

# Answer Key

**Note:** Graphic Organizer answers are suggestions only and may not match students' answers exactly.

## Preview Test

### 01 Psychology

1. (C)            2. (A)            3. (B)  
4. (D)            5. (B)            6. (C)

### 02 Art History

7. (B)            8. (B)            9. (B)  
10. (C)           11. (B)           12. (C)

### 03 Service Encounter

13. (B)           14. (A), (C)    15. (C)  
16. (B)           17. (A)

## Chapter 1 Main Idea Questions

### 01 Astronomy

Mercury vs. The moon		
Mercury	Both	The moon
Scarps – raised areas resembling wrinkles that are caused by shrinking of its surface after cooling	Craters – round holes on the surface caused by meteorite impacts	Flat, dark areas covering the surface that are caused by lava flow in the moon's history

1. (C)            2. (B)

**Summary:** The professor compares the surfaces of the moon and the planet Mercury. The professor first mentions that the moon contains *maria*, which are dark, flat areas caused by lava flow in the moon's early history. The professor then says the surfaces are similar because of the craters that each has. Finally, the professor mentions the unique scarps on Mercury, which are raised areas that look like wrinkles.

### 02 History

Roman Public Baths	
Definition	Role
Public areas for bathing and socializing	Led to better hygiene
	Became enjoyable part of daily social life
	Provided source of entertainment and fitness
	Gave people place to discuss politics

1. (D)            2. (A)

**Summary:** The professor discusses the role that public baths played in Roman culture. First, the professor briefly mentions the increase in hygiene before moving on to the way the baths became a part of daily life. The professor then mentions how the baths included areas to exercise, giving the culture a source of entertainment and fitness. Last, the professor says that the baths were important centers for political discussion.

### 03 Office Hours

Problem	Solution
Student wants to get credit for computer program she will write for summer trip	Professor suggests independent study, offers to sponsor project

1. (A)            2. (B)

**Summary:** The student visits the professor because she wants to get credit for creating a program for an archaeology trip during the summer. The professor describes what is necessary for the project to be approved and offers to sponsor the project for the student. The student will view the online checklist and gather the correct materials.

### 04 Service Encounter

Problem	Solution
Student locked out of dorm room	Look for RA with key to let him in
	Find custodian who might have key

1. (B)            2. (D)

**Summary:** The student has locked himself out of his room and asks the desk employee how he can get back into his room. The desk employee discovers that the key is missing and says an RA has it. She then suggests that the student find the RA or find a custodian that might have a key.

**05 Business**

Outdoor Advertising	
Example	
Billboards	Transit advertising
Advantage	Disadvantage
Seen by many people	Cannot control who sees ad
Opportunity for creativity	Can be very expensive

1. (B)            2. (A)

**Summary:** The professor discusses the advantages and disadvantages of outdoor advertising. He says that this kind of advertising is seen by a lot of people. However, it is also harder to control who sees the ad. The professor then says that these advertisements can be very creative. However, he adds that creativity can be very expensive to accomplish.

**06 Film Studies**

Early Animation Devices	
Type	Explanation
Phenakistoscope	Static pictures on a wheel, slit to view pictures
Kinematoscope	Improved by enlarging cabinet or housing
Praxinoscope	Drum instead of wheel, used mirror to steady image

1. (C)            2. (D)

**Summary:** The professor describes three devices used in early animation. The first was the Phenakistoscope and consisted of pictures drawn on a disc and viewed through slits. The next was called the Kinematoscope and improved upon the Phenakistoscope by adding a cabinet. Last, the Praxinoscope used a drum instead of a wheel and used mirrors to keep the image steady.

**07 Office Hours**

Problem	Solution
Student wants to use CD for his paper	Can use lyrics and briefly describe music
Student wants to use video for his paper	Do a presentation to show video

1. (D)            2. (A)

**Summary:** The student goes to see the professor to ask about using a video and a CD in a paper. After clearing up some confusion, the professor says that the student can reference the music on the CD in the paper. However, with the video, the professor suggests that the student do a presentation to show the video itself.

**08 Service Encounter**

Problem	Solution
Student left backpack in library and it is now locked	Officer contacts another officer, who finds backpack

1. (C)            2. (C)

**Summary:** The student visits the campus security office late at night because he has left his backpack in the library, which is now closed for the night. The officer checks the lost and found and contacts the other officers to try to find it. They finally contact an officer who is still in the library, and the backpack is found.

**09 Sociology**

Davis and Moore's Principles of Stratification	
Theory	Example
Some jobs have higher salaries to encourage people to do difficult jobs	Doctors must receive training and spend a lot of money to prepare, high salary is reward
	Teachers are as necessary as doctors, though reward is the job itself instead of large salary

1. (B)            2. (D)

**Summary:** The professor discusses a theory of stratification by Davis and Moore. The theory says

that some jobs have more rewards to encourage people to do them. The professor first discusses a doctor as an example of a difficult job that has a high salary. The professor then discusses a teacher, which is also a difficult and necessary position, but does not pay well. The professor explains that this happens because the act of teaching is a reward in itself and does not require a higher pay.

## 10 Biology

Koch's Germ Theory of Disease	
Requirement	Result
Organism must be present in sick subject, never in healthy subject	Koch applied his postulates to identify cause of tuberculosis
Pure culture must be grown	
Healthy animal should be infected and become sick	
Blood sample must match original culture	

1. (A)                      2. (B)

**Summary:** The professor describes Koch's Germ Theory of Disease and his postulates. The postulates require the following: the organism to be present in all cases of the disease, a pure culture to be grown, disease in a healthy animal to be caused by the culture, and similarity in blood samples to exist between the original culture and a sample from the infected animal. The professor describes how Koch's postulates aided him in discovering the specific organism that causes tuberculosis.

## Chapter 2 Detail Questions

### 01 Art History

Great Depression Photography		
Cause	Effect	Support
Great Depression	Government became involved in arts	FSA hires photographers to document events
	Realism in photography	Emotion of migrant mother in Dorothea Lange photo

1. (B)                      2. (D)                      3. (A)

**Summary:** The professor explains that during the Great Depression, photographers began to take photos of real people in difficult situations. A government program hired photographers to take pictures, and many photographers focused on farmers who migrated to California because their farms had been destroyed by dust storms. These photos went on to influence later photographs.

### 02 Business

Traditional Theory vs. Interactionist Theory		
Traditional	Both	Interactionist
<ul style="list-style-type: none"> <li>• Conflict is always harmful</li> <li>• Conflict can be avoided through scientific management</li> <li>• Conflict hinders productivity</li> </ul>	<ul style="list-style-type: none"> <li>• Proper management of conflict increases productivity</li> </ul>	<ul style="list-style-type: none"> <li>• Conflict can be beneficial</li> <li>• Conflict is unavoidable</li> <li>• Conflict should be managed to reduce harm and increase benefits</li> </ul>

1. (A)                      2. (B)                      3. (A), (D)

**Summary:** The professor describes two views of conflict in organizations. Frederick Taylor thought conflict was harmful at work and hindered productivity. He believed that managers could avoid conflict through proper use of scientific management. Conversely, Robbins's interactionist view proposed that conflict can also have enormous benefits to an organization. He says that conflict is unavoidable and can be managed in ways to raise productivity.

### 03 Office Hours

Problem	Solution
Department head does not think class would be popular	If student can get thirty classmates to send letters then department might approve it

1. (A)                      2. (C)                      3. (C)

**Summary:** The student thinks that nature writing would make a good class. The professor said she had tried to get it approved in the past, but that the department head did not think the course would be popular enough. The professor says that if the student can get thirty students to send letters to the department head, then he would probably approve the class.

### 04 Service Encounter

Problem	Solution
Student feels he is wasting meals with current meal plan	Purchase plan with fewer meals per week
	Purchase meal points, which are more flexible

1. (D)                      2. (A)                      3. (C)

**Summary:** The student wants to change his meal plan because he has a hectic schedule and is not using his current plan to its full potential. He first settles for a plan with fewer meals. However, he still thinks that he will be wasting meal credits. The employee suggests “Meal Points” that will allow him to buy meals when he needs to.

### 05 Astronomy

Formation of Earth's Atmosphere			
Step 1	Step 2	Step 3	Step 4
Sun's particles blow hydrogen and helium gases into space	Volcanic activity releases CO <sub>2</sub> , nitrogen, and water vapor into atmosphere	Earth cooled and water vapor condensed, forming precipitation	Algae and plants absorb carbon dioxide from atmosphere and release oxygen

1. (B)                      2. (B), (C)                      3. (B)

**Summary:** The professor explains how the Earth's atmosphere was formed. First, solar wind blew the hydrogen and helium gases into space. Next, activity from the Earth's interior released water vapor, carbon dioxide, and nitrogen into the air (outgassing), creating a hot, dense atmosphere. Once the Earth cooled, water vapor condensed into precipitation. Once algae and plants evolved, they absorbed carbon dioxide and released oxygen into the atmosphere.

### 06 Zoology

Gorillas vs. Chimpanzees		
Gorillas	Both	Chimpanzees
<ul style="list-style-type: none"> <li>• Small group size</li> <li>• One male in each group</li> <li>• Dominance relies on brute force</li> </ul>	<ul style="list-style-type: none"> <li>• Male-dominated groups</li> <li>• Similar DNA</li> </ul>	<ul style="list-style-type: none"> <li>• Large groups (50 or more individuals)</li> <li>• Several males in group</li> <li>• Dominance can depend on intelligence</li> </ul>

1. (B)                      2. (D)                      3. (A)

**Summary:** The professor discusses the similarities and differences between gorillas and chimps. These animals share similar DNA and live in male-dominated societies. However, gorilla groups are smaller, consist of only one male per group, and rely on strength to determine the leader. Chimp groups are larger, can consist of several males per group, and have been known to rely on intelligence to determine the leader.

### 07 Office Hours

Problem	Reason	Solution
Student has not been doing well on tests; feels study guides do not reflect test questions	Student has been depending too much on study guides	Use study guide in conjunction with notes
		Fill out study guides in-depth

1. (A)                      2. (B)                      3. (D)

**Summary:** The student goes to the professor to discuss questions on the test that were not in the study guide. The study guide only briefly listed the key topics. The professor informs the student that she should also use her class notes to study for tests rather than relying on the study guide, as it is not an in-depth list of everything that will be on the test.

### 08 Service Encounter

Problem	Solution	Actual Cause of Problem
Student thinks steel cable broke on weight lifting machine	Students who break gym equipment must pay fee and fill out form	Pin holding weights together fell out

1. (C)            2. (C), (D)    3. (B)

**Summary:** A student approaches a gym employee and says she may have broken the weightlifting machine. She thinks she will have to pay for it completely, but the employee tells her the school's insurance will cover it. She has to fill out a form and pay a fee. The employee walks over to the machine and realizes that it is not broken. A part that holds the weights together has fallen out, and just needs to be re-inserted.

### 09 Psychology

Facial Feedback Hypothesis	
Emotions are activated by facial expressions	Studies show emotions not activated solely by facial expressions
	Brain sends signal to part that controls facial movement
	Facial expressions exaggerate or suppress emotions

1. (B)            2. (D)            3. (B)

**Summary:** The professor explains that the facial feedback hypothesis states that our emotions are activated by the expressions we make during an emotional situation. Tests of this hypothesis showed that facial expressions do not cause emotions to happen, but that they can exaggerate or suppress an emotion that a person is already experiencing.

### 10 Geography

Thomas Malthus's Theory	
Definition	Refutation
Population increasing at such a rate that planet will no longer sustain us, resulting in massive famine and death	Worldwide famine did not occur
	Wealthy countries have decreasing population rate
	Technology has made it possible for world to sustain current population

1. (A)            2. (C)            3. (B)

**Summary:** Thomas Malthus predicted that the population would increase until there would not be enough resources for everyone. He predicted catastrophes such as worldwide famine, and believed the only way to reduce population growth was through massive human suffering. He also thought that the wealth of economically developed countries would encourage their inhabitants to have more children. Both of his predictions were false.

### | Vocabulary Review 1 |

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

### | Mini Test 1 |

1. (A)            2. (C)            3. (C)  
 4. (B)            5. (A)            6. (C)  
 7. (B)            8. (C)            9. (B)  
 10. (A)            11. (C)            12. (B)  
 13. (C)            14. (D)            15. (B)  
 16. (B)            17. (A)

**Chapter 3 Function Questions**

**01 Psychology**

Kohlberg's Theory of Moral Development		
Pre-conventional	Conventional	Post-conventional
Individual only thinks of "right" in regard to self	Begins to consider "right" in relation to how society sees right and wrong	Begins to develop ideas of right and wrong without regard to society

1. (D)      2. (C)      3. (A)

**Summary:** The professor discusses Lawrence Kohlberg's Theory of Moral Development, which is separated into six stages that fall into three categories. In the pre-conventional stages, people only consider themselves. In the conventional stages, people develop moral reasoning. In the post-conventional stages, people begin to do something because they know it benefits society.

**02 Philosophy**

Objectivism vs. Solipsism		
Objectivism	Both	Solipsism
<ul style="list-style-type: none"> <li>Reality is independent of our minds</li> <li>Our sensory perceptions prove its existence</li> </ul>	<ul style="list-style-type: none"> <li>Metaphysical roots</li> </ul>	<ul style="list-style-type: none"> <li>Reality is manufactured by our minds</li> <li>Cannot be proven because senses are manufactured</li> </ul>

1. (C)      2. (A)      3. (C)

**Summary:** The professor compares objectivism and solipsism. She says that objectivists believe that a world exists outside of the mind, while solipsists believe that nothing exists outside of how we perceive it. In addition, objectivism says that our senses prove the existence of things outside of the mind, while solipsism argues that our mind creates those senses.

**03 Office Hours**

Problem	Solution	Aspect
Student wants experience teaching before graduation	Student should take independent study course	Design lesson plans
		Help professor teach

1. (B)      2. (C)      3. (C)

**Summary:** The student visits the professor's office to discuss her concerns about her future in teaching. The professor responds by giving two different suggestions. The first is that she just simply not worry about it. However, when the student continues to ask for advice, the professor suggests that she consider doing an independent study course.

**04 Service Encounter**

Alumni Health Insurance	
Advantage	Disadvantage
Offers complete vision, dental, and medical coverage	Requires expensive deductible and co-pay before coverage begins
Covers all major medical procedures	Does not pay for minor things like prescriptions
Easy to qualify for	Policyholder may be paying for coverage not ever used

1. (C)      2. (C)      3. (A)

**Summary:** The student visits the university health office to find out about health insurance. The woman explains that it is available for any student who has graduated, and then mentions a policy that costs \$50 dollars a month and requires a \$1,000 deductible and \$45 co-pay on prescriptions. The student feels that this policy would not be beneficial due to its high cost.

**05 Business**

Magazine Advertisements	
Advantage	Disadvantage
More creativity with ads	Infrequent print dates
Established readership base	Limited customer base
Specialized markets	Advertisement competition

1. (A)      2. (D)      3. (A)

**Summary:** The professor discusses three advantages of magazine advertising: the ability for advertising creativity, an established readership base, and specialized markets. However, he also mentions three disadvantages. He cites infrequent production, limited customer bases, and advertising competition as a few reasons why these types of ads may not always be the most beneficial.

## 06 History

Positive vs. Negative Effects of the Transcontinental Railroad		
Positive	Both	Negative
<ul style="list-style-type: none"> <li>• Many new towns created</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of livestock</li> </ul>	<ul style="list-style-type: none"> <li>• Death of bison</li> <li>• Change in lifestyle for Native Americans</li> </ul>

1. (A)                      2. (B)                      3. (A)

**Summary:** The professor discusses ways in which the railroad affected the American West. He first says that it made new towns possible. He then discusses the large-scale deaths of bison across the region. He goes on to explain the effects of the railroad on the Native Americans, and finally discusses the changes that occurred by bringing livestock into the area. While the railroad had some negative effects, it also shaped the West's history.

## 07 Office Hours

Problem	Solution
Information	Make timeline and choose most important information
Sources	Academic sources: journals, research publications, educational websites
Organization	Logical order of what reader needs to know
Time	Set goals; work hard

1. (A)                      2. (B)                      3. (C)

**Summary:** The student goes to see the professor in order to discuss an upcoming research paper. The professor suggests narrowing down the sources by using a timeline to figure out the most important events. He then suggests using academic sources, such as journal articles. He also proposes working in an order that builds on what the readers know, slowly introducing them to more information.

## 08 Service Encounter

Problem	Solution
Bookstore will not buy back textbook	Use university textbook trading website
Student wants money in exchange for textbook	Select "straight buy" option when creating profile

1. (A)                      2. (D)                      3. (B)

**Summary:** The student goes to the university bookstore for the textbook buyback, but the bookstore employee informs him that not all of his books can be bought back. He asks the employee if there is anything else that can be done. The employee responds by telling him about an online textbook trading website. She explains how it works, what is required, and what some of its disadvantages are. She also tells him how to use the website.

## 09 Environmental Science

Nuclear Waste Disposal				
Problem				
How to dispose of dangerous nuclear waste				
Solution				
Make more stable (vitrification)	Store in bunkers	Bury or submerge	Make less radioactive (transmutation)	Send into space

1. (A)                      2. (A)                      3. (A)

**Summary:** The professor discusses the problem of disposing of nuclear waste with the class. He begins by discussing processes of making the waste more stable. He then discusses storing waste underground. Last, he discusses submerging the waste in the ocean, burying it in remote areas, and sending it into space.

## 10 Art History

Methods of Sculpture	
Method	Explanation
Modeling	Adding material to frame usually made of metal
Casting	Beginning with core and using mold to create piece
Assembling	Putting pieces of other things together to make art
Carving	Taking large piece of material and carving shape out of it

1. (C)      2. (D)      3. (C)

**Summary:** The professor discusses four different methods used to create sculptures. Modeling is an additive process that adds a material to a core. Casting, also additive, involves adding material to a mold. Assembling puts materials together to create a sculpture. Carving, the only subtractive method mentioned, takes pieces away from a large piece of material.

1. (A)      2. (D)      3. (C)

**Summary:** The professor defines direct selling as the selling of a product to the customer, without the help of a store, for example. He also relates the different sales methods that comprise direct selling, including using phone calls, seminars, and demonstrations. The first method involves the seller calling consumers to offer a product. Seminars are presentations that discuss the benefits of a product. With the final method, sellers demonstrate how a product works.

**Chapter 4 Stance Questions**

**01 Economics**

Stagflation		
Definition	Example	Cause
Combination of stagnant economy with inflation	The oil crisis of 1973	OPEC stopped exporting oil to US
		Oil companies decreased production
		Price of gasoline rose and US gas companies did not increase profits

1. (A)      2. (D)      3. (B)

**Summary:** The professor discusses the effects of stagflation with the class. He uses the 1973 oil crisis, when OPEC raised prices by four times their original amount. He describes how decreased availability results in inflation, and how in stagflation, production decreases. He also demonstrates how this caused prices to increase.

**02 Business**

The Direct Sales Model		
Way to sell products directly to customers without using retail stores or middlemen		
Phone Calls	Seminars	Demonstrations
Call potential customers, present product information	Present lecture or speech about product, emphasizing strong points	Show people how well product works, answer questions, sell to customers

**03 Office Hours**

Problem	Solution
Student does not believe she can finish project on time because studio is always full	Choose alternate time to go to studio
	Switch studio times with another student

1. (B)      2. (A)      3. (A)

**Summary:** The student has been sick with the flu and has missed several days of class. She goes to her professor to discuss her sculpture project, which she is concerned she may not be able to complete by the deadline. The professor gives two recommendations. First, she should go early in the morning when the studio is not crowded. Second, she can switch studio times with another student.

**04 Service Encounter**

Problem	Solution 1	Concern	Solution 2
Student did not receive expected package	Check to see if package was delivered to another dorm	Visiting each dorm will take a long time	Call each dorm to see if they have package

1. (B)      2. (C)      3. (D)

**Summary:** The student goes to the campus mail center to see if it has a package that he has been expecting. He is expecting to receive his birth certificate. The employee there says that she does not have the package, and recommends that he check with the other dorms on campus to see if it was delivered to one of them by mistake.

## 05 Environmental Science

Nature's Removal of Pollution	
Method	Explanation
Rain out	Pollution falls back down to Earth when it rains
Sedimentation	Particles heavier than air fall back down due to gravity
Photodissociation	Sunlight breaks chemical bonds
Oxidation	Oxygen combines with particles of pollution; falls to ground with rain

1. (D)      2. (A)      3. (B)

**Summary:** The professor talks about ways that nature removes pollution from the air. One way is called rain out, which is moisture pulling pollution to the ground. She also talks about sedimentation, or the settling of particles due to gravity. In photodissociation, the sun breaks the particles' chemical bonds, making them harmless. Oxidation occurs when oxygen combines with something else and it is then caught and taken to the ground.

## 06 Business

The Hawthorne Effect	
Theory	Refutation
Showing employees attention can improve productivity	One test indicated breaks caused increased productivity
	Another test showed no increase in productivity
	Third test had other factors that may have been responsible for increased productivity

1. (B)      2. (A)      3. (C)

**Summary:** The professor's lecture reviews the experiments that explored the Hawthorne Effect theory. He discusses the initial experiment, in which lighting was changed to see if this affected worker productivity. It didn't seem to matter, so researchers thought attention given to workers affected productivity. Researchers then did other experiments, such as changing the rooms workers were in and giving them breaks. These experiments seemed to disprove the Hawthorne Effect.

## 07 Office Hours

Problem	Solution
Student wants to be professor's research assistant	Student must complete application, provide references, write exam, give interview, and go through probationary period

1. (C)      2. (B)      3. (C)

**Summary:** The student comes to the professor to ask about an ad for a research assistant she had posted in the campus newspaper. The professor describes the conditions, expectations, and what kinds of qualifications she requires for the position. The student describes his prior experience working in a laboratory, as well as his education in chemistry. The professor also describes what the study will research.

## 08 Service Encounter

Problem	Solution
Student missed work study deadline but wants to continue working in admissions office	File petition with the office to attempt to bypass rule about work study
	Look for another job that does not require work study

1. (A)      2. (D)      3. (B)

**Summary:** The student accidentally missed the deadline to apply for work study. The student has a job in admissions that she enjoys, but she is concerned about losing it after the employee mentions that most of those positions are reserved for work study students. The employee suggests that she fill out a petition for exception, which would allow her to keep her job if granted. The employee then describes what the form requires.

## 09 Anthropology

The Overkill Theory	
Theory	Support
Increase in population caused humans to kill too many animals, which forced them to find other food sources	Species extinction followed human civilization progress
	Extinctions occurred worldwide rather than in concentrated areas; only population growth was consistent
	Other food sources took more time to gather, hunt, or prepare, so must have been done out of necessity

1. (A)      2. (D)      3. (D)

**Summary:** The professor discusses what factors caused the development of broad-spectrum collecting. He focuses on the overkill theory, which he supports. He talks about the progress of human civilization and the corresponding extinction of different species of animals, and how it impacted what foods were available to people, as well as other possible indications of the theory's accuracy.

## 10 Biology

Animals Using Medicine	
Theory	Support
Animals have learned certain medicinal plants help them recover from or prevent illness	Monkeys chew certain leaves to get rid of intestinal parasites
	Bears chew plants and use juice to get rid of parasites on fur
	Lemurs eat soil to stop poison in bamboo from killing them

1. (C)      2. (A)      3. (A)

**Summary:** The professor discusses animal intelligence, particularly in the area of animals using medicines. Some students are skeptical, but she gives them a number of examples to support her claims, including the habits of monkeys and bears that eat medicinal leaves.

### | Vocabulary Review 2 |

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

9. (B)      10. (B)      11. (A)  
 12. (B)      13. (A)      14. (B)  
 15. (C)

16. predict      17. verified      18. devise  
 19. particle      20. diverse

21. O      22. S      23. S  
 24. S      25. O

### | Mini Test 2 |

1. (B)      2. (D)      3. (B)  
 4. (C)      5. (D)      6. (B)  
 7. (B)      8. (A)      9. (A)  
 10. (C)      11. (A)      12. (D)  
 13. (A)      14. (C)      15. (B)  
 16. (D)      17. (D)

## Chapter 5 Organization Questions

### 01 Business

The Product Life Cycle	
Stage 1:	Development and introduction Description: Product is developed and company loses money
Stage 2:	Growth Description: Product gains reputation and begins to make money
Stage 3:	Mature Description: Product is at height of money-making potential
Stage 4:	Decline Description: Product fails to make money and is no longer made

1. (D)      2. (B)      3. (D)

**Summary:** The professor discusses the product life cycle, a series of stages every product goes through. She talks about each stage in order: the product development and introduction stage, the growth stage, the mature stage, and the decline stage. She describes the characteristics of each phase and compares each phase of the product life cycle with corresponding phases of a human's life cycle.

## 02 History

Dance Halls	
Definition	Effect
Large halls where groups of people went to join dance craze	Concepts of entertainment changed to include large groups of people
	Moral judgments became less strict in America

1. (B)      2. (B)      3. (D)

**Summary:** The professor discusses dance halls. They were large venues where people could gather and dance. Dance halls grew in popularity with the latest dance crazes of the times. He then moves on to discuss some effects of the dance halls. He says that they changed people's view of entertainment and helped change some moral concepts.

## 03 Psychology

Two-Factor Theory of Emotion		
Theory	Support	Refutation
Physical conditions can lead brain to create emotions	Racing heart can be interpreted as nervousness when actual cause is certain food	Physical arousal is not necessary to produce emotion

1. (A)      2. (D)      3. (C)

**Summary:** The professor's lecture is about the Two-Factor Theory of Emotion. He discusses the two factors separately and gives an example for each. He first describes how physical conditions can create emotions. He then describes how the mind can create emotions by interpreting situations in different ways.

## 04 Literature

Structuralism	
Definition	Example
By simplifying literary work down to most basic structure, value can be determined through originality or lack of it	<i>Romeo and Juliet</i> uses very similar structure to many other famous stories in literature and therefore is not original

1. (C)      2. (A)      3. (B)

**Summary:** The professor begins the lecture by asking the students to consider any unique classic literature, and then she uses this to explain structuralism. Structuralism, she says, is the idea that if a story is not unique in its basic structure, it is not important. The professor shows how structuralists view *Romeo and Juliet*, stating that they would not like it, since it is not unique. Structuralists see no value in works that follow established patterns.

## 05 Astronomy

Saturn's Rings	
Topic	Point
What Saturn's rings are made of	Small particles that orbit the planet
	Particles are made of frozen water that can be as large as a snowball
	Particles formed a ring pattern after bumping into each other over time

1. (B)      2. (A)      3. (B)

**Summary:** The professor discusses the rings on Saturn. He begins by asking the students to guess what the rings are made of. He reveals that they are made of tiny ice particles. After a student asks why the particles form rings, he discusses that collisions with other particles keep the rings thin.

## 06 Environmental Science

DDT	
Advantage	Disadvantage
Reduced malaria cases	Loses effectiveness quickly
Made yellow fever less of a threat	Harms other animals, stored in oils and fats and can harm the environment
	Harmful effects can move up food chain through biomagnification

1. (D)      2. (D)      3. (A)

**Summary:** The lecture begins with the professor discussing the invention of DDT in the 1940s and its subsequent uses. She then talks about all the negative results of using the pesticide, including its long-term effects on animals and gradual ineffectiveness. She also explains the positive points of DDT usage, such as reducing the threat of malaria and yellow fever.

## 07 Sociology

Game Theory and the Nash Equilibrium	
Theorie	Example
Game theory: views strategies as games in relation to others	Tag: strategies must change in relation to different actions
Nash equilibrium: Strategies can reach an equilibrium	Prisoner's dilemma: prisoners can reach equilibrium by doing same action

1. (D)      2. (B)      3. (A)

**Summary:** The discussion begins with a definition of game theory, which is a series of games that have been analyzed to study human interactions under certain conditions. It is primarily used to understand all possible strategy choices under those conditions. The professor also discusses the Nash equilibrium. This occurs when no player has an advantage. The professor uses the prisoner's dilemma as an example.

## 08 Education

Paulo Freire's Theory of Education	
Theory	Support
Students are partially responsible for education; student-teacher relationship should involve dual roles	Personal story about sitting in class not learning until focused
	Use of project to allow students to teach each other and learn themselves

1. (C)      2. (A)      3. (A)

**Summary:** The lecture focuses on Freire's ideas about education. The professor begins by talking about her own experience learning: she realized one day that she had to take an active role in her own education. Freire's theory about education says that teachers should be like students, and students should be like teachers. The professor explains that, in order to put this theory into practice in her classes, she asks students to do presentations.

## 09 Biology

Genetic Diversity		
Cause	Effect	Example
Lack of genetic diversity in animals	Animals susceptible to disease	Cheetahs have difficulty surviving because of reduced genetic diversity
	More deformities	
	Vulnerability of species	

1. (D)      2. (A)      3. (D)

**Summary:** The professor introduces the idea of genetic diversity and its effects on animals. He discusses three major results of a lack of genetic diversity: susceptibility to disease, increased incidence of deformities, and an overall decrease in the species' ability to survive. He uses cocker spaniels and cheetahs to back up his points about the negative effects of a lack of genetic diversity.

## 10 Art History

The Black Death and Art			
Cause			
The Black Death			
Effect			
Sombre colors in art	Art focused on death or morbidity	Realistic settings, figures, or subjects	New art movement called "Art of Dying"

1. (D)      2. (C)      3. (B)

**Summary:** The professor discusses the ways in which the Black Death impacted art during the 14<sup>th</sup> century. She talks about the morbid nature of the work, the somber colors that characterized it, and the use of death as a central theme. Two artists in particular, Triani and Giotto, created works that were typical of the era. Finally, she discusses "The Art of Dying," a school of art that reflected the church's outlook on death.

## Chapter 6 Content Questions

### 01 Business

Tall Management Structure	
Disadvantage	Example
Poor communication such as distortion of commands	Employees interpret information differently than they should
Long time for decisions and orders to pass to all levels	Slow to respond to market changes
Having many managers is expensive	Middle managers are first to get laid off when company downsizes

1.

	Yes	No
Managers hide information from other managers.		✓
The extensive hierarchy of managers is very costly.	✓	
Managers make different decisions at different levels.		✓

**Summary:** The professor talks about the “tall” management structure and its main disadvantages for companies. A tall management structure is one in which a company has many levels of organization, particularly many levels of managers. The three main disadvantages she talks about are the distortion of commands, the long time needed for decisions to pass to all levels, and the expenses of having so many managers.

### 02 Environmental Science

Off-Site Management vs. On-Site Management		
Off-Site	Both	On-Site
<ul style="list-style-type: none"> <li>• Examples: zoos, botanical gardens, aquariums</li> <li>• Focuses on preserving individual species separately</li> <li>• Can preserve endangered species and then reintroduce them later</li> </ul>	<ul style="list-style-type: none"> <li>• Aim to preserve species from extinction</li> <li>• Protects both plants and animals</li> </ul>	<ul style="list-style-type: none"> <li>• Examples: national parks</li> <li>• Preserves species together as part of natural environment</li> <li>• Can preserve more species, including ones that have not been discovered yet</li> </ul>

1.

	Off-Site	On-Site
Uses aquariums	✓	
Preserves individual species	✓	
Keeps animals in natural habitats		✓
Uses national parks		✓

**Summary:** The professor introduces the problem of how humans can protect the diversity of plant and animal species on Earth. He compares two methods. Off-site management, like zoos, takes species out of their natural environment and seeks to protect them as individuals. On-site management, like natural parks, seeks to protect the natural environment and all the species in it. Each has different advantages.

### 03 Office Hours

Problem	Solution
Student wants practical experience in environmental science	Volunteer with local environmental group
	Do independent study project while volunteering

1.

	Yes	No
The student should find a local environmental group.	✓	
The student needs to find a sponsor for her project.	✓	
The student needs to take a class on designing a project first.		✓

**Summary:** The student asks the professor how she can get practical experience in the environmental science field. The professor responds by telling her she can volunteer with a local environmental group. The student says she is too busy. In response, the professor suggests that the student do an independent study project and get credit for the experience as a volunteer.

### 04 Service Encounter

Problem	Solution
Student wants to balance time for job and classes	Drop three or more classes and focus on work and remaining classes

1.

	Yes	No
The student is getting lower grades this term.	✓	
The student might lose his scholarship.		✓
The student needs to work at least twenty hours each week.	✓	
The student wants to graduate on time.	✓	

**Summary:** The student visits a counselor to ask for advice on how to balance time for his job and classes. The student explains that he needs to work a minimum of twenty hours per week and that he is taking six classes to graduate on time. The counselor suggests he drop three or more classes and focus on work and on doing well in his remaining classes.

### 05 Philosophy

Montaigne's Thought	
Influence	Result
Criticism of extreme positions	Influenced rise of "positive skepticism," a new form of criticism of authority
Promotion of moderation and tolerance	
Rejection of absolute moral positions	

1.

	Yes	No
Inspired other skeptics		✓
Left his job as a lawyer	✓	
Moved to a different country		✓

**Summary:** The professor explains that Montaigne lived during a time of terrible wars and retreated to the countryside. She adds that he wanted to know himself in order to ask questions about society. He did three things that influenced the development of a new form of criticism called "positive skepticism." She says these were criticism of extreme positions, support of moderation and tolerance, and rejection of absolute moral positions.

### 06 Sociology

Societies		
Type		
Hunter/Gatherer	Horticultural	Agrarian
Feature		
Very mobile	Sometimes mobile	People settled in one place
Obtained food through hunting and gathering	Obtained food from crops, hunting, and gathering	Obtained food through agriculture
Little division of labor	Some division of labor	Specialized division of labor

1.

	Hunter/Gatherer	Horticultural	Agrarian
Has professionals			✓
Prefers to move around	✓		
Most people do same job	✓		
Plants some crops		✓	

**Summary:** The professor talks about society as the most complex form of social organization. He discusses three types of societies: hunter/gatherer, horticultural, and agrarian. He explains how each type differs based on three dimensions. These are mobility, subsistence patterns, and division of labor.

### 07 Office Hours

Problem	Solution
Student wants to take class but has not completed prerequisite	Professor will let her take course on trial basis, she can audit it at the same time

1.

	Yes	No
Audit the 101 class	✓	
Get permission from her advisor		✓
Talk with the professor regularly	✓	
Take a test		✓

**Summary:** The student asks the professor if she can attend his class. He says that she needs to complete the prerequisite course first. She tells him about her plans and previous education to try to convince him to let her into the course. The professor agrees to let her take the class on a trial basis.

## 08 Service Encounter

Situation	Problem	Solution
Student wants to work for school newspaper and get paid as freelance writer	School cannot afford to pay another staff member	Employee suggests student work freelance first and paid position may open up in future

1.

	Yes	No
To make money	✓	
To get experience	✓	
To write about sports		✓
To build a portfolio	✓	

**Summary:** The student is looking for a job at the school newspaper as a paid freelance writer. The employee says that they do not pay such writers, which makes the student disappointed. The employee tries to convince the student to work for the paper as an unpaid freelance writer while suggesting that he might get hired for a job in the future.

## 09 History

The "Gospel of Wealth"	
Theorie	Refutation
People get what they deserve. If they work hard, anyone can become rich.	Not everyone can become rich. People are different.
If government lets wealthy control their money, they will give to the poor.	Large-scale giving did not happen. Government programs helped poor more.

1.

	Yes	No
Governments should let people get rich by reducing taxes.		✓
The wealthy are responsible to help others improve themselves.	✓	
Philanthropy can eradicate poverty without the help of the government.	✓	

**Summary:** The professor talks about what some thought about wealth and poverty at the end of the 19<sup>th</sup> century. He discusses Carnegie's "Gospel of

Wealth," which said that the poor could improve themselves and that philanthropy was the best solution to poverty. Then the professor refutes both points, saying that not everyone has the ability to be rich and that government programs were more successful in alleviating poverty.

## 10 Astronomy

Lunar Water	
Theory	Support
Likely there are underground deposits of water on moon	<i>Clementine</i> found evidence of underground water at lunar south pole
	<i>Lunar Prospector</i> found indirect evidence of water ice in both lunar polar regions

1.

	<i>Clementine</i>	<i>Lunar Prospector</i>
Searched both poles		✓
First to find evidence of water	✓	
Crashed into crater		✓
Detected hydrogen		✓

**Summary:** The class discusses the possibility that there may be water on the moon. They agree that it would have to be frozen and located underground at the poles. The professor points out that two spacecraft looked in those areas and found evidence of water; however, no one has yet been able to prove that there is water on the moon.

## Chapter 7 Inference Questions

### 01 Philosophy

Objectivism	
Axiom	Key Point
Primacy of Existence	An objective reality exists independent of consciousness
Law of Identity	All objects that exist have an identity
Axiom of Consciousness	People are conscious and thus able to learn

1. (B)                      2. (D)                      3. (A)

**Summary:** The lecture is about a philosophy called Objectivism. The professor discusses three axioms, which describe the Objectivist belief about reality. The first is the Primacy of Existence, which says that there is an objective reality that exists aside from consciousness. The second axiom is the Law of Identity, which says that everything has an identity. The third is the Axiom of Consciousness, which says that people are aware of existence and the identities of objects.

**02 Linguistics**

Sapir-Whorf Hypothesis	
Theory	Support
Grammatical structure of language influences behavior and thinking of speakers	Hopi people had no tenses to express time, thought to be related to conception of time as cyclical

1. (A)            2. (B)            3. (B)

**Summary:** The lecture is about the Sapir-Whorf theory of linguistic relativity. The theory proposes that the way people act and think is determined by their language. The professor supports the theory by talking about the Hopi language and culture. From that, some researchers found that the grammatical structure of the language, which did not include tenses, may have affected how the people who spoke that language conceived of time.

**03 Office Hours**

Problem	Aspect	Solution
Student does not understand comments on paper	No logical link between sentences	Explain further to clarify
	Used "institution" as synonym for "business"	Be careful of language
	Only mentioned precedents	Apply precedents to Cineweb

1. (A)            2. (D)            3. (C)

**Summary:** The conversation takes place between a student and a professor. After receiving his graded paper, the student is confused about the professor's comments. The professor tells the student that he

has to be more logical. The professor also says that the student must be careful about his word choice. Finally, the professor tells the student how to adequately support his ideas.

**04 Service Encounter**

Becoming a Recognized Club			
Step 1	Step 2	Step 3	Step 4
Create constitution that includes membership lists and details about organization	Submit constitution to Student Activities Office	Wait to hear if application gets approved or denied	If accepted, receive organization packet

1. (D)            2. (A)            3. (C)

**Summary:** The conversation takes place between a student and an employee of the university. The student wants to reserve a room for her juggling club, but she cannot because the club is not registered with the university. Then the employee explains the process for becoming a recognized organization. The student must submit a constitution and have it approved.

**05 Geology**

Volcanoes	
Type	Explanation
Cinder cone	Steep-sided volcano created when cinders accumulate around the crater
Composite volcano	Large volcanoes reinforced by hardened lava in the sides
Shield volcano	Large volcanoes formed when liquid lava flows cool over large distances
Lava dome	Grow from the inside because lava rarely escapes

1. (A)            2. (B)            3. (B)

**Summary:** The lecture is about four different types of volcanoes. The professor explains that cinder cones are created when violent eruptions emit lava. The lava hardens into pieces called cinders that build up around the crater. Composite volcanoes are much larger and are strengthened by lava that hardens in cracks in the side of the cone. Shield volcanoes are formed by liquid eruptions that harden over large distances. Lava domes are formed from within, and lava rarely escapes the volcano.

## 06 Art History

Andy Warhol's Contribution to Pop Art	
Definition	Contribution
Art movement focusing on appealing or familiar themes	Influenced others to think of mass-produced items as art
	Promoted idea that art can be mass produced by working in artistic "assembly lines"
	Promoted pop art as legitimate art form in galleries

1. (A)                      2. (C)                      3. (D)

**Summary:** The professor discusses three ways in which Andy Warhol influenced the pop art movement. First, Warhol's ideas that mass-produced items could be art influenced other artists of the movement. Second, Warhol also promoted the collaboration of artists as a way to mass produce art. This was also a key idea of the movement. Finally, Warhol participated in an exhibit that helped legitimize pop art and forced people to redefine art.

## 07 Office Hours

Problem	Reason	Solution
Student's participation grade was lower than expected	Says irrelevant things in class	Stay on topic
	Speaks at least 3 times per class, instead of responding to classmates	Listen to others and only speak when it addresses comments directly

1. (A)                      2. (D)                      3. (B)

**Summary:** The conversation takes place between a student and her professor. The student approaches the professor because she is unhappy about her low participation grade. The professor explains to the student that he seeks quality over quantity and gives her some tips for raising the grade. First, he tells her to add only relevant comments. Also, he asks her to try to interact with the other students instead of just speaking in order to get a high grade.

## 08 Service Encounter

Problem	Solution	Conclusion
Student's reservation of practice room cannot be found	Employee could find record in her file	Student must return home to find reservation slip
	Student could provide reservation number	
	Student could provide confirmation slip	

1. (B)                      2. (C)                      3. (B)

**Summary:** The conversation takes place between a student and the building manager of the music department. The student had a reservation, but the manager cannot locate the information and is therefore unable to allow the student to use the practice room. The student suggests different ways of recovering the information, but ultimately, he has to go back to his room to retrieve the confirmation sheet.

## 09 Business

Mass Production	
Advantage	Disadvantage
Extremely efficient	Inflexible for design changes
Eliminates human error	Requires a lot of money up front

1. (C)                      2. (A)                      3. (C)

**Summary:** The lecture is about mass production. First, the professor gives a brief history of this type of production, debunking the myth that the assembly line was invented by Henry Ford. Then he talks about some of the advantages and disadvantages of mass production. The advantages are that it is faster and eliminates human error. The disadvantages are that it is inflexible and requires a lot of money.

### 10 Psychology

Lucid Dreaming			
Definition			
Dreaming while being aware you're dreaming			
Step 1	Step 2	Step 3	Step 4
Try to memorize a dream you've had	Do an activity that requires full wakefulness for 15 minutes	Get into bed and tell yourself to remember next dream you have	Visualize yourself in bed having dream previously rehearsed

1. (A)                      2. (C)                      3. (B)

**Summary:** The lecture is about lucid dreams. First the professor defines these dreams as ones in which dreamers are conscious of their actions and behaviors. The professor explains how to induce a dream like this. The process involves remembering a dream and going to sleep again to try to control the dream.

#### | Vocabulary Review 3 |

1. (C)                      2. (D)                      3. (A)  
 4. (A)                      5. (C)                      6. (B)  
 7. (C)                      8. (D)
9. (B)                      10. (C)                      11. (C)  
 12. (C)                      13. (A)                      14. (D)  
 15. (B)
16. course                      17. evaluation                      18. customary  
 19. twofold                      20. institution
21. plume                      22. facilitate                      23. venue  
 24. dynamic                      25. external

#### | Mini Test 3 |

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

5.

	Batesian	Müllerian
Animals undergo signal standardization		✓
A bug with no defense mechanism models itself after an inedible species	✓	
Groups of unrelated animals form mimicry rings		✓
First observed in the Pierdiae butterfly	✓	

6. (D)                      7. (A)  
 8. (D)                      9. (B)  
 10.

	Egyptian	Mesoamerican
Built in the middle of lakes		✓
Took longer to cultivate food		✓
Manipulated a major river to provide water	✓	
Grew millet, wheat, and barley	✓	

11. (D)                      12. (B)                      13. (D)  
 14.

	Yes	No
Arrive at the section well prepared		✓
Take time to listen to what the other students say	✓	
Create a list of topics or questions to bring up during the section		✓
Be confident in her academic ability	✓	

#### Practice Test

1. (D)                      2. (B)                      3. (A)  
 4. (B)                      5. (B)                      6. (D)
7. (A)                      8. (C)                      9. (B)  
 10. (A)                      11. (A)

12.

Events	Yes	No
The Venetian Republic was invaded by the Normans.		✓
The Venetian Republic became trade partners with the Genoese.		✓
The Venetian Republic defeated the Genoese in 1381.		✓
The Venetian Republic allied with Genoa against the Byzantine Empire.		✓

13. (B)      14. (A)      15. (A)  
16. (C)      17. (C)

18. (C)      19. (B)      20. (B)  
21. (A)      22. (B)  
23.

	Plato	Socrates	Both
When virtue is truly known, one is virtuous.		✓	
Goodness is an objective form.	✓		
The concept of self-interest was not treated.			✓
Written dialogues were used to teach philosophy.	✓		

24. (B)      25. (C), (D)      26. (A)  
27. (C)      28. (A)      29. (B)  
30. (B)      31. (D)      32. (C)  
33. (B)      34. (C)