



1. In one story by this author, the boy Gerasim is the only person to comfort the title character, who has a religious epiphany before he dies. In addition to *The Death of Ivan Ilyich*, this author wrote a novel that sees the title lover of Count (*) Vronsky commit suicide on a railway, and another novel about the Rostovs and the Bezukhovs centering on Napoleon's invasion of Russia. For 10 points, name this Russian author of *Anna Karenina* and *War and Peace*.

ANSWER: Leo Tolstoy [or Leo Nikolayevich Tolstoy; or Lev Nikolayevich Tolstoy]

186-12-69-11101

2. In two dimensions, Green's Theorem relates two forms of this operation. This operation can be approximated using parabolic segments with Simpson's Rule. It can be done using trigonometric substitution, and is rigorously defined for continuous functions using a partition into (*) rectangular regions in a Riemann sum. When it lacks bounds, it is called indefinite. For 10 points, name this calculus operation, an inverse operation to the derivative which finds the area under a given curve.

ANSWER: integration [or integral]

104-12-69-11102

3. In one paper, this man identified "innately creative people" and people with "deadened or lowered" aspirations as exceptions to his most famous idea, which was influenced by Kurt Goldstein. He identified significant moments of joy as "peak experiences," and identified safety as essentially a (*) precondition for fulfilling needs of love. This man used Eleanor Roosevelt to describe the concept of self-actualization. For 10 points, identify this man who put forth a pyramidal Hierarchy of Needs.

ANSWER: Abraham Harold Maslow

189-12-69-11103

4. Polyidus of Corinth advised sleeping in a temple to Athena in order to gain control of this creature, which Poseidon later tasked with stopping Mount Helicon from floating away. This creature's name comes from his initial appearance at the source of the ocean, and he had the ability to bring forth springs by stamping his foot. This brother of Chrysaor threw off a man (*) attempting to reach Mount Olympus, and was born from the decapitated body of Medusa. For 10 points, Bellerophon rides what winged horse of Greek mythology?

ANSWER: Pegasus

019-12-69-11104

5. Monte Testaccio is a hill-sized refuse dump for this product in Rome. In Roman times, the samian type of this good was red and made in Gaul. The Greek krater subtype of this product was usually black-figure rather than red-figure. Amphoras were another Greek form of these products, which had names inscribed on broken segments to cast votes for ostracism. The (*) Kerameikos (KAIR-ah-mee-KOHS) district made this good in Athens. For 10 points, name these products that were fired in kilns after being spun from clay on a wheel.

ANSWER: pottery [or ceramics; or terra cotta; prompt on clay; prompt on vases; prompt on jars; prompt on urns]

104-12-69-11105

6. Lithuanian folk music inspired the opening solo of this music, which is joined by other woodwinds, until stopping and restarting. Nicholas Roerich was this ballet's set designer. Bronislava Nijinska was replaced by Maria Piltz as “the Chosen One” who dances herself to death in its last movement (*) Sacrificial Dance. A bassoon solo opens this ballet, which, like *The Firebird* and *Petruschka*, was written with Ballet Russes. For 10 points, name this ballet by Igor Stravinsky which caused a riot at its premiere.
ANSWER: *The Rite of Spring* [or *Vesna svyashchennaya*; or Le *Sacre du Printemps*]

121-12-69-11106

7. The western portion of this state was once disputed over and became known as the Neutral Ground or Sabine Free State. One Supreme Court case started in this state when the Committee of Citizens tested the Separate Car Act. That case regarding this state's segregation of train cars was (*) *Plessy v. Ferguson*. Later, this state was where Carl Weiss assassinated the leader of the "Every Man a King" campaign, "Kingfish" governor Huey Long. For 10 points, name this state formed largely from the southern portion of an 1803 purchase.

ANSWER: Louisiana

019-12-69-11107

8. One of the first works in this movement depicts a bodybuilder holding a lollipop. That Richard Hamilton collage is *Just What Is It That Makes Today's Homes So Different, So Appealing?* Another artist from this movement used Ben-day dots to draw the red and yellow explosion caused by a (*) fighter plane being hit by a rocket. This movement was typified by *Whaam!*, a comic strip-like work by Roy Lichtenstein. For 10 points, name this movement which included Andy Warhol's soup can paintings and incorporated mass media into art.

ANSWER: pop art

019-12-69-11108

9. This interaction was proposed to result in an asymmetric release of certain radiation from cobalt-60 by Lee and Yang, or, in other words, to violate parity symmetry. Glashow, Salam, and Weinberg unified this force with the electromagnetic force. The (*) W and Z bosons mediate this force, which allows quarks to change flavor. For 10 points, name this fundamental interaction which mediates beta decay, and is contrasted with a more powerful nuclear force.

ANSWER: weak interaction [or weak nuclear force]

174-12-69-11109

10. This author wrote a novel in which a mob shouts “less bread, more taxes” and the Warden of Outland is overthrown. This writer of *Sylvie and Bruno* analyzed the usefulness of fourteen different geometry textbooks in *Euclid and His Modern Rivals* and wrote a poem in which a character speaks of “shoes and ships and sealing wax” and (*) “cabbages and kings,” “The Walrus and the Carpenter.” He also described a “vorpal blade” that goes “snicker-snack” in “Jabberwocky.” For 10 points, name this author who created the Red Queen and Cheshire Cat in *Alice’s Adventures in Wonderland*.

ANSWER: Lewis Carroll [or Charles Lutwidge Dodgson]

019-12-69-11110

11. Along the eastern border of this state lies a lake with the largest cypress forest in the world. Large reserves of natural gas are found in the Barnett Shale, which underlies a major city in this state. Another city in this state, home to the western part of Caddo Lake, is paired with the most violent city in the world. The Chihuahuan Desert extends into this state's (*) Big Bend National Park. This state's northernmost region is known as its panhandle. It contains the cities of El Paso and Fort Worth. For 10 points, name this second-largest US state.

ANSWER: Texas [prompt on Lone Star State]

020-12-69-11111

12. In one of this man's works, the title character assumes an alias as a hotel employee named Armand for his day job and robs the willing Madame Houplé of her valuables. He also wrote a story in which the title character shoots Cipolla at the end of a performance. Those works by this man are *Confessions of Felix Krull*, *Confidence Man* and (*) "Mario and the Magician." He also wrote of the end of Gustav von Ascehnbach's life and about Hans Castorp's stay in a sanatorium. For 10 points, name this German author who wrote *Death in Venice* and *The Magic Mountain*.

ANSWER: Thomas Mann

030-12-69-11112

13. These stars sometimes undergo sudden increases in rotation speed called glitches. These stars experience starquakes. Walter Baade and Fritz Zwicky proposed the existence of these stars. The mass of these stars is bounded by the Tolman-Oppenheimer-Volkoff limit, and they are formed from the core collapse of stars surpassing the (*) Chandrasekhar limit. Subclasses of this type of star include magnetars and pulsars. For 10 points, name this type of star composed of namesake neutral particles.

ANSWER: neutron stars [accept pulsars before "Fritz Zwicky" and prompt afterwards; prompt on stars]

014-12-69-11113

14. One essay by this philosopher says that "custom and gross sense" dictate life, as there are few new ideas, and one can only live in rather than analyze the present. This author of "Experience" argued against the need to believe in miracles in his controversial address to the graduating class of Harvard's Divinity School. He proposed that (*) "Man Thinking" was the unique position of New World philosophers in "The American Scholar," and said he became a "transparent eyeball" in "Nature." For 10 points, name this Transcendentalist philosopher, also a poet and a friend of Henry David Thoreau.

ANSWER: Ralph Waldo Emerson

019-12-69-11114

15. Some of the discontent that caused this event arose when Mary of Modena gave birth to a male heir. This event sparked the revolts of Jacob Leisler and John Coode in colonial America. This event was precipitated by a letter of invitation to the Dutch stadtholder. This event's causes included the suspension of the Test Act and other (*) pro-Catholic policies of James II, and it resulted in the English Bill of Rights. For 10 points, name this 1688 event that deposed the Stuarts in favor of William and Mary.

ANSWER: Glorious Revolution [or Bloodless Revolution; accept Revolution of 1688 before read]

080-12-69-11115

16. A series of these events in 1916 New Jersey claimed five victims in what conspiracy theorists called a German plot. Peter Benchley's best-known novel concerns this type of event, to which many crewmembers of the USS (*) *Indianapolis* fell victim. John Williams composed a theme underpinned by alternating Es and Fs to accompany them in a film. Brook Watson survived one of these events in Havana Harbor that was depicted in a Copley painting. For 10 points, name this type of potentially-fatal event that kills five people in *Jaws*.

ANSWER: shark attacks [or more specific answers, like great white shark attacks]

080-12-69-11116

17. This is the sole instrument featured in Edgar Varese's *Density 21.5*, created at the request of George Barrere for the new platinum type of this instrument he had created. The first composition for the form of this instrument perfected by Boehm was Debussy's *Syrinx*. Frederick the Great was an avid performer of this instrument. Air is blown through the embouchure hole on the (*) headjoint of this instrument. For 10 points, identify this reedless woodwind instrument, the full-size sibling of the piccolo.

ANSWER: flute [or platinum flute before "Boehm" is read]

066-12-69-11117

18. **One part of this structure undergoes avascular necrosis in Legg-Calves-Perthes disease. If this bone's namesake artery is blocked, the cruciate anastomosis provides circulation, and this bone's neck connects its greater and lesser trochanter to its head. Its head articulates with the acetabulum, where it creates a (*) ball-and-socket joint, and its lateral and medial epicondyles connect with the fibula and tibia, respectively. For 10 points, name this bone in the thigh.**

ANSWER: femur

048-12-69-11118

19. **The title character of a work by this author is engaged to both Madeline Fox and Leora Tozer and marries the latter. That character researches the X Principle. In addition to writing *Arrowsmith*, he wrote of Carol (*) Kennicott joining the Thanatopsis Club in another novel. The title real estate salesman of another novel by this author makes speeches against the candidacy of Seneca Doane. For 10 points, name this first American Nobel Laureate in Literature, the author of *Main Street* and *Babbitt*.**

ANSWER: Sinclair Lewis [or Harry Sinclair Lewis]

194-12-69-11119

20. **This landform's "Short Ears" people rebelled against their enslaving "Long Ears" people. This home of the undeciphered rongorongo script housed a society that died out after deforesting its palm trees, as told in Jared Diamond's *Collapse*. This island's natives, who call it and themselves (*) Rapa Nui, have been governed since 1888 by Chile. For 10 points, name this Pacific island home to hundreds of moai stone heads.**

ANSWER: Easter Island [accept Rapa Nui until read]

104-12-69-11120

21. **The speaker of this poem wishes he might become a bird "set upon a golden bough to sing." This poem describes how "fish, flesh, or fowl commend all summer long whatever is begotten, born, and dies" while "all neglect monuments of unageing intellect." It idealizes a city with a "drowsy (*) emperor" and "Grecian goldsmiths" after claiming, "That is no country for old men." For 10 points, name this poem by William Butler Yeats about traveling to an ancient city.**

ANSWER: "Sailing to Byzantium"

080-12-69-11121

22. **William Howard Russell's became the first modern war correspondent during this war. One cause of this war was a dispute in which France claimed guardianship of Christians in the Holy Land. The largest action of this conflict was a year-long siege of Sevastopol. "The Lady with the Lamp" became the nickname of (*) Florence Nightingale during this conflict, which included the Charge of the Light Brigade. For 10 points, name this 1853 to 1856 war between the major European powers over a Black Sea peninsula.**

ANSWER: Crimean War

080-12-69-11122

23. **This process is what makes mothballs effective, due to the properties of naphthalene. This process occurs when a substance is heated below its triple point. The end result of this process can be used to create (*) fog when working with solid carbon dioxide, or dry ice. For 10 points, name this process in which a solid turns directly into a gas without going through a liquid phase, and which is the reverse process of deposition.**

ANSWER: sublimation [accept word forms; accept evaporation before "triple point"]

023-12-69-11123



1. This process corresponds to marine transgressions, which, with regressions, create scarps. For 10 points each:

[10] Name this process that floods coastal regions and which is predicted to increase due to global warming causing melting of glaciers and thermal expansion of water.

ANSWER: sea level rise

[10] Melting polar ice is an example of this type of feedback loop. It is self-reinforcing due to reduced reflectivity of sunlight.

ANSWER: positive feedback loop

[10] Another example of a positive feedback loop is the release of this greenhouse gas from Arctic permafrost. Clathrates of this compound can be found on the ocean floor.

ANSWER: methane

066-12-69-11201

2. During this conflict, Frederick the Great won the battles of Rossbach and Leuthen. For 10 points each:

[10] Name this 1756 to 1763 conflict between the major European powers and their overseas empires. The French and Indian War was its North American theater.

ANSWER: Seven Years' War

[10] In a coalition with the Duke of Newcastle, this man successfully led Great Britain through the Seven Years' War. His son of the same name served as prime minister from 1783 to 1801.

ANSWER: William Pitt, the Elder [or Earl of Chatham]

[10] During the Seven Years' War, this son of George II and leader of the Anglo-Hanoverian army had to surrender to the French. He earned the nickname "Butcher" for the way he treated the Jacobites after winning the Battle of Culloden Moor.

ANSWER: Duke of Cumberland [or William Augustus]

080-12-69-11202

3. Name these Russian composers, for 10 points each.

[10] This man composed the *Scheherazade* suite but is perhaps best known for an extremely rapid work, "The Flight of the Bumblebee."

ANSWER: Nikolai Rimsky-Korsakov

[10] This composer based his *Tamara* on a Mikhail Lermontov poem and wrote the extremely difficult *Islamey* for piano.

ANSWER: Mily Alexeyevich Balakirev

[10] This virtuoso pianist wrote four numbered piano concertos as well as a work based on the *Caprices*, *Rhapsody on a Theme of Paganini*.

ANSWER: Sergei Rachmaninoff

192-12-69-11203

4. This philosopher wrote the opera *The Cunning-Man*, and he stated that the history of man was one of decay in *A Discourse on the Sciences and the Arts*. For 10 points each:

[10] Name this Swiss-born philosopher who came to the conclusion that progress corrupted man in his *Confessions* and stated "Man is born free, and everywhere he is in chains."

ANSWER: Jean-Jacques **Rousseau**

[10] Rousseau described "forcing man to be free" in this influential book of political philosophy.

ANSWER: *The **Social Contract*** [or *Du **Contrat Social***]

[10] In *The Social Contract*, Rousseau posited the view that, in a democratic society, citizens remain free by obeying the law and thus submitting themselves to this collective resolution of the state.

ANSWER: **general will** [or **volonté générale**]

030-12-69-11204

5. Because fog from the sea periodically covers this desert's "Skeleton Coast", its endemic Welwitschia plants absorb most water from condensation on their leaves. For 10 points each:

[10] Name this coastal desert that extends into Angola in the north and borders the Kalahari Desert in the south.

ANSWER: the **Namib** Desert

[10] This mineral forms "pans," like the Etosha Pan in northern Namibia, when it accumulates in the topsoil in a flat area. Trade in this foodstuff made the Mali Empire wealthy.

ANSWER: **salt** [or **halite**; or **NaCl**; or **sodium chloride**]

[10] In the south, the Namib extends into this other nation, from which Namibia gained independence in 1978. This nation with three capitals also surrounds Lesotho.

ANSWER: Republic of **South Africa** [or Republiek van **Suid-Afrika**; or iRiphabliki ye**Sewula Afrika**; or iRiphabliki yom**Zantsi Afrika**; or iRiphabhuliki yase**Ningizimu Afrika**; or iRiphabhuliki ye**Ningizimu Afrika**; or Repabliki ya **Afrika-Borwa**; or Rephaboliki ya **Afrika Borwa**; or Rephaboliki ya **Aforika Borwa**; or Riphabliki ra **Afrika Dzonga**; or Riphabuliki ya **Afurika Tshipembe**]

193-12-69-11205

6. Several of these beings were born when Izanagi cleansed himself after his trip to the underworld. For 10 points each:

[10] Name these divinities who include Hachiman, Tsukuyomi (TSOO-koo-YO-mee), and Amaterasu (AH-muh-ter-AH-soo)

ANSWER: **kami** [or **shin**]

[10] This kami is the brother of Amaterasu whose tricks cause her to go into hiding. This storm god kills the serpent Orochi.

ANSWER: **Susano'o**

[10] Kami are revered in this native Japanese religion, known as the "Way of the Gods."

ANSWER: **Shinto**

080-12-69-11206

7. This author described a difficult night in the Egyptian desert in his *The Temptation of St. Anthony*. For 10 points each:

[10] Name this French author who wrote about Frederic Moreau and his love for Madame Arnoux in *Sentimental Education*. Characters in his most famous work include Leon Dupuis.

ANSWER: Gustave **Flaubert**

[10] The aforementioned novel is this work about Emma, whose dreams of an exciting Parisian lifestyle lead to her downfall after a tumultuous affair with Rodolphe Boulanger.

ANSWER: **Madame Bovary**

[10] In *Madame Bovary*, the title character's husband, Charles, has this occupation.

ANSWER: **doctor** [or **physician**]

192-12-69-11207

8. One example of this property is aluminum oxide's ability to form aluminate ions with bases and to act as a proton acceptor with acids. For 10 points each:

[10] Name this type of substance that also includes water, which can become either an acidic hydronium or a basic hydroxide depending on the reaction.

ANSWER: **amphoteric** substances [or **amphoterism**]

[10] Water's ability to accept or donate protons makes it a base and an acid according to this acid-base theory.

ANSWER: **Bronsted-Lowry** theory

[10] The Bronsted-Lowry theory fails to explain aluminum oxide's amphotericism, which can be understood by this theory that looks at acids and bases as electron pair acceptors and donors.

ANSWER: **Lewis** theory

023-12-69-11208

9. This man was given the title "Qaid-i-Azam," or "Great Leader," shortly before his 1948 death. For 10 points each:

[10] Identify this leader of the Muslim League who was named the first governor-general of the country he helped create in 1947.

ANSWER: Muhammad Ali **Jinnah**

[10] Jinnah engineered the formation of this predominantly Muslim country out of British India.

ANSWER: Islamic Republic of **Pakistan** [or Jamhuryat Islami **Pakistan**]

[10] Pakistani politics have been intermittently dominated by this family, which included 1970s prime minister Zulfikar Ali and his assassinated daughter Benazir.

ANSWER: **Bhutto** family [or **Bhuttos**]

019-12-69-11209

10. This poem's title character lives on an island where "four gray walls, and four gray towers, overlook a space of flowers." For 10 points each:

[10] Name this poem about a woman who dies after falling in love with Sir Lancelot.

ANSWER: "The **Lady of Shalott**"

[10] This author of "Ulysses" and "The Lotos-Eaters" wrote "The Lady of Shalott."

ANSWER: Alfred, Lord **Tennyson**

[10] In this Tennyson poem, describing a military action during the Crimean War, six hundred soldiers ride "into the jaws of death, into the mouth of hell."

ANSWER: "The **Charge of the Light Brigade**"

194-12-69-11210

11. There are six of these devices, which change the direction or magnitude of a force. For 10 points each:
[10] Name this class of object, of which lever and inclined plane are examples, which are building blocks for larger objects.

ANSWER: **simple machines**

[10] This simple machine consists of its two namesake parts that rotate together. A windlass is an example of this machine.

ANSWER: **wheel and axle**

[10] This is the ratio of the force applied to the target to the force applied by the user. A lever with the fulcrum nearer the load will have a high value for this quantity.

ANSWER: **mechanical advantage**

174-12-69-11211

12. Sulla increased the size of this body from 300 to 600 members and filled it with his cronies. For 10 points each:

[10] Name this aristocratic body whose name was Latin for "assembly of old men." Convening at the Curia and consisting of Romans who had held a magistracy, this body directed public affairs at the height of the Republic.

ANSWER: Roman **Senate** [or **Senatus Romanus**]

[10] One of the two Romans holding this position usually directed meetings of the Senate. Its holders were the constitutional heads of state and commanders-in-chief of the army.

ANSWER: **consuls** [or **consules**]

[10] Just below the Senatorial Order and patricians stood this aristocratic class. Consisting of those who owned 400,000 sesterces or more, this class provided most of Rome's businessmen and tax collectors.

ANSWER: **equites** [or the **Equestrian Order**; or the ordo **equester**; or the **knights**]

080-12-69-11212

13. In one song named for this man, the singer asks "When you think about me, do you think about seventeen?" and states "Funny how a melody sounds like a memory." For 10 points each:

[10] Name this singer who is famous for playing with the E Street band. Known as "The Boss," this man claimed to be "Born down in a dead man's town" in his "Born in the USA."

ANSWER: Bruce **Springsteen**

[10] In this song, Bruce Springsteen claims to be "stranded in the jungle" and orders everybody to "move over" because he's "running on the bad side."

ANSWER: "**Tenth Avenue Freeze-Out**"

[10] Clarence Clemons played this instrument in the E Street Band and in Lady Gaga's "Edge of Glory." Kenny G plays this instrument in Katy Perry's song "TGIF."

ANSWER: **saxophone**

149-12-69-11213

14. A Christ-like figure in a white shirt stands with his arms outstretched in the center of this painting. For 10 points each:

[10] Name this painting, which depicts the shooting of defenders of Madrid during the Napoleonic Wars on the title date.

ANSWER: *The **Third of May, 1808*** [or *El **tres de mayo de 1808 en Madrid***; or *Los **fusilamentos de la montana del Principe Pio***; or *Los **fusilamentos del tres de mayo***]

[10] This painter of *The Sleep of Reason Produces Monsters* and *The Charge of the Mamelukes* painted *The Third of May, 1808*.

ANSWER: Francisco Jose de **Goya** y Luciente

[10] This series by Goya was painted on the walls of the Quinta del Sordo. This series includes *Fight with Cudgels*, *A Witches Sabbath*, and *Saturn Devouring His Son*.

ANSWER: **Black Paintings** [or **pinturas negras**]

186-12-69-11214

15. These devices are particularly favored by the Rinzai sect, and are collected in the volumes *The Gateless Gate* and *The Blue Cliff Record*. For 10 points each:

[10] Identify these paradoxical statements, which attempt to induce enlightenment by asking for the sound of one hand clapping or comparing the Buddha to three pounds of flax.

ANSWER: **koans**

[10] Koans are used in this school of Buddhism, which seeks sudden "satori" through meditation.

ANSWER: **Zen** Buddhism

[10] One koan states that if the meditator meets the Buddha on the road, the student should perform this action.

ANSWER: **kill him** [or obvious equivalents]

019-12-69-11215

16. In this story, the protagonist is shown the title entity made by his ancestor, Tsui Pen. For 10 points each:

[10] Name this story, which sees Yu Tsun murder Stephen Albert to convey the location of British artillery.

ANSWER: "The **Garden of Forking Paths**" [or "El **Jardin de Senderos Que se Bifurcan**"]

[10] This author of "Tlon, Uqbar, Orbis Tertius" and "The Library of Babel" included "The Garden of Forking Paths" in his collection *Ficciones*.

ANSWER: Jorge Luis **Borges**

[10] Borges's character Pierre Menard is called the "author" of this work. This work sees the title character fight the Knight of the White Moon.

ANSWER: **Don Quixote** [or *The Ingenious Gentleman **Don Quixote** of La Mancha*; or *El Ingenioso Hidalgo **Don Quijote** de la Mancha*]

186-12-69-11216

17. The mixed-race shipping magnate Paul Cuffee founded Freetown as an early advocate of this plan. For 10 points each:

[10] Name this largely unenacted plan favored by Lincoln early in his presidency, for which purpose Liberia was founded.

ANSWER: African **colonization** [or sending freed **black** slaves back to **Africa**; accept any answer involving the movement to or settling of free African-Americans on African land]

[10] The American Colonization Society was once led by this Kentucky senator and "Great Compromiser." In 1844, he made his last failed presidential run as a Whig.

ANSWER: Henry **Clay**

[10] This Jamaican-born entrepreneur worked with other blacks on the Back to Africa movement in the 1920s, though his failed Black Star Line shipped almost nobody.

ANSWER: Marcus Moziah **Garvey**

104-12-69-11217

18. One scene in this film switches between shots of mob bosses being killed and shots of a baptism, all while a priest speaks. For 10 points each:

[10] Name this film about the Corleone family. Earlier in this film, Michael Corleone was sent to Italy after he used a gun, hidden in a toilet, to kill a corrupt Police chief.

ANSWER: *The* **Godfather**

[10] This man directed the *Godfather* trilogy. His film *Apocalypse Now* involves one scene where air cavalry troops are flying as the *Ride of the Valkyries* plays.

ANSWER: Francis Ford **Coppola**

[10] In *Apocalypse Now*, Colonel Kurtz recites this T.S. Eliot poem as an American journalist proclaims "He's really out there." This poem ends by stating "the world ends/Not with a bang but with a whimper."

ANSWER: "The **Hollow Men**"

149-12-69-11218

19. These proteins can be modified by methylation, acetylation, biotinylation, phosphorylation, among others, which make up its namesake "code". For 10 points each:

[10] Name these positively charged proteins that make up the nucleosome core particle. DNA is wrapped around these proteins to form chromatin.

ANSWER: **histones**

[10] Some histone variants, like CENP-A, localize exclusively to this part of the chromosome, which is the point at which the two arms are connected.

ANSWER: **centromere**

[10] The study of histone modifications and DNA methylation are integral to this field of biology, which studies mechanisms of inheritance that are not directly coded on DNA.

ANSWER: **epigenetics**

048-12-69-11219

20. For 10 points each, name these subjects of plays by Jerome Lawrence and Robert E. Lee.

[10] One of their plays is titled after the night this person spent in jail for refusing to pay a tax, in protest of the Mexican War.

ANSWER: Henry David **Thoreau**

[10] In 1972, Lawrence and Lee penned *Jabberwock*, a play about the life of this author of *My World and Welcome To It* and "The Secret Life of Walter Mitty."

ANSWER: James **Thurber** [or James Grover **Thurber**]

[10] The duo's play *Inherit the Wind* is a thin *roman a clef* about this Dayton, Tennessee event.

ANSWER: the **Scopes** monkey trial [or obvious equivalents]

019-12-69-11220

21. The protagonist of this novel compares his lover to the Chijimi grass-linen of two villages he visits. For 10 points each:

[10] Name this novel about the relationship between Shimamura and Komako, who becomes a geisha in the spa town in the title location.

ANSWER: *Snow Country* [or *Yukiguni*]

[10] *Snow Country* was written by this Nobel Prize-winning Japanese novelist whose other works include *Thousand Cranes* and *The Master of Go*.

ANSWER: Yasunari **Kawabata**

[10] Kawabata wrote a novel titled for the sound of one of these landforms. Dante's Purgatory is envisioned as one of these landforms.

ANSWER: **mountains**

014-12-69-11221