

Answer Key

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

Preview Test

- | | | |
|---------|---------------|---------|
| 1. (D) | 2. (B) | 3. (B) |
| 4. (A) | 5. (A) | 6. (B) |
| 7. (B) | 8. (C) | 9. (A) |
| 10. (C) | 11. (D) | 12. (C) |
| 13. (A) | 14. (A, C, F) | |

Chapter 1 Fact Questions

01 Linguistics

The Effect of the Gold Rush on the English Language	
Theory	Example
Many English expressions originated during California Gold Rush	"Pan out" came to mean "to be successful"
	"Strike it rich" came to mean "to become wealthy"

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

Summary: The passage discusses English phrases that can be traced back to the gold rush in California. The phrase "pan out" came from the pans that miners used. Gold would settle to the bottom of their pans, and the sediment would be removed. The expression "strike it rich" originated from miners striking the rocks to find gold and becoming wealthy quickly if they found it.

02 Theater

The Greek Chorus and the Audience	
Definition	Role
Person or group of people that added to a play in various ways	Helped audience understand play by providing important plot information
	Interacted with audience, either by showing emotion or by communicating with audience members

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

Summary: The role of the chorus in Greek theater was to provide a commentary on a play to the audience in order to clarify the plot. The chorus explained the stories and

facilitated the audience's understanding of events. By singing or speaking in unison, the chorus was also responsible for influencing the way audiences reacted to a play. It did this by showing embellished reactions and discussing the play's events and characters with the audience.

03 Ecology

Changes in Coral Reefs	
Cause	Effect
1. Increased ocean temperatures	Bleaching of coral occurs when it loses algae
2. Tropical storms	Sediment fills water and blocks sunlight, causing algae to die

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

Summary: Global warming is responsible for altering the ocean's temperatures, which affects coral reefs. Coral reefs are vulnerable to temperature changes, and they become damaged if exposed to higher temperatures for prolonged periods. One indication of coral damage due to warm ocean temperatures is bleaching. An increase in tropical storms is another way coral reefs are being damaged because of global warming. Sediment from overflowing rivers clouds the ocean, which decreases the amount of sunlight reaching the corals.

04 Literature

The Romance vs. The Novel		
The Romance	Both	The Novel
<ul style="list-style-type: none">Moral stories of heroic adventuresUsed language considered loftyIdealized portrayal of characters	<ul style="list-style-type: none">Popular in 15th century	<ul style="list-style-type: none">Stories of everyday lifeUsed language considered lowRealistic portrayal of characters

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

Summary: The passage discusses the appearance of the novel as it flourished along with the romance in the 15th century. The invention of the printing press increased the distribution of written texts to people. The novel often parodied the impossible characters and formal style of the romance, instead presenting more realistic temperaments and motives of people. Also, the main focal point of the novel was character, as opposed to plot in the romance.

05 Anthropology

Symbolic Behavior	
Theory	Support
Superstitions can have positive psychological effects	1. Rituals can give sense of control over uncertain situations 2. Taboos can relieve anxiety in many situations

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

Summary: The passage discusses symbolic behavior as a means for people to cope with uncertainty in their lives. Two common types of symbolic behavior are rituals and taboos. Rituals are behaviors done repeatedly in order to bring about a certain outcome. Although a ritual cannot solely bring about a desired result, an individual can get a feeling of control through performing the ritual. Taboos are forbidden behaviors that can make some people believe that something terrible will transpire. By avoiding a certain taboo, a person may feel that he or she can also avoid misfortune.

06 Sociology

Globalization	
Cause	Effect
1. Dutch East India Company began worldwide export activity	Beginning of globalization
2. Traded with nations previously closed to trade, increasing cultural mixing	

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

Summary: The passage discusses the Dutch East India Company as an important impetus in the trend of globalization beginning in the 17th century. It provided an avenue for cultural exchanges through the trade of goods by sea. Through their maritime trade abilities, the Dutch grew in power and eliminated competition by expelling the Portuguese and the British from the East Indies. Through the trade activities of the Dutch East India Company, highly prized and exotic items such as spice and textiles were able to circulate around the world.

Chapter 2 Negative Fact Questions

01 Psychology

Conversation: Men vs. Women		
Men	Both	Women
<ul style="list-style-type: none">More likely to make conversation fun and make jokesDo not generally chat with male friends often	<ul style="list-style-type: none">Conversation has similar goals	<ul style="list-style-type: none">More likely to discuss problems and emotionsOften call friends just to talk

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

Summary: According to the passage, men and women engage in very different same-sex conversations. For men, talk is generally not personal, is more likely to include innocent teasing and joking, and is not very common. Men often consider personal feelings a sign of vulnerability. By contrast, women often broach personal topics such as feelings and problems with one another. Female conversation is thought to be very important to maintain and nurture female relationships.

02 Agriculture

Water Shortage	
Problem	Solution
Agricultural waste of water	<ul style="list-style-type: none">Use underground watering to reduce evaporation and runoffGrow native plant species that thrive in an environment

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

Summary: The passage discusses ways in which farmers are trying to counter shortages of clean, fresh water. When crops are watered above the surface of the ground, much of the water evaporates instead of reaching the plants. By installing new underground irrigation systems, a more uniform application of water can reach the root systems of the plants. Another novel idea for farmers to use water more efficiently is to grow more native species of crops. Native crops can grow without excessive watering, thus slowing the depletion of precious water resources.

03 Marketing

Product Demonstration		
Definition	Advantage	Example
Giving customers an opportunity to experience the product in person	1. Can make a product more real to a customer, which can increase sales	Car dealers often give test drives to customers
	2. Can demonstrate unique benefit or function of a product	Sales of a company's cookware went up after demonstrating its benefits

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

Summary: According to the passage, while product advertising is advantageous in selling goods and services, a hands-on demonstration is often more effective with prospective customers. Product demonstration makes an item more tangible to buyers, in that they can actually touch and use it before they buy it. This shows consumers what a product's function is, which can lead to higher sales of the product. For example, a manufacturer of non-stick cookware made many more sales after demonstrating its product at an exposition.

04 Political Science

Dependency Theory		
Theory	Support	Example
Developing nations cannot progress while remaining dependent on other nations	Developing nations spend more on imports than on exports	Grenada exports bananas, nutmeg, and cocoa but must import many other products

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

Summary: The passage discusses dependency theory, which explains why some developing nations cannot integrate into the world economy. These countries will not succeed economically until they restructure their import and export programs. Because the revenue gained from exports is much lower than the expenditures needed to import basic goods, these nations cannot generate a healthy economy. Dependency theorists suggest that the only viable solution for these countries is to increase manufacturing in order to decrease dependence upon developed nations for their welfare.

05 Anthropology

Cultural Interpretations	
Ethnocentrism	Cultural Relativism
Judges cultures based on one culture's standards	Judges cultures based only on that culture's standards
Von Däniken did not believe ancient Egyptians built pyramids	Egyptians must have built pyramids

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

Summary: The passage discusses two ways in which cultures can be understood. The first is ethnocentrism, which is the interpretation of a culture based on the standards of one's own culture. Ethnocentrism is thought to be a universal occurrence. Another way to interpret cultures is cultural relativism, which judges cultures according to their own standards. However, this position can be difficult to adopt without extensive effort and study of other cultures. Anthropologists help alleviate this problem.

06 History

The History of the Globe Theatre		
Step 1: Built in 1599 but burned down in 1613	Step 2: Rebuilt in 1614 but closed down and demolished	Step 3: Replica built in 1997 to match original

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

Summary: According to the passage, London's famous Globe Theatre has a complex and illustrious/turbulent history spanning about 400 years. Constructed as an open-air amphitheater, its center was a large pit in which attendees would stand and watch the performances. After it was destroyed twice, it existed only in the minds of its admirers for 350 years. Finally in 1997, the Globe Theatre was again rebuilt. It is an open-air venue, just like the original.

Chapter 3 Inference Questions

01 Literature

Unreliable Narrators	
Definition	Role
Narrator who does not describe events truthfully	1. Make readers question story and narrator 2. Add realism to characters

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

Summary: According to the passage, an unreliable narrator is a literary device that is used to challenge the reader's trust. Unreliable narrators are also used by authors to add a sense of realism to a character. The example used is "The Cask of Amontillado" by Edgar Allan Poe. The unreliable narrator in this case is Montresor, whose view is tainted with prejudice and a desire for revenge. Readers must contemplate whether or not to believe the unreliable narrator, thereby gaining a more comprehensive understanding of the character.

02 Business

Successful Entrepreneurship	
Requirement	Example
1. Innovation	Amazon.com made buying books more convenient
2. Risk-taking	Debbi Fields took risks to finance cookie chain

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

Summary: According to the passage, entrepreneurship is the launching of a business venture in order to make money. Two factors that can bring about success in new business are innovation and risk-taking. Innovation is crucial in fulfilling a unique public demand. Risk-taking is another necessary component of a new business because many entrepreneurs are competing in a new or difficult territory. For example, the owner of a successful cookie chain had to convince a bank to finance her business concept in order to become successful.

03 Biology

The Botanical Career of Carl Linnaeus		
Step 1: Developed love for plants and began to name and classify them	Step 2: Went on expeditions to find new plant species and developed <i>Systema Naturae</i>	Step 3: Became professor and continued to gather plant species from around the world

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

Summary: According to the passage, Carl Linnaeus was a botanist who dedicated his life to creating a classification system of plants. The process began with a love of plants as a child. Linnaeus set out on many expeditions to find new plants. As a professor, he gained worldwide renown and collected many plant specimens from around the world. His *Systema Naturae* grew considerably into a multivolume work that was preserved by other scientists after his death.

04 Psychology

Fuzzy Trace Theory		
Definition	Category	Example
False memories are created due to brain making traces of events	1. Gist trace: trace of basic idea of an entire event	Soccer player may remember how a game went but forget specific details
	2. Verbatim trace: trace of specific details of an event	Patient may remember specific details from an event but forget event itself

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

Summary: According to the passage, the phenomenon of generating false memories can be explained by the fuzzy trace theory. This theory states that after an experience, the brain makes traces of information. A gist trace is a remembrance of the event in a general sense. Because the brain remembers a general sense of the entirety of an event rather than specific details, false memories may be created to fill in the gaps. A verbatim trace is a recollection of events based on specific details or moments, rather than the experience as a whole.

05 Astronomy

Lunar Craters	
Type	Explanation
1. Impact craters	Form from meteorites and asteroids crashing into surface of moon
2. Volcanic craters	Magma under surface breaks through and causes surface to collapse

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

Summary: The moon has accumulated a number of craters that form its jagged terrain. The vast majority of lunar craters are caused by the impact of meteorites and asteroids. Because the moon has no atmosphere, there is no protective barrier to burn up meteorites before they hit the moon's surface. Therefore, when meteorites explode upon impact, surface material is ejected with great force. Another way lunar craters are formed is when molten rock rises through the moon's surface, breaking it. A cavity forms beneath the surface, which eventually collapses to form a crater.

06 Zoology

Wolves and Dogs	
Theory	Support
Modern dogs retain many characteristics of wolves	1. Both form hierarchical relationships
	2. Both are territorial and can be aggressive

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

Summary: According to the passage, while dogs and wolves bear little physical resemblance to each other, they demonstrate common traits. For example, their social structures consist of hierarchies within packs or families. They are also both highly territorial and become aggressive to assert dominance and ownership. Wolves and many dogs have an inherent belligerence toward strangers. They react to a threat by baring their teeth and displaying other aggressive behavior.

Chapter 4 Rhetorical Purpose Questions

01 Literature

Identifying Theme	
Step 1: Examine title for clues	Step 2: Look for repeated words or images

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

Summary: The focus of the passage is on literary themes and how to interpret/discriminate themes in poetry. A theme is the general idea that is expressed in a poem. The author describes two ways of discerning/interpreting themes in poetry. First, the reader can analyze a title, which often indicates what the poem may be about. For example, Lewis Carroll's "A Boat beneath a Sunny Sky" suggests that the poem is about something joyful and tranquil. Next, the reader should look for repeated words or images, as they often help the reader conclude the theme of the poem.

02 Meteorology

How Aurora Borealis Is Formed		
Step		
1. Sun discharges plasma	2. Plasma reaches Earth's atmosphere	3. Plasma particles collide with atmospheric gases
Description		
Plasma is made up of particles	Plasma travels through space; eventually comes into contact with atmosphere	Gas atoms build up energy; release it as light

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

Summary: According to the passage, many of the spectacular weather phenomena seen from Earth are caused by powerful storms in space. For example, Aurora Borealis is an extra-planetary storm that results in the appearance of impressive lights in the northern sky. Aurora Borealis is caused when particles are discharged from the sun. Then, the particles collide with gases in the Earth's atmosphere. In the process, an electric charge is transferred to the gases. The collision causes energy to build up. When the energy is released, the gases emit lights with a continuously changing spectrum of colors.

03 Environmental Science

Electric Cars	
Theory	Support
Electric cars are better for the environment and economy	1. Study showed electric cars reduce carbon dioxide emissions by 100 percent
	2. Reduce influence of petroleum prices on world economy
	3. Less expensive to operate

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

Summary: The invention of the automobile has had a profound effect on modern transportation. The passage describes the merits of the electric car and its benefits to the environment and the economy. Gasoline engines produce gases and fumes that contribute to global warming. Electric cars, meanwhile, can reduce emissions by one hundred percent. Electric cars are also better because they reduce reliance on petroleum. Decreased dependence reduces the impact of fluctuating petroleum prices on the economy.

04 Biology

Altruism and Evolution		
Theory	Explanation	Example
Kin Selection	Animal sacrifices chances of reproducing or surviving to help evolutionary success of species	While some bees do not reproduce, this actually helps species to survive

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

Summary: The passage discusses altruism in biology. Altruism, or selfless behavior, is considered an evolutionary mechanism that seems to defy the theory of natural selection. Some scientists believe that by exercising kin selection, some animals promote the genetic fitness of their species by sacrificing themselves. For example, worker bees forgo their ability to reproduce so that they can protect the hive and their queen.

05 Oceanography

How Rogue Waves Are Formed	
Theory	Support
1. Wave interactions with ocean currents	1. Agulhas Current runs past southern tip of Africa, a region with a high incidence of rogue waves
2. Wave reinforcement	2. When two or more waves join, their respective heights add together

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

Summary: According to many personal accounts and mathematical calculations, rogue waves can reach incredible heights. Stories of rogue waves have circulated for centuries, but scientists still are not sure what causes them. A high incidence of rogue waves off the southern tip of Africa seems to be caused by contact between normal wave patterns and ocean currents. In other areas, rogue waves may be caused by two or more waves joining together to form one massive wave. However, the exact circumstances in which rogue waves appear are still unknown, and in fact, they may sometimes occur randomly.

06 Anthropology

Native American Pottery		
Type	Materials	Technique
1. Southwestern	Dry clay	Use of extremely hot temperatures
2. Northeastern	Many different materials	Mix materials with clay, use of coil technique, rub with stones

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

Summary: The passage discusses artifacts recovered in the southwestern and the northeastern parts of the United States. A popular and revered art form, the pottery of southwestern Native Americans has an extensive history. In the beginning, they created more functional pottery out of clay, subjecting it to extremely hot temperatures. Northeastern pottery featured many different materials due to disparate geography. Native Americans in the northeast also finished pots with stones to add a polished look.

| Vocabulary Review 1 |

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

| Mini Test 1 |

01 Environmental Science

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

02 Marketing

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

Chapter 5 Vocabulary Questions

01 Linguistics

Vocabulary	
Type	Point
1. Passive Vocabulary	1. Larger than active vocabulary
	2. Expands as a person ages
2. Active Vocabulary	1. Smaller than passive vocabulary
	2. Limited by words needed to communicate

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

Summary: The passage describes two different types of vocabulary that linguists recognize. Passive vocabulary is the set of words that a person knows but avoids using in speech or writing. A person's passive vocabulary expands throughout his or her lifetime. Active vocabulary, on the other hand, is the set of words that a person can actually produce when speaking or writing.

02 Biology

Angiosperms			
250 Million Years Ago	130 Million Years Ago	100 Million Years Ago	80 Million Years Ago
Gigantopterids contained chemicals used by angiosperms	Earliest angiosperm fossil	Bees helped angiosperms spread	Angiosperms became most common type of plant

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

Summary: The passage discusses angiosperms, flowering plants that continued to thrive long after dinosaurs became extinct. The earliest angiosperm fossil is thought to be 130 million years old. It is also estimated that angiosperms began to evolve about 250 million years ago from the gigantopterids. Gigantopterids may be the earliest ancestor of angiosperms. Bees helped the plants diffuse across the world by spreading the plants' pollen. Angiosperms are now the most common type of plant on Earth.

03 Economics

Inflation	
An increase in prices of all goods and services	
Demand-pull inflation	Cost-push inflation
People "bid up" price of goods, causing companies to charge more	Rising production costs drive up general prices

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

Summary: The passage discusses two economic theories explaining inflation. The first is demand-pull inflation. This is when supplies are unable to meet consumer demand. By their willingness to pay more for the product, consumers effectively bid up the price. Factors causing demand-pull inflation include an increase in currency or exports. The second type of inflation is cost-push inflation. This occurs when the production price of something increases. Companies must charge consumers more in order to keep the businesses profitable. Cost-push inflation can also be caused by an increase in the price of raw materials.

04 Photography

Contrast		
Step	Description	Example
1. Lighting	The way light hits subject affects contrast	To increase contrast, photographer can use colored lens filters
2. Exposure	Amount of light that hits film affects color	To ensure proper exposure, photographer can bracket shot

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

Summary: The passage describes ways that photographers can achieve effective contrast in photographs. Proper contrast in a photograph will direct the viewer's attention to its most interesting aspects. One way is to regulate the amount of time the film is exposed to light. By using lens filters, photographers can accentuate certain colors and reduce others. The other way that photographers control contrast is by exposing the film correctly. Exposure can be manipulated by changing the aperture or the shutter speed. A technique called bracketing can allow a photographer to choose an exposure that will render the best contrast in a photograph.

05 Health

Fatigue		
A condition of extreme sleepiness or exhaustion		
Physical Fatigue	Mental Fatigue	Pathological Fatigue
Person cannot perform at usual level	Sleepiness or lack of concentration	Caused by disease

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

Summary: The passage discusses three types of fatigue, the feeling of extreme weariness or exhaustion. Physical fatigue can be described as feeling drained, and is caused by physical exertion. This type of fatigue is a temporary loss of muscle function, and is usually pronounced after some type of exertion. The second type is mental fatigue. It is characterized by feelings of drowsiness and difficulty concentrating. The third type is pathological fatigue, which may be caused by a disease such as chronic fatigue syndrome.

06 Anthropology

Origin of Austronesian Languages		
Theory	Support	Explanation
Austronesian languages originated in ancient Taiwan	1. Nine of ten Austronesian languages formed from Formosan languages	Formosan languages spoken by Taiwanese aborigines
	2. Austronesian peoples migrated from Taiwan	Migration patterns prove Austronesian-speaking peoples are genetically and linguistically related to Taiwanese aborigines

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

Summary: The passage proposes that the often-ignored aborigines of Taiwan are the descendants of the original speakers of Austronesian languages. Anthropologists have uncovered evidence that confirms the origins of this language family. The most convincing data stems from the fact that languages usually originate in areas with the most linguistic diversity. Studies reveal that Formosan languages form nine out of the ten branches of Austronesian language. Scientists also can genetically link peoples from countries that speak Austronesian languages to the ancient inhabitants of Taiwan by studying their migration patterns.

Chapter 6 Reference Questions

01 History

The Formation of the United Nations			
1919	1943	1944	1945
League of Nations sets the stage for future organizations	During talks, leaders agree to create international organization	Five nations meet to discuss goals of organization	United Nations convenes for first time

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

Summary: The passage discusses the history of the United Nations. Another international organization called the League of Nations preceded its formation, but it had been ineffective in enforcing its resolutions. World leaders wanted to avoid another devastating world war, so they made an agreement to create a new peacekeeping organization. After a series of wartime conferences with

representatives from around the world, the United Nations officially convened for the first time on October 24th, 1945.

02 Sociology

Urbanization in Mexico City	
Problem	Solution
1. Water shortages	Seek new sources for water and increase public awareness about water conservation
2. Heavy traffic	Improve public transportation to reduce traffic

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

Summary: The passage discusses the problems associated with urbanization. A large population shift from rural communities to large cities can cause great difficulties, especially in areas where population growth surpasses a city's ability to meet the needs of its citizens. For example, in the metropolis of Mexico City, issues such as water shortages and heavy traffic are a challenge for city officials. Mexican administrators are now exploring options that will provide people with a safe and reliable water supply and efficient public transportation.

03 Astronomy

Binary Star Systems	
Classification	Explanation
1. Visual	Can be seen with a telescope
2. Spectroscopic	Can only be seen with a spectrometer
3. Eclipsing	Continuously eclipse each other as they orbit around center of mass

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

Summary: Pairs of stars that orbit around the same center of mass in space are called binary star systems. The point that the mass of a system is concentrated on is the binary star system's center of mass. Visual binary stars can be seen through a telescope with high resolving power. Spectroscopic binary stars can only be seen with a spectrometer, which measures unperceivable differences in the light the stars emit. Eclipsing binary stars travel along an orbit in which they eclipse each other. Studying eclipsing binary stars allow scientists to determine the composition of space.

04 Biology

Plant Movements	
Type	Characteristic
1. Tropisms	1. Directional reaction to stimulus
	2. Irreversible
2. Nastic Movements	1. Response to environmental stimulus
	2. Reversible

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

Summary: While plants may appear to be stationary objects, they do in fact move a great deal. For example, ivy plants can interweave with a pole, and sunflowers crane their faces toward the sun. One type of plant movement is tropism. Tropisms occur when a plant reacts to a directional stimulus. For instance, phototropism is when a plant moves in response to a light stimulus. Another type of plant movement is nastic movement. It occurs when a plant reacts to environmental changes. Thigmonasty occurs when the plant moves in response to touch. This movement is a mechanism that allows plants such as the Venus flytrap to feed.

05 Health Sciences

Effects of Sugar	
Theory	Support
1. Sugar is psychologically addictive	Surveys reveal that people seek sugary food to improve mood and become anxious without it
2. Sugar is physically addictive	Studies show that rats become addicted and experience withdrawal symptoms if sugar is taken away

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

Summary: The passage discusses the theory that sugar can be addictive. When a person craves sugary foods and experiences a negative reaction in its absence, he or she may have a sugar addiction. Although sugar cane has been cultivated for thousands of years, too much sugar can cause tooth decay and suppress the immune system. According to surveys, people indulge in sugary foods when they are feeling angry or sad. This suggests that sugar is psychologically addictive. Evidence that it may also be physically addictive was revealed after a study on rats. The rats that were dependent on sugar experienced tremors and other withdrawal symptoms when the sugar was taken away.

06 Psychology

How Pfungst Discovered the Clever Hans Effect			
Step			
1. Pfungst removed Hans from audience to ask questions	2. Pfungst had people aside from Hans's trainer ask questions	3. Pfungst asked questions without Hans seeing him	4. Pfungst had people ask Hans questions to which they did not know answers
Result			
Hans answered correctly	Hans answered correctly	Hans performed poorly	Hans performed poorly

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

Summary: The passage discusses a psychological phenomenon called the Clever Hans Effect. It was discovered by German psychologist Oskar Pfungst when he documented the case of a horse that could allegedly perform arithmetic and keep track of the date. In order to showcase his amazing skills, Clever Hans and his owner traveled the continent. Pfungst subjected the horse to a series of tests and discovered that the horse was actually just adept at interpreting human body language. By being more receptive to cues from the trainer's involuntary body language, Clever Hans was able to produce the correct answers.

cooler temperatures cause it to condense. Usually, water droplets fall back down to the ground as precipitation after they evaporate. However, if a mountain physically obstructs the rain clouds, the rain will fall before it can reach the other side. Therefore, the water never returns to that area.

02 Business

The Online Auction Business Model	
Advantage	Disadvantage
1. No time or geographic constraints	1. Decreased consumer confidence because of criminal activity
2. High level of consumer loyalty	2. Need for increased Internet security

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

Summary: The passage is about the online auction business model, which allows people to bid on and purchase items via the Internet. The business model has both advantages and disadvantages. The model does not have the time or geographic constraints of other businesses, and it provides high customer loyalty. However, the anonymity of patrons allows for such criminal activities as the sale of stolen or counterfeit items.

03 Biology

Species Related to Amphibian Evolution		
Species		
1. Crossopterygian fish	2. <i>Panderichthys</i>	3. <i>Ichthyostega</i>
Description		
Primitive feet; similar skull and teeth to amphibians	Flat bodies, straight tails, and more developed feet	First true amphibian; had legs and lungs

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

Summary: The passage is about the evolution of amphibians, which are cold-blooded animals that hatch in water and are born with gills. Few fossils of early amphibians have been found, but scientists have managed to determine some transitional species among them. From the earliest ancestor, the crossopterygian fish, scientists observed the development of feet-like apparatus. Later, the *Panderichthys* fish was found to have amphibian-like features, unlike its earlier counterparts. Finally, the fossils of the *Ichthyostega* are believed to be the first proper amphibian.

Chapter 7 Sentence Simplification Questions

01 Geography

The Rain Shadow Effect			
Step			
1. Water on surface evaporates	2. Moist air rises and cools	3. Cold air causes water vapor to condense and produce precipitation	4. Mountains block rain from reaching leeward side, creating rain shadow

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

Summary: The passage discusses the rain shadow effect, which occurs when the hydrologic cycle is interrupted. When the water in the air evaporates, the moist air rises. When it reaches the high elevation of a mountain range, the

04 History

What Caused the Fall of Rome?	
Theory	Support
Roman society became too complex to sustain itself	In an attempt to solve food shortages, Romans conquered other nations, but as empire grew bigger and more complex, it did not have resources to sustain itself

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

Summary: The passage is about Joseph Tainter's theory regarding the fall of the Roman Empire. This great civilization has been studied by many scholars. According to Tainter, Roman society was ruined because it became too complex. Complex societies need resources to finance the costs of solutions to their problems. In an attempt to address their food shortage, the Romans decided to conquer neighboring lands and take their resources. Eventually, the Romans only created more problems for themselves and extended their resources until they could no longer maintain the society.

05 Psychology

Intelligence		
Type		
1. Analytical	2. Creative	3. Contextual
Details		
Related to skills taught in school	Ability to apply knowledge to new situations	Ability to make changes to succeed in any context

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

Summary: The passage is about Robert Sternberg's Triarchic Theory of Human Intelligence. His approach studies three components of intelligence: analytical, creative, and contextual. Analytical intelligence is measured by proficiency in academic tasks, and is often determined through the use of standardized tests. Creative intelligence is how well a person can apply known skills to new situations. Often, creatively intelligent people are quite intuitive. Contextual intelligence is the ability to behave appropriately in any given context.

06 Anthropology

Cultural Diffusion	
Type	Explanation
1. Direct contact diffusion	Culture close to another adopts an aspect of other culture
2. Intermediate contact diffusion	"Middlemen" help spread part of a culture to other areas
3. Stimulus diffusion	One culture's technology prompts similar technology in another culture

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

Summary: The passage discusses cultural diffusion, when aspects of a culture are incorporated into another. There are three different modes of cultural diffusion. Direct contact diffusion occurs when one culture takes on aspects of a culture that it has contact with. Intermediate contact diffusion is when the spread of a culture happens through a "middleman." Stimulus diffusion is when the knowledge of a certain trait spurs the invention of a similar trait in another culture, though it may not be an exact replica.

Chapter 8 | Text Insertion Questions

01 Biology

Fungi	
Characteristic	Role
1. Decompose organic material to gain nutrients	Allow nutrients to be returned to soil through decomposition
2. Reproduce through spores put into the air	Reproduce very quickly, which led to their use in medicine

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

Summary: According to the passage, although fungi can be a nuisance, they are vital to ecosystems. Despite their destructive capabilities, fungi help to decompose organic matter so that nutrients will be returned to the environment. In addition, fungi exhibit reproductive behavior through the use of spores. Once the spores find a habitable area, they reproduce very quickly. This reproductive ability has led to their use in the development of antibiotics in modern medicine.

02 Business

Product Stewardship		
Definition	Aspect	Role
Reducing a product's environmental impact throughout life cycle	1. Manufacturer participation	Use safe packaging and encourage recycling
	2. Retailer participation	Aid manufacturers in getting message to consumers
	3. Government participation	Encourage recycling and create statewide programs

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

Summary: The passage discusses the concept of product stewardship. It encourages environmental protection plans that are implemented throughout a product's entire life cycle. Manufacturers have begun using new packaging that is recyclable and non-toxic. Retailers are also acting as mediators between manufacturers and consumers. They are also executing/instituting recycling programs. Lastly, state governments are fostering recycling through many programs, such as the container deposit program.

03 Astronomy

The Runaway Greenhouse Effect	
Cause	Effect
1. Greenhouse gases trap solar radiation, preventing heat loss	Temperature on Venus becomes very high
2. Heat causes oceans to evaporate, water vapor escapes atmosphere	No water remains on Venus

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

Summary: The passage discusses the runaway greenhouse effect on Venus. Greenhouse gases serve to heat both Earth and Venus. However, their atmospheres are much different despite their relative proximity to each other. Venus's high concentration of carbon dioxide acts as a barrier. This exacerbates the heating effect by preventing the sun's infrared radiation from escaping Venus's atmosphere. The heat caused by the gases allowed water to evaporate and escape the atmosphere, which is why oceans never formed on Venus.

04 History

Olmsted and Public Space		
Topic	Point	Explanation
Olmsted changed the way public spaces were viewed	1. Thought public spaces should provide escape from city life	Made Central Park resemble New York as little as possible while remaining cohesive part of city
	2. Thought public spaces should be for everyone	Ensured Central Park was in a location that everyone could get to easily

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

Summary: The passage discusses the changes in public spaces effected by landscape architect Frederick Law Olmsted. He realized that cities lacked a cohesive balance of places in which to work, play, and live. Olmsted planned Central Park in New York around the idea that people needed a sanctuary in order to escape the bustle of city life. While previous public spaces had catered to certain groups of people, Olmsted wanted Central Park to be accessible to all members of the public.

05 Psychology

Selective Attention Theories		
Theory	Explanation	Example
1. Filter Theories	Brain filters unnecessary information	In a crowded room, you will not hear every conversation, but will recognize your name
2. Attentional resource theories	Attention is fixed amount to divide among tasks	In a crowded room, one must divide attention among events

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

Summary: The passage discusses selective attention theories, which try to determine why people focus their attention in different ways. Filter theories say that the brain filters out unwanted information. For example, a person disregards conversations in a room if they have no relevance to his or her thoughts. One's brain can filter unfamiliar information and redirect attention to familiar names or voices. Attentional resource theories describe attention as a fixed amount to divide according to how much attention one wants to pay to something. A person can devote a certain amount of attention to certain stimuli.

06 Literature

Allegory		
Definition	Role	Example
Use of extended metaphor in a story	1. To describe difficult concepts	Plato's allegory of prisoners in a cave to describe philosophical knowledge
	2. To tell familiar story in new way	George Orwell's allegory of animals on a farm to describe a political situation

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

Summary: The passage discusses the use of allegory in literature. Allegory is used as an extended metaphor for two reasons. The first is to explain difficult concepts. For example, Plato uses the bondage of prisoners to explain philosophical knowledge. The second purpose of allegory is to tell a familiar story in a new way. For instance, in George Orwell's *Animal Farm*, farm animals stage a revolution to evict humans from their farm. They soon discover that they are not fit to run the farm themselves. The story's events figuratively represent the political situation of Orwell's time.

| Vocabulary Review 2 |

- | | | |
|-----------------|------------------|------------|
| 1. (B) | 2. (D) | 3. (A) |
| 4. (D) | 5. (D) | 6. (A) |
| 7. (C) | 8. (B) | |
| 9. (A) | 10. (A) | 11. (B) |
| 12. (D) | 13. (C) | 14. (B) |
| 15. (A) | | |
| 16. Fossils | 17. preserved | 18. devote |
| 19. identifying | 20. instrumental | |
| 21. (B) | 22. (E) | 23. (C) |
| 24. (A) | 25. (D) | |

| Mini Test 2 |

01 Zoology

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

02 Linguistics

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

Chapter 9 Prose Summary Questions

01 Botany

Plant Stems		
Definition	Part	Function
Plant structure that supports buds and leaves and carries nutrients to plant	1. Phloem	Carries carbohydrates from leaves to roots
	2. Xylem	Water and nutrients pulled from roots to leaves

1. (A, C, D)

Summary: Stems are the support structure for a plant's buds and leaves. Concentric rings within the stem transport nutrients downward from the source to the plant's roots through the pressure-flow mechanism. Water evaporates from the leaves, which attracts more water molecules upward from the roots. This process creates tension in the interior of the stem for continuous water movement. More water enters through the roots from the soil, sustaining the life of the plant.

02 Archaeology

Experimental Archaeology		
Definition	Role	Example
Subfield of archaeology that attempts to replicate ancient processes	Reveals new information about ancient cultures	Paint-making using primitive methods and materials

1. (A, B, E)

Summary: Experimental archaeology attempts to replicate certain skills of past cultures. By doing this, we can determine what made ancient artifacts so durable. Archaeologists use only the primitive materials and methods available at the time the items were made. One experiment recreated the process of paint-making using ores, minerals, and sedimentary deposits. Then, animal fat was extracted using tools available at the time. Finally, yucca roots were added to recreate the substance likely made by ancient paint makers.

03 History

Entrepreneurship During the California Gold Rush		
Cause	Effect	Example
California Gold Rush	Increase in entrepreneurial opportunities	Levi Strauss capitalized on needs of gold miners

1. (C, D, F)

Summary: The 1849 gold rush in California inadvertently created opportunities for entrepreneurs to make their fortunes in ways other than mining. A rapidly growing population increased the demand for basic necessities such as food and clothing. While some merchants inflated their prices to take advantage of the miners' plight, many were honest and hardworking. Levi Strauss was a merchant who sold various types of apparel, including a type of work trousers that used metal rivets. This provided a type of pants that fulfilled miners' needs in a new way and led to his success.

04 Astronomy

Why the Sky Is Blue	
Theory	Support
Molecules in the atmosphere scatter color in sunlight	1. Rayleigh discovered sunlight is scattered by water molecules in atmosphere 2. Rayleigh found that light scattered is mostly in blue part of spectrum, giving sky blue color

1. (B, E, F)

Summary: The sky appears to be blue because of the scattering of light waves against water molecules in the atmosphere. The colors of the light spectrum we can see range from red, which has the longest wavelength, to violet, which has the shortest. When light rays are broken or refracted by water in the atmosphere, colors appear separated because of their wavelengths. The scattering of light molecules in the sky is predominantly at the blue end of the light spectrum because of its shorter wavelength, most easily seen by the human eye. Farther from the sun, the greater saturation of color makes the sky appear a deeper blue.

05 Art History

Stieglitz Photography		
Definition	Role	Example
Photography as art rather than production of standard photographs	Promoted artistic side of photography	<i>Equivalents</i> —images of shadow and light to capture moment of experience

1. (B, C, F)

Summary: Alfred Stieglitz was a photographer who made his work an expression of artistic interpretation of the world around him. Dada art had a profound impact on the way he viewed photography, so he became interested in the promotion of photography as art. Stieglitz edited and published a photography periodical and focused much of his work on urban surroundings. His *Equivalents* series was intended to completely capture a moment in time, thereby affording the viewer an equivalent experience of the feeling of that moment.

06 Sociology

The Role of the Media in Socialization	
Advantage	Disadvantage
1. Educate children about academic and social skills 2. Provide common topics to discuss	1. Show violence, which can teach the wrong lessons 2. Depict stereotypes that are learned and believed by public

1. (C, D, E)

Summary: The passage discusses the media's role in socialization, which has only intensified as television's role has grown in society. Television is undeniably an important part of modern culture. The media have educational and interactional advantages and disadvantages. Many people believe that the media help educate children and give people common topics to discuss in social settings. However, others believe that the media promote violence and implant often unrealistic stereotypes.

Chapter 10 Table/Chart Questions

01 Geology

Seismic Waves	
Classification	Attribute
1. P Waves (Primary Waves)	1. The fastest waves
	2. Can travel through any medium
	3. Vibrate in the direction they travel
2. S Waves (Secondary Waves)	1. Slower than P waves
	2. Travel through only solid mediums
	3. Vibrate at right angles

1.

Seismic Wave	Statements
P waves	<ul style="list-style-type: none"> Produce vibrations that move in the direction of the waves Move through underground water Are the fastest moving waves
S waves	<ul style="list-style-type: none"> Can only move through solids Produce vibrations that move up and down or side to side

Summary: According to the passage, earthquakes generate shock waves known as seismic waves. Two kinds of seismic waves travel through the Earth's interior. Primary waves, or P waves, travel outward from where an earthquake originates. They can move through solids, liquids, or gases under the surface of the Earth, alternately compressing and expanding them. S waves are secondary waves that can only move through solids. They vibrate at right angles to their direction. S waves travel more slowly than P waves and can only travel through solid mediums. Scientists can compare S waves and P waves to pinpoint the location of earthquakes, even thousands of miles away.

02 Anthropology

Hunter-Gatherers vs. Pastoralists		
Hunter-Gatherers	Both	Pastoralists
<ul style="list-style-type: none"> Egalitarian society Basic unit is band Lots of social mobility among bands 	<ul style="list-style-type: none"> Based on small groups 	<ul style="list-style-type: none"> Hierarchical Extended family headed by father Part or all of group moves with herd

1.

Society	Statements
Hunter-Gatherer	<ul style="list-style-type: none"> A married woman has a choice of several different groups with whom she can live. Members of the group are treated as equals.
Pastoralist	<ul style="list-style-type: none"> Herds often split into groups that move separately. About 12,000 years ago, humans thought to develop this method. Sons usually live in a group with their fathers, even after they marry.

Summary: The way in which a pre-industrial society finds or produces its food affects its social structure. Hunter-gatherer societies, in which members forage for food, are egalitarian. Members are usually related through marriage or kinship. Everyone gets an equal share of the meat, and they can easily move from one band to another. Pastoralist societies are hierarchical. Usually an older male member heads up the group, which consists of his sons and their families. Pastoralists also rely on domesticated animals for food and other products.

03 Philosophy

The Philosophies of Plato and Aristotle		
Problem	Theory	Explanation
What is the best form of government?	1. Philosopher-king	Only philosopher can understand ideal of good life
	2. Rule of law	Even ruler must be subject to laws

1.

Philosopher	Statements
Plato	<ul style="list-style-type: none"> Only a philosopher can understand the ideal of the good life. The world of Forms is the true reality. Rule of law is necessary for good government in the absence of a philosopher-king. A world exists that is beyond the human senses.
Aristotle	<ul style="list-style-type: none"> Man perceives reality through his senses. A government based on the rule of law is the best method. Even rulers must follow the laws of the state.

Summary: According to the passage, Plato believed reality existed in a world of Forms that could only be understood by philosophers. Because human senses cannot give a perfect rendering of the world, it is only through the mind that humans can truly know reality. For Plato, the ideal form of government was a philosopher-king, who could ensure that the concept derived from the world of Forms was promoted. Without a philosopher-king, Plato believed that the rule of law was the subsequent form of good government. Aristotle, however, believed that what people perceived through their senses was reality. His theory that even rulers must follow the rule of law formed the underpinning of constitutional governments today.

04 Art History

Baroque vs. Rococo		
Baroque	Both	Rococo
<ul style="list-style-type: none"> Very large buildings Bright colors Impressive views 	<ul style="list-style-type: none"> Integration of painting, sculpture, and architecture 	<ul style="list-style-type: none"> Less imposing, smaller scale Pastel tones Unified interiors

1.

Architectural Style	Statements
Baroque	<ul style="list-style-type: none"> Palaces were especially massive and imposing. Different, dramatic views were used in the design of the interior. Paintings using bright colors decorated church interiors.
Rococo	<ul style="list-style-type: none"> Swirls and curves were used in interior design. Sculptures tended to be smaller and less dramatic.

Summary: There are four key elements of Baroque architecture. Buildings were massive. Architecture, painting, and sculpture worked together. The interiors used bright colors and different materials, and there were dramatic views off the main visual axis. Baroque architecture was too robust for the tastes of the time. However, Rococo architecture was a refinement of these elements. Its decoration was more delicate and subtle. It also featured the integration of painting and sculpture with its architecture.

05 Sociology

The Changing Ideas of Race		
Meaning		
1. People who shared same identity or way of life were called a race	2. Race was characterized by physical attributes	3. Race is cultural idea that has no biological basis

1.

Period	Concept of Race
Original Usage	<ul style="list-style-type: none"> Said that a race of people shared a lifestyle
16 th and 17 th Centuries	<ul style="list-style-type: none"> Divided people into races according to physical traits Stated that parents pass racial characteristics to their children
20 th Century	<ul style="list-style-type: none"> Proved that races are not determined by biology Described race as a cultural creation

Summary: According to the passage, it was conventional wisdom that race simply denoted a group of people who shared an identity, such as being from the same country. Race meant something much different from its current association. Later, people thought race was a biological fact. It was believed that certain physical and behavioral traits could be used to distinguish each race. Finally, scientists showed there was no scientific basis for the idea of race, and it was actually a cultural construct.

06 Economics

Keynes vs. Friedman		
Keynes	Both	Friedman
<ul style="list-style-type: none"> Money supply does not affect economy Key to strong economy is demand Spending will create demand and strengthen economy 	<ul style="list-style-type: none"> Based on quantity theory of money 	<ul style="list-style-type: none"> Money supply affects economy Contraction of money supply caused Great Depression More money available for spending increases health of economy

1.

Theory	Statements
Keynesian	<ul style="list-style-type: none"> Governments can change tax policies to change consumer spending. The employment rate will fall without sufficient demand. The health of an economy depends on three kinds of spending.
Monetarist	<ul style="list-style-type: none"> Governments need to control the supply of money in order to affect the economy. The economy will be negatively affected by a contracted supply of money.

Summary: Two economists developed new theories on how governments can influence the economy. Keynesian economists believe that three variables affect economic activity: consumer spending, government spending, and investment. Keynes's theories became so widely accepted that economists rejected monetary policy to manage economic activity. On the other hand, Friedman's monetarists believe that money supplies have a causal effect on the economy. They attribute the fiscal disaster of the Great Depression to a contraction in the money supply, causing the market to decline.

| Vocabulary Review 3 |

- | | | |
|-----------------|---------------|------------------|
| 1. (B) | 2. (D) | 3. (A) |
| 4. (B) | 5. (C) | 6. (A) |
| 7. (D) | 8. (C) | |
| 9. (A) | 10. (B) | 11. (B) |
| 12. (D) | 13. (C) | 14. (D) |
| 15. (A) | | |
| 16. denotes | 17. construct | 18. underpinning |
| 19. stereotypes | 20. ranking | |
| 21. (B) | 22. (C) | 23. (A) |
| 24. (E) | 25. (D) | |

| Mini Test 3 |

01 Health

1. (B, C, E)

02 Business

1. (B, C, E)

03 Biology

1.

Infectious Agents	Characteristics
Virions	<ul style="list-style-type: none"> Can be prevented before infection Include a piece of genetic material that is replicated
Prions	<ul style="list-style-type: none"> Cause irreversible damage to tissues Are composed of matter found in the body Form an abnormal and irregular structure

04 History

1.

Theory	Statements
Chicxulub Theory	<ul style="list-style-type: none"> A piece of a large asteroid may have broken away in space and hit Earth. An object from outer space left a crater on the Yucatan Peninsula. Dinosaurs became extinct because of a meteor's impact on Earth.
Keller's Theory	<ul style="list-style-type: none"> Global warming caused by volcanic activity contributed to extinction. Volcanic eruptions released toxic gases and caused acid rain. Dinosaur species weakened after years of stressful living conditions. The Earth was bombarded by multiple meteors that diminished dinosaur numbers.

| Practice Test |

01 Psychology

- | | | |
|---------------|---------|---------|
| 1. (B) | 2. (C) | 3. (B) |
| 4. (B) | 5. (C) | 6. (A) |
| 7. (A) | 8. (B) | 9. (A) |
| 10. (C) | 11. (D) | 12. (B) |
| 13. (B, D, F) | | |

02 History

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

12.

Theory	Statements
War Theory	<ul style="list-style-type: none">• Ongoing attacks weakened the city.• Thai soldiers invaded and looted the city.
Religion Theory	<ul style="list-style-type: none">• The predominant religion was originally Hindu.• The change to Buddhism destroyed the people's unity.
Groslier's Theory	<ul style="list-style-type: none">• The developments were too vast to manage.• The irrigation system sapped the city of its resources.• The city's land was eroded and overused.

03 Astronomy

1. (D) 2. (B) 3. (A)
4. (A) 5. (D) 6. (A)
7. (B) 8. (B) 9. (B)
10. (D) 11. (D) 12. (B)
13. (A, D, E)

04 Music

1. (D) 2. (C) 3. (D)
4. (B) 5. (C) 6. (D)
7. (A) 8. (B) 9. (B)
10. (A) 11. (B) 12. (A)
13. (B, C, F)

05 Biology

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

