionary
    b. behavioral
    c. psychodynamic
    d. biological
    e. social-cultural

17. _____ Which perspective is most directly concerned with how the physical properties of the brain influence behaviors and mental states?

    a. cognitive
    b. social-cultural
    c. psychodynamic
    d. behavioral
    e. biological

18. _____ A clinical psychologist who explains behavior in terms of unconscious drives and conflicts is employing a(n) _____ perspective.

    a. evolutionary
    b. psychodynamic
    c. behavioral
    d. social-cultural
    e. cognitive

19. _____ Natassia believes that boys learn to be more aggressive than girls primarily because boys are more frequently exposed to external pressures to fight. Natassia's belief most directly exemplifies the _____ perspective.

    a. behavioral
    b. evolutionary
    c. cognitive
    d. psychodynamic
    e. biological

20. _____ Which psychological perspective highlights the manner in which people encode, process, store, and retrieve information?

    a. cognitive
    b. psychodynamic
    c. behavioral
    d. biological
    e. evolutionary

21. _____ Dr. Wilson attributes the delinquent behaviors of many teens to the pressures associated with being members of street gangs. Her account best illustrates a(n) _____ perspective.

    a. psychodynamic
    b. behavioral
    c. social-cultural
    d. biological
    e. evolutionary

22. _____ Dr. Veenstra conducts basic research on the impact of racial prejudice on behavior. Dr. Veenstra is most likely a(n) _____ psychologist.

    a. developmental
    b. clinical
    c. social
    d. biological
    e. industrial-organizational

23. _____ Clinical psychologists specialize in

    a. constructing surveys.
    b. animal research.
    c. providing therapy to troubled people.
    d. providing drugs to treat behavioral disorders.
    e. studying how people solve complicated mental puzzles.

24. _____ Dr. Mills conducts research on why individuals conform to the behaviors and opinions of others. Which specialty area does his research best represent?

    a. cognitive psychology
    b. social psychology
    c. developmental psychology
    d. clinical psychology
    e. industrial-organizational psychology

25. _____ Mr. Kay is interested in whether individual differences affect learning. Mr. Kay is most likely a(n) _____ psychologist.

a. human factors
b. developmental
c. educational
d. social
e. clinical

26. _____ Mr. Christian has designed a camera with buttons that are easy to reach and see. Mr. Christian is most likely

a. a cognitive psychologist.
b. conducting basic research.
c. using psychometrics.
d. engaged in applied research.
e. engaged in introspection.

27. _____ The psychologist who would be least likely to be involved directly in patient care in a hospital setting is a

a. clinical psychologist.
b. rehabilitation psychologist
c. neuropsychologist
d. health psychologist
e. educational psychologist

28. _____ Dr. Welker decided on his career path after seeing two of his grandparents experience Alzheimer's disease. Because he now works in the diagnosis and treatment of Alzheimer's disease, he must be considered a(n) _____.

a. experimental psychologist.
b. forensic psychologist.
c. rehabilitation psychologist.
d. counseling psychologist.
e. neuropsychologist.

29. _____ As a health psychologist, Dr. Rowell would be most likely involved in

a. animal research performed in a laboratory setting.
b. helping businesses create more effective interviewing practices when hiring new workers.
c. designing puzzles to see if adolescents and adults reason differently.
d. testifying in a court case about the mental health of a person accused of a crime.
e. determining the effectiveness of a new campaign to reduce teen smoking.

30. _____ The hindsight bias refers to people's tendency to

a. dismiss the value of replication.
b. reject any ideas that cannot be scientifically tested.
c. exaggerate their ability to have foreseen the outcome of past events.
d. assume that correlation proves causation.
e. overestimate the extent to which others share their opinions.

31. _____ Alexandra is told that research supports the value of cosmetic surgery for boosting self-esteem. Belinda is told that the esteem-enhancing value of cosmetic surgery has been refuted by research. Both women would consider the findings to be common sense. This best illustrates the power of

    a. random sampling.
    b. overconfidence.
    c. the hindsight bias.
    d. illusory correlation.
    e. the double-blind procedure.

32. _____ Formulating testable hypotheses before conducting research is most directly useful for restraining a thinking error known as

    a. random sampling.
    b. the hindsight bias.
    c. overconfidence.
    d. illusory correlation.
    e. random assignment.

33. _____ Our tendency to believe we know more than we do illustrates

    a. naturalistic observation.
    b. illusory correlation.
    c. overconfidence.
    d. the standard deviation.
    e. placebo.

34. _____ Political officials who have no doubt that their own economic and military predictions will come true most clearly demonstrate

    a. illusory correlation.
    b. random sampling.
    c. overconfidence.
    d. the placebo effect.
    e. operational definition.

35. _____ Which two questions exemplify the scientific attitude?

    a. What do you mean? How do you know?
    b. Who believes you? What are their qualifications?
    c. How common is this answer? How many people agree?
    d. Is this an established truth? How long has it been considered fact?
    e. Which truths does this agree with? Which truths does it contradict?

36. _____ A questioning attitude regarding psychologists' assumptions and hidden values best illustrates

    a. hypotheses.
    b. critical thinking.
    c. the hindsight bias.
    d. overconfidence.
    e. illusory correlation.

37. _____ According to Professor Fayad, we like people who like us because their affection for us boosts our own self-esteem. His idea is an example of

a. naturalistic observation.
b. illusory correlation.
c. hindsight bias.
d. replication.
e. a theory.

38. _____ What do scientists call an explanation that organizes observations and predicts future behaviors or events?

a. hypothesis
b. theory
c. critical thinking
d. operational definition
e. replication

39. _____ A hypothesis is a(n)

a. observable relationship between specific independent and dependent variables.
b. testable prediction that gives direction to research.
c. set of principles that organizes observations and explains newly discovered facts.
d. unprovable assumption about the unobservable processes that underlie psychological functioning.
e. statement of procedures used to define research variables.

40. _____ A specification of how a researcher measures a research variable is known as a(n)

a. standard deviation.
b. control condition.
c. replication.
d. operational definition.
e. observation.

41. _____ Replication involves

a. the selection of random samples.
b. perceiving order in random events.
c. repeating an earlier research study.
d. rejecting ideas that cannot be scientifically tested.
e. overestimating the extent to which others share our views.

42. _____ Professor Ambra was skeptical about the accuracy of recently reported research on sleep deprivation. Which process would best enable her to assess the reliability of these findings?

a. naturalistic observation
b. replication
c. random sampling
d. the case study
e. standard deviation

43. _____ In 1848, Phineas Gage, a railroad construction foreman, survived when an explosion drove an iron rod through his head damaging the functioning of the frontal lobes. This instance provided evidence that the frontal lobe plays a role in personality and behavior. Researchers have continued to study Gage's brain to better understand this link. Which research method is being used?

a. experimentation
b. correlation
c. case study
d. naturalistic observation
e. survey

44. _____ The biggest danger of relying on case-study evidence is that it

a. is based on naturalistic observation.
b. may be unrepresentative of what is generally true.
c. overestimates the importance of operational definitions.
d. leads us to underestimate the causal relationships between events.
e. relies mostly on correlational rather than causational evidence.

45. _____ Surveys indicate that people are much less likely to support "welfare" than "aid to the needy." These somewhat paradoxical survey results best illustrate the importance of

a. random sampling.
b. wording effects.
c. the placebo effect.
d. naturalistic observation.
e. hindsight bias.

46. _____ In order to learn about the political attitudes of all students enrolled at Arizona State University, Professor Marlow randomly selected 800 of these students to complete a questionnaire. In this instance, all the students enrolled at Arizona State University are considered to be a(n)

a. independent variable.
b. representative sample.
c. control.
d. dependent variable.
e. population.

47. _____ Correlational research is most useful for purposes of

a. explanation.
b. prediction.
c. control.
d. replication.
e. experimentation.

48. _____ A correlation coefficient is a measure of the

a. difference between the highest and lowest scores in a distribution.
b. average squared deviation of scores from a sample mean.
c. direction and strength of the relationship between two variables.
d. statistical significance of a difference between two sample means.
e. frequency of scores at each level of some measure.

49. _____ To graphically represent the correlation between two variables, researchers often construct a

a. skewed distribution.
b. scatterplot.
c. standard deviation.
d. bar graph.
e. pie chart.

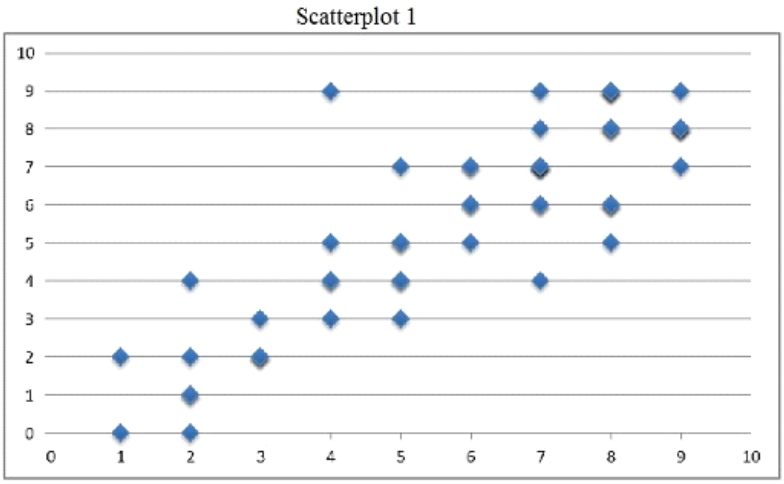
50. _____ If psychologists discovered that wealthy people are less satisfied with their marriages than poor people are, this would indicate that wealth and marital satisfaction are

a. causally related.
b. negatively correlated.
c. independent variables.
d. dependent variables.
e. positively correlated.

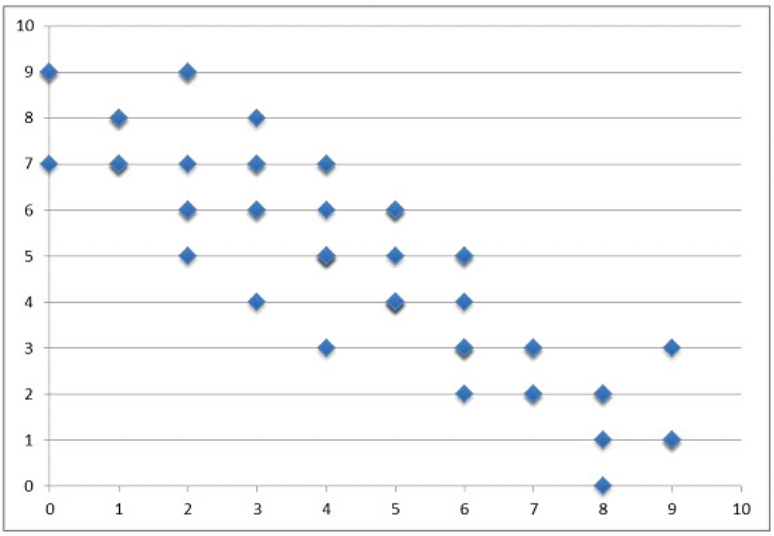
51. _____ Which of the following correlations between annual income and education level would best enable you to predict annual income on the basis of level of education?

a. +0.05
b. –0.01
c. +0.10
d. +0.50
e. –0.001

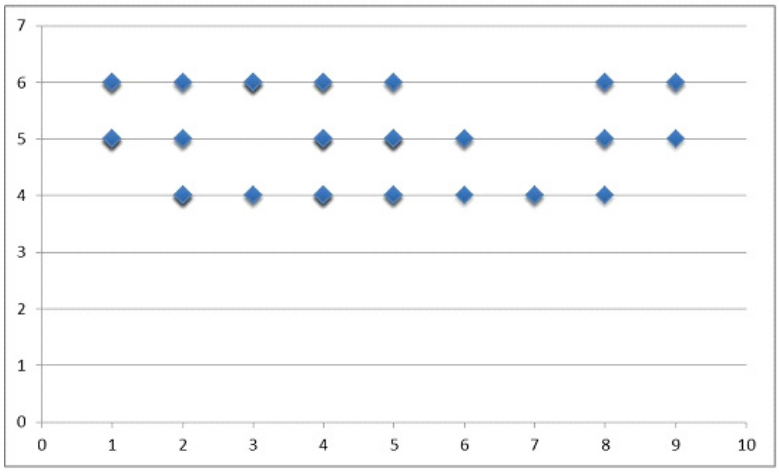
Use the following five scatterplots to answer the next two questions.



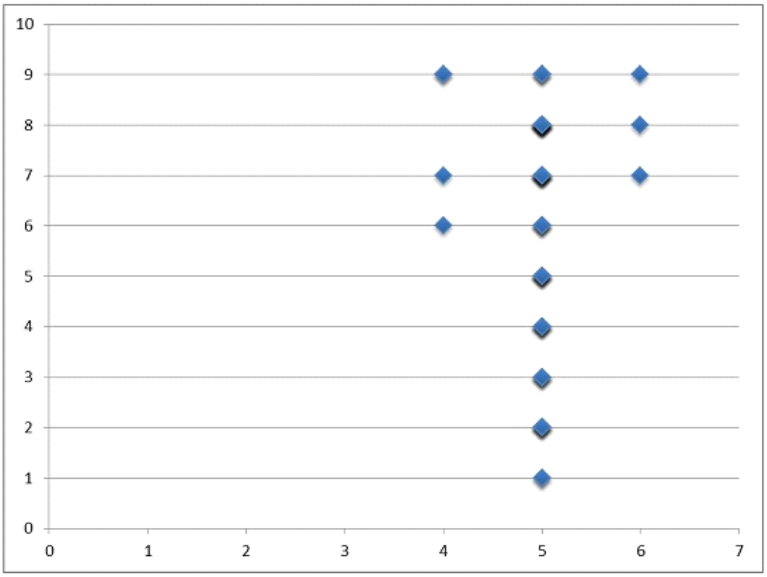
Scatterplot 2

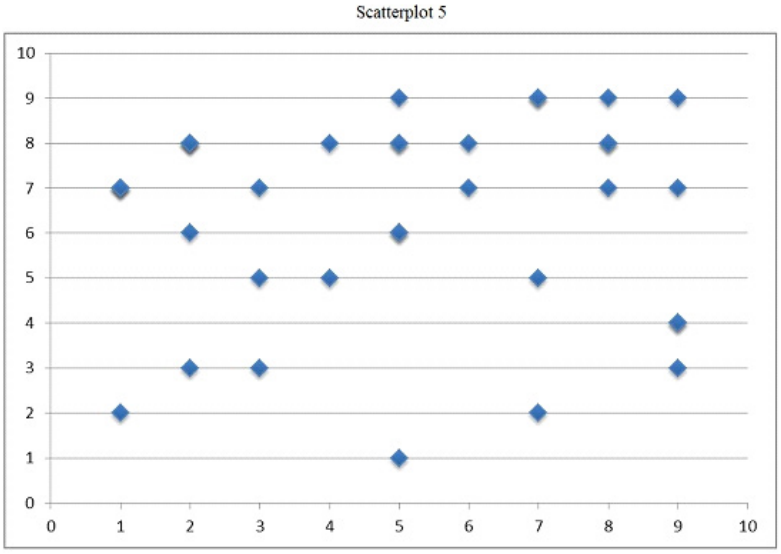


Scatterplot 3



Scatterplot 4





52. _____ Which of the following scatterplots represents a relationship with a correlation coefficient that would be close to positive one (+1)?

a. 1
b. 2
c. 3
d. 4
e. 5

53. _____ Which of the following scatterplots represents a relationship with a correlation coefficient that would be close to negative one (-1)?

a. 1
b. 2
c. 3
d. 4
e. 5

54. _____ Which of the following is the best definition of illusory correlation?

a. a statistical relationship between two variables
b. a perceived but nonexistent correlation
c. any independent variable that does not truly cause a dependent variable
d. a scatterplot indicating the likelihood that a variable will or will not change
e. a predication about the relationship between two variables

55. _____ The sequential occurrence of two highly unusual events is most likely to contribute to

a. random sampling.
b. the hindsight bias.
c. the placebo effect.
d. an illusory correlation.
e. overconfidence.

56. _____ To minimize the extent to which outcome differences between experimental and control conditions can be attributed to placebo effects, researchers make use of

a. random sampling.
b. the double-blind procedure.
c. random assignment.
d. operational definitions.
e. replication.

57. _____ Which of the following is true for those assigned to a control group?

a. The experimenter exerts the greatest influence on participants' behavior.
b. The research participants are exposed to all the different experimental treatments.
c. The research participants are exposed to the most favorable levels of experimental treatment.
d. The experimental treatment is absent.
e. The operational definition is not applied to their variables.

58. _____ During the past year, Zara and Ivan each read 2 books, but George read 9, Ali read 12, and Marsha read 25. The median number of books read by these individuals was

a. 2.
b. 50.
c. 10.
d. 12.
e. 9.

59. _____ The arithmetic average of a distribution of scores is the

a. mode.
b. median.
c. standard deviation.
d. mean.
e. range.

60. _____ During the past month, Henri and Sylvia each ate 10 candy bars, while Jerry ate 8, Tricia ate 6, and Tahli ate only 1. The mean number of candy bars eaten by these individuals was

a. 3.
b. 5.
c. 7.
d. 8.
e. 10.

61. _____ Which measure of central tendency would a baseball manager be most likely to rely on in picking a pinch hitter in a tie game?

a. median
b. mode
c. range
d. mean
e. standard deviation

62. _____ When the observed difference between the means of an experimental group and control group are not likely due to chance, researchers conclude that this difference is

a. positively correlated.
b. highly variable.
c. reliable.
d. statistically significant.
e. experimentally empirical.

63. _____ What do researchers call a difference between the means of experimental and control groups when they know the averages are reliable and the difference between the groups is unlikely due to random chance or extraneous variables?

a. operationally defined
b. statistically significant
c. normal curve
d. standard deviation
e. experimental group

64. _____ American males shake hands in greeting; Japanese men bow. However, people can communicate with a smile. What does this tell us about the role of culture in understanding our psychology?

a. Culture shapes our behavior, but certain underlying processes guide people everywhere.
b. Psychologists cannot generalize theories to different cultures because culture is such a powerful influence on behavior.
c. Culture is a biological force that does not affect overt social behaviors.
d. Biological differences divide the human family and our behaviors.
e. An awareness of cultural differences is unimportant to the study of behavior and mental processes.

65. _____ Stanley Milgram designed his influential studies on obedience in response to thinking about the Holocaust. In their defense, Nazi war criminals said they had committed such atrocities against the Jews and others because they were "just following orders." Milgram's motivation to study obedience to authority illustrates that

a. human behavior can be tested by means of experimentation.
b. psychology is based on common sense and intuition.
c. psychology is not value free; it affects what psychologists study.
d. psychologists must be aware of ethical concerns when using human participants in experiments.
e. the personal bias of researchers make their findings suspect.

Once you have double checked your answers, correct your exam using the answer key in the back of the *Psychology Interactive Workbook and Diary*. Next, (if you're not too upset) go back and figure out what you did wrong on the questions you missed. I have made it easy to do this by listing the modules next to the answers. Don't beat yourself up for missing questions because you actually learn more when confronted with a wrong answer.

Fill out the Unit Grade Sheet on this page as it is a summary of all the points that you earned throughout the Unit. Note that everything is done as percentages because each unit will have differing numbers of test and OQ questions. Finally, record your Total Unit Score in the gradebook located in Appendix 5.

Because this class (and learning in general) is cumulative, each Unit Test is designed to continually review prior material. In other words, information from previous tests is fair game for future tests. Therefore, information from Unit 1 will be included in every other test all year so make sure to figure out anything that is giving you trouble. Don't worry, by the end the year it will be a breeze!

Unit Grade Sheet	
Review Questions	_____ / 20
OQs (OQ% x 20) Example: .90 x 20 = 18/20	_____ / 20
Unit Tests (test% x 20) Example: .80 x 20 = 16/20	_____ / 20
Workbook and Diary Activities	_____ / 20
Workbook and Diary Questions/Responses	_____ / 20
Total Unit Score (record in grade book located in Appendix 5)	_____ / 100

***Grace note:** on the first test(s), I allow students to do a buyback. They are allowed to go back to every question on the test they missed, and get the point back by defining or explaining *every* option on the question. (So they can now explain why the correct answer is correct and why the others are not.)

Here is an example:

The difference between the highest and lowest scores in a distribution is the:

a. mean. The statistical average of a number of scores. Add the scores and divide by the number of scores.
b. range. The difference between the highest and the lowest scores in a distribution. [Clearly the best answer!]
c. median. The middle score in a distribution.
d. standard deviation. How much the scores vary from the mean.
e. correlation coefficient. A number that indicates the direction and strength of numbers in a distribution.

This method takes a lot of work, but ensures that the student will understand the material more thoroughly. I will leave it to you and your parents to decide if this is an option for other tests.

Section Three

Class Conclusion & Appendices

Appendix 1: OQ Answer Keys

OQ Module 1

1. The scientific study of behavior (stuff you do) and mental processes (the stuff going on inside).
2. Yes. It gathers empirical evidence and utilized the scientific method rather than hunches.
3. Behaviorists thought it was nonsense because you couldn't measure thought processes.
5. Checking to make sure you read the diary and workbook intro. There are a ton of amazing resources on the publisher's website http://www.macmillanlearning.com/Catalog/studentresources/MyersAP2e .
4. The AP test. Actually, my main goals are for you to glorify God has you have fun and learn… but it would be great for you to take the AP test if you want!

OQ Module 2

1. The debate wrestles with the question of which is a more important determinant in who we are: nature (genetic make-up) or nurture (our experience).
2. A perspective which incorporates biological, psychological, and social-cultural levels of analysis.
3. Basic research is research for the sake of new learning to expand our base of knowledge. Applied research seeks to solve a specific problem.
4. Psychiatrists can prescribe drugs.
5. A perspective which focuses on how behavior and thinking vary across situations and cultures.

OQ Module 3

1. Age-related behavioral changes across a broad range of topics.
2. Experimental psychologists.
3. Psychometric and quantitative psychologists.
4. Forensic psychologists.
5. Sports psychologists.

OQ Module 4

1. The cognitive perspective.
2. The tendency to believe that you could have/would have foreseen it.
3. Anagrams, dropping a class or predictions of world events.
4. Your own, subjective answer (free point!)
5. True.

OQ Module 5

1. The wording effect.
2. A theory explains, but a hypothesis goes one step further because it is a testable prediction implied by a theory.
3. A random sample of 150. Size does not substitute for randomness.
4. A survey looks at many cases in less depth. A case study looks at few cases, in greater depth.
5. You would be (and I hope you really are in a few minutes) unobtrusive, so that your subjects don't change their behavior because they know you are watching.

OQ Module 6

1. Manipulating one variable at a time to see its effect.
2. Double-blind: both the subject and the researcher are blind (neither knows who has received the treatment and who has received the placebo).
3. The independent variable is one whose effect is being studies. For example, if a new pain reliever was being studied it would be they group that got the medicine. The dependent variable is the outcome. In the example with the medicine, it would be how much it took the pain away.
4. A confounding variable is any other factor that messes up the data.
5. The random assignment is way more important.

OQ Module 7

1. Yes it can, by testing theoretical principles and it is these principles that hopefully generalize to everyday life.
2. Yes they do, because if the participants knew exactly what was being tested that might change their behavior and therefore skew the results. Debriefing is when they are told exactly what was being tested and if there was any deception and why.
3. That before an experiment, participants be told enough to enable them to choose whether or not they want to be a part of an experiment.
4. Yes, as long as researchers ensure the "comfort, health, and humane treatment" of animals and minimize infection, illness, and pain."
5. Rats are not stupid enough to purchase lottery tickets.

OQ Module 8

1. 205 hair flips.
2. 202 hair flips.
3. 215–199=16 hair flips.
4. Statistically significant.
5. A number that shows how much scores vary. An example might be how consistent is a basketball team's scoring. A 4 would indicate much more consistency between players than a 15.

OQ Module 9

1. Myelin sheath.
2. Endorphins.
3. Synapse or synaptic gap.
4. Injections of botulin smooth wrinkles by paralyzing the underlying facial muscles.
5. All-or-none response.

OQ Module 10

1. Peripheral nervous system (PNS) and central nervous system (CNS).
2. Autonomic and somatic (skeletal).
3. Sympathetic and parasympathetic.
4. Somatic.
5. Sensory neuron, interneuron, motor neuron.

OQ Module 11

1. Hormones, bloodstream.
2. Pituitary gland, hypothalamus.
3. See illustration in text.
4. MRIs use magnetic fields and radio waves to see the soft tissue structure of the brain; PET scans trace radioactive glucose throughout the brain.
5. The amygdala.

OQ Module 12

1. False. They are negatively correlated because as age goes up, plasticity goes down.
2. Simply match brain signals on their motor cortex to simple arm movements on a robotic arm using an implanted chip on her motor cortex. (Decode cognitive neural signals in order to control external devices.)
3. The motor cortex controls voluntary movements; the sensory cortex processes sensations.
4. Frontal lobe.
5. Neurogenesis.

OQ Module 13

1. Corpus callosum
2. If the picture was flashed to the right hemisphere, they couldn't say what they viewed because the corpus callosum had been cut and the message could not be sent to the verbal side of the brain. However, their left hand, which is controlled by the right brain, could express it by selecting the spoon.
3. Right side of the body.
4. Left hemisphere.
5. The idea that information is often simultaneously processed on separate conscious and unconscious tracks.

OQ Module 14

1. Nucleus, chromosome, gene.
2. Heritability is the proportion of variation among individuals attributable to genes. Twain: 100 percent heritability.

Appendix 2: Textbook Module & Unit Review Answer Keys

Answers for the Module Multiple-Choice Questions, Unit Multiple-Choice Questions and Unit Free Response Questions in *Myers' Psychology for AP*.

Note: For the Unit Free-Response Questions, I have included the answers to only #2 questions. The answers to each #1 question is located in the text. I did not assign any #3 questions.

Module 1

1. C
2. B
3. E
4. C
5. C

Module 2

1. C
2. D
3. A
4. B

Module 3

1. A
2. E
3. A
4. E
5. A
6. D
7. E

Unit 1 Review

1. D
2. A
3. B
4. D
5. B
6. B
7. C
8. E
9. A
10. C
11. B
12. C
13. E
14. D

Unit I Free-Response Question #2

When answering Free Response Questions, make sure to give as much specific information as you can. At the end the other year AP test, the graders have a very specific rubric which they use to grade your essay. It doesn't haven't to be beautiful (no style points), but it does have to provide some level of detail).

1 point: Educational psychologists focus on the relationship between learning and physical and social environments and to help develop strategies to improve the learning process. They might focus on basic research about learning or developing new ways to teach effectively.

2 point: Industrial-organizational psychologists focus on the relationship between people and their working environments. They want to increase productivity or improve the hiring process or promote job satisfaction in the workplace.

3 point: Forensic psychologists focus on applying psychological principles to legal issues. They might look at public policies related to mental health or help police in criminal investigations or even work on jury selection and deliberation processes.

4 point: Community psychologists try to focus on broad problems of mental health in the community rather than on specific individuals. They seek to promote psychological health by making the environment better such as preventative measures, crisis intervention and looking at the problems of undeserved groups and ethnic minorities.

The breadth of options should persuade the parents that psychology is broader than their assumption.

Module 4

1. C
2. C
3. B
4. D

Module 5

1. A
2. D
3. A
4. B
5. A
6. D
7. A

Module 6

1. A
2. D
3. A
4. D
5. D
6. C

Module 7

1. D
2. D
3. B
4. E

Module 8

1. A
2. A
3. B
4. E
5. D

Unit II Review

1. D
2. B
3. A
4. C
5. D
6. B
7. A
8. B
9. C
10. A
11. C
12. C
13. E
14. E
15. C
16. B
17. D
18. D
19. B
20. C

Unit II Free-Response Question #2

When answering FRQs, the most important thing to keep in mind is to answer each element of each question. In this case, points will be assigned for both defining and apply each term.

1 point: Def: When each individual in the whole population has an equal chance of being selected to participate in a study, it is a truly random sample. This is a subset of the entire population.

2 point App: Dr. Tabor's sample is not random because she is only choosing participants from her own classes. Therefore, every member of the population (American university students) did not have an equal chance of being chosen to participate.

3 point: Def: A scatterplot is a graph of the relationship between 3 variables and each dot on the graph represents the values of 2 variables for each participant. The viewer can see the slope of the dots and which illustrates the relationship between the variables (positive or negative). How spread out the dots data points are represents the strength of the relationship or variability.

4 point App: When Dr. Tabor graphs the data on a scatterplot, she can tell by the upward slope that the relationship between alertness and sleep where positively correlated. She can tell by the fact that the data was pretty tightly packed that it was also very strong. (.89)

5 point: Def: The wording effect can pose a problem in survey research because the way in which you phrase a question can affect the results.

6 point App: Dr. Tabor's results may be affected by the manner in which she asks the question. She should be careful to not ask a "leading question," one that pushes towards a certain answer.

7 point: Def: Operational definitions are descriptions of exactly how variables will be measured. Well documented operational definitions allow for replication which is an important part of the scientific method.

8 point App: The variable of sleep is operationally defined as the number of hours per night of sleep reported. The variable of alertness is operationally defined as an individual's self-reported evaluation of a scale from 1–10.

9 point: Def: A positive correlation is one that indicates a relationship between variables where they both move together (either up together or down together).

10 point App: In this case, Dr. Tabor discovered a positive relational between the amount of sleep students received and their levels of alertness. In other words, the more sleep the students received, the more alert they were in class. Or the less sleep students received, the less alert they were in class.

Module 9

1. C
2. E
3. C
4. D
5. C
6. D
7. A
8. d

Module 10

1. C
2. E
3. A
4. A
5. C
6. D
7. E
8. B

Module 11

1. C
2. B
3. D
4. E
5. C
6. B
7. D

Module 12

1. A
2. D
3. B
4. B
5. A
6. A
7. E
8. B

Module 13

1. A
2. B
3. E
4. A
5. B
6. B

Module 14

1. D
2. E
3. A
4. C
5. C

Module 15

1. C
2. A
3. A

Unit III Review

1. C
2. A
3. B
4. A
5. E
6. E
7. A
8. B
9. E
10. E
11. C
12. B
13. D
14. D
15. E
16. C
17. C
18. A
19. A
20. C
21. B
22. C
23. E
24. A
25. D

Appendix 3: Course Unit Test Answer Key

Unit I & II Test Answer Section

1. ANS: D
2. ANS: C
3. ANS: B
4. ANS: E
5. ANS: C
6. ANS: B
7. ANS: D
8. ANS: C
9. ANS: D
10. ANS: D
11. ANS: A
12. ANS: D
13. ANS: A
14. ANS: D
15. ANS: C
16. ANS: C
17. ANS: E
18. ANS: B
19. ANS: A
20. ANS: A
21. ANS: C
22. ANS: C
23. ANS: C
24. ANS: B
25. ANS: C
26. ANS: D
27. ANS: E
28. ANS: E
29. ANS: E
30. ANS: C
31. ANS: C
32. ANS: B
33. ANS: C
34. ANS: C
35. ANS: A
36. ANS: B
37. ANS: E
38. ANS: B
39. ANS: B
40. ANS: D
41. ANS: C
42. ANS: B
43. ANS: C
44. ANS: B
45. ANS: B
46. ANS: E
47. ANS: B
48. ANS: C
49. ANS: B
50. ANS: B
51. ANS: D
52. ANS: A
53. ANS: B
54. ANS: B
55. ANS: D
56. ANS: B
57. ANS: D
58. ANS: E
59. ANS: D
60. ANS: C
61. ANS: D
62. ANS: D
63. ANS: B
64. ANS: A
65. ANS: C

Unit Test III Answer Section

1. ANS: D
2. ANS: A
3. ANS: D
4. ANS: A
5. ANS: B
6. ANS: B
7. ANS: C
8. ANS: C
9. ANS: B
10. ANS: B
11. ANS: C
12. ANS: D
13. ANS: B
14. ANS: A
15. ANS: B
16. ANS: D
17. ANS: D
18. ANS: A
19. ANS: D
20. ANS: A
21. ANS: B
22. ANS: B
23. ANS: C
24. ANS: D
25. ANS: D
26. ANS: D
27. ANS: D
28. ANS: C
29. ANS: C
30. ANS: D
31. ANS: A
32. ANS: E
33. ANS: C
34. ANS: B
35. ANS: A
36. ANS: D
37. ANS: D
38. ANS: C
39. ANS: D
40. ANS: E
41. ANS: D
42. ANS: D
43. ANS: D
44. ANS: E
45. ANS: B
46. ANS: E
47. ANS: D
48. ANS: D
49. ANS: A
50. ANS: C
51. ANS: E
52. ANS: D
53. ANS: A
54. ANS: B

55. ANS: D
56. ANS: E
57. ANS: B
58. ANS: D
59. ANS: C
60. ANS: C
61. ANS: D
62. ANS: B
63. ANS: B
64. ANS: B
65. ANS: D
66. ANS: E
67. ANS: D
68. ANS: C
69. ANS: D
70. ANS: D

Unit IV Test Answer Section

1. ANS: A
2. ANS: B
3. ANS: B
4. ANS: D
5. ANS: D
6. ANS: C
7. ANS: D
8. ANS: C
9. ANS: D
10. ANS: A
11. ANS: E
12. ANS: C
13. ANS: D
14. ANS: D
15. ANS: C
16. ANS: A
17. ANS: E
18. ANS: B
19. ANS: B
20. ANS: B
21. ANS: A
22. ANS: D
23. ANS: B
24. ANS: D
25. ANS: D
26. ANS: B
27. ANS: C
28. ANS: A
29. ANS: B
30. ANS: E
31. ANS: C
32. ANS: A
33. ANS: C
34. ANS: C
35. ANS: B
36. ANS: E
37. ANS: A
38. ANS: E
39. ANS: A
40. ANS: D
41. ANS: D
42. ANS: D
43. ANS: B
44. ANS: E
45. ANS: B
46. ANS: B
47. ANS: D
48. ANS: A
49. ANS: A
50. ANS: B
51. ANS: C
52. ANS: A
53. ANS: D
54. ANS: D
55. ANS: C
56. ANS: B
57. ANS: D
58. ANS: D
59. ANS: D
60. ANS: B
61. ANS: C
62. ANS: D
63. ANS: D
64. ANS: D
65. ANS: B
66. ANS: B
67. ANS: E
68. ANS: D
69. ANS: C
70. ANS: B

Unit V Test Answer Section

1. ANS: B
2. ANS: B
3. ANS: D
4. ANS: D
5. ANS: B
6. ANS: C
7. ANS: A
8. ANS: C
9. ANS: A
10. ANS: C
11. ANS: C
12. ANS: C
13. ANS: B
14. ANS: D
15. ANS: A
16. ANS: A
17. ANS: E
18. ANS: A
19. ANS: E
20. ANS: E
21. ANS: E
22. ANS: E
23. ANS: B
24. ANS: A
25. ANS: C
26. ANS: B
27. ANS: B
28. ANS: B
29. ANS: D
30. ANS: A
31. ANS: B
32. ANS: A
33. ANS: A
34. ANS: D
35. ANS: A
36. ANS: A
37. ANS: B
38. ANS: C
39. ANS: A
40. ANS: E
41. ANS: D
42. ANS: A

Appendix 5: Grade Book

Total Unit Scores	
Unit I & II: Psychology's History and Research Methods	_____ / 100
Unit III: Biological Bases of Behavior	_____ / 100
Unit IV: Sensation and Perception	_____ / 100
Unit V: States of Consciousness	_____ / 100
Unit VI & VII: Learning and Cognition	_____ / 100
Unit VIII: Motivation, Emotion, and Stress	_____ / 100
Unit IX: Developmental Psychology	_____ / 100
Unit X: Personality	_____ / 100
Unit XI: Testing and Individual Differences	_____ / 100
Unit XII & XIII: Abnormal Behavior and Treatment	_____ / 100
Unit XIV & Enrichment: Social Psychology and Enrichment	_____ / 100
Final Grade	_____ / 1100

Convert to percentage and circle grade:

A B C D F

Example: 990/1100 = 90% = A