1. In one of this man's poems, Simon Zealot claims, "If they think they ha' slain our Goodly Fere they are fools eternally." Another of this author's poems mimics the song "Go Lovely Rose" by addressing a "dumb-born book" in the section "Envoi." In another, a "stirrer-up of strife" declares, "Damn it all! All this our South stinks of Peace!" This author wrote, "the age demanded an image of its accelerated grimace," and described a man whose "true Penelope was Flaubert" in one poem. This poet wrote the "Pisan" section of one work while being detained in a cage, and he described "petals on a wet, black bough" in a two line poem. For 10 points, name this poet of "Hugh Selwyn Mauberley," "In a Station of the Metro," and The Cantos.
ANSWER: Ezra Pound
2. This man peeled poles of wood from almond trees and placed them next to a watering hole, after he tricked his father-in-law into giving him the striped and speckled animals from his flocks. Many Jewish services begin with a prayer praising this man's tents, Ma Tovu. This Biblical character renamed the site of Luz to Bethel, which was the place his mother died. While sleeping on a stone, this man dreamed of angels ascending to heaven. Though his birth name literally means "heel", he was given a new name meaning "he who struggles with God", or Israel. This man dressed up in goatskins to steal his brother's birthright. For 10 points, name this brother of Esau and son of Isaac.
ANSWER: Jacob [or Israel before it is read; or Yaakov]
3. This is the first note of the tone row on which Webern's String Quartet is based. Brahms's Variations and Fugue on a Theme by Handel is based on a harpsichord suite in this note's major key. The Beethoven string quartet whose last movement was initially the Grosse Fuge is in this note's major key. Chopin used this note's minor key for a piano sonata whose somber third movement gives the piece the nickname the "Funeral March." There are five flats in the minor key of this note, which is what the C played on a trumpet or clarinet sounds like. This note is the first flat added in the circle of fifths. For 10 points, name this note that is the only accidental in the key of F major, and which in equal temperament is the same as A sharp.
ANSWER: B flat [or B-flat major; or B-flat minor]
4. This person was accused by the Girondins of complicity in the defection of General CharlesFrancois Dumouriez. This man argued against moving the government from Paris to Blois in a speech in which he said, "Audacity, more audacity, and always audacity!" This man founded an organization to prevent the "infractions of the rights of man" known as the Cordeliers Club. Though the extent of his role in the event is unclear, this man was given credit for an August 10, 1792 march on the Tuileries that resulted in the end of the Bourbon monarchy in France. For 10 point, name this French Revolutionary leader who served as the first president of the Committee of Public Safety but was ultimately executed due to his opposition to the Reign of Terror. ANSWER: Georges Danton
5. This poet's relationship with his psychologist W. H. R. Rivers is treated in Pat Barker's Regeneration trilogy. In an autobiographical series of novels by this poet, the protagonist is saved by the intervention of David Cromlech, who is a thinly-veiled version of Robert Graves. This author of Memoirs of a Fox-Hunting Man ended a poem telling "you smug-faced crowds with kindling eyes" to "sneak home and pray you'll never know the hell where youth and laughter go." This author of "Suicide in the Trenches" also described a soldier who drowns in the mud trying to retake lost ground. For 10 points, name this author of "Counter-Attack" and other poems about his time in World War I, who was a personal hero to Wilfred Owen. ANSWER: Siegfried Sassoon
6. During 2006 protests in his country, this person's skull was stolen and his grave was defaced with the phrase "murderers and traitors shall not rest on holy ground." To contrast with his more radical predecessor, he made speeches claiming that "whoever is not against us is with us." He was imprisoned and tortured by the AVH under orders of Gabor Peter. Despite receiving a letter from this person promising safe passage, his erstwhile prime minister was arrested and hanged after leaving the Yugoslav embassy. This man's regime was described with terms like "the happiest barrack" and "Goulash communism." He took power after the Soviet Union invaded his country in 1956 and deposed Imre Nagy. For 10 points, name this Communist ruler of Hungary. ANSWER: Janos Kadar [or Janos Joszef Czermanek]
7. One device that performs this task uses an ISFET sensor to monitor the release of hydrogen ions, while another method uses a zero-mode waveguide for fluorescent detection. An experimental method for doing this that fits in a USB drive threads the substrates through a nanopore. Another method of performing this task couples luciferase activity to pyrophosphate release. Besides the IonTorrent, 454, and Illumina versions of this technology, a more common method of doing this uses capillary electrophoresis to read fluorescently-terminated chains; that method is named for Sanger. The data from this technique can be overlapped to form contigs in the Shotgun method, which was used by the Craig-Venter-owned Celera corporation. For 10 points, name this method for determining the order of nucleotides in an organism's genome. ANSWER: DNA sequencing [or nucleic acid sequencing or RNA sequencing; do not accept "protein sequencing"]
8. The Derveni papyrus is attributed to this man, who names a set of ancient world beliefs in which a silver egg surrounded by a serpent hatches into the god Phanes. This human names a set of hymns worshipping the proto-Dionysiac god Zagreus. He relates several stories, including the deaths of Cyparissus and Adonis, after he incites a grove of trees to grow around him in Book X of Ovid's Metamorphoses. The Hebrus river contained part of this Ciconian king after maenads ripped his head off. This man helped the Argonauts overcome the Sirens some time after his wife died by snakebite on their wedding night. For 10 points, name this man who defied an order not to look behind him, a mythical musician who failed to rescue his lover Eurydice from Hades. ANSWER: Orpheus
9. In this novel, Ferdi Progulske is executed after attempting to kill a gym teacher with a bomb. A character in this novel is called the "purest God's little lamb" before being sent off to work in hotel service. The protagonist of this novel swears to "never make oblation to the Host of the Beast." In this novel, Nettlinger attempts to visit the protagonist in the Prince Heinrich Hotel. The protagonist of this novel, an architect named Robert, destroyed St. Anthony's Abbey three days before World War II ended. For 10 points, name this novel about the Faemel family, one of whom plays the title game daily, written by Heinrich Böll.
ANSWER: Billiards at Half-Past Nine [or Billiard um halb zehn]
10. One of this composer's operas ends with the Latin mnemonic tune "Malo" being sung in the manner of a requiem. In another of his operas, townspeople sing a threnody for the title character upon seeing a crushed wreath and Lady Billows organizes the May Day festival. A boat is intentionally sunk at the end of, and two euphemistically-labeled "nieces" and the schoolmistress Ellen appear in, this composer's opera about a fisherman who abuses his apprentices, which includes the separately-published Four Sea Interludes. His most famous operatic character, a stammering sailor, murders his master-at-arms Claggart. For 10 points, name this English composer of Albert Herring, Peter Grimes, and Billy Budd.
ANSWER: Edward Benjamin Britten, Baron Britten
11. This painter mocked the trend of spectators gaping at collisions and accidents in his canvas Steaming Streets. This artist painted German soldiers hiding behind naked bodies in The Barricade, part of his series on World War I atrocities. This man depicted the black Joe Gans in a painting satirizing the practice of barring "socially unacceptable" members from joining private groups. In another of this artist's paintings, a blue-shirt wearing referee stands behind two men. His paintings Both Members of This Club, Stag at Sharkey's, and Dempsey and Firpo all showcase his favorite subject matter. For 10 points, name this artist of urban New York noted for his many paintings of boxing scenes.
ANSWER: George Bellows
12. A transducer commonly used with this technology consists of stacks of piezoelectric ceramic disks separated by electrodes and sandwiched between a stiff, light head mass and dense, heavy tail mass. That transducer is the tonpilz, so-named for its mushroom-like shape. The multibeam form of this technology produces a "swath" of data that is typically used to produce bathymetric charts while its sidescan form is used in conjunction with a towfish. The passive type of this technology does not have variables such as projector source level and reverberation level, which are instead components of its active type. Concerns over its use include the mass stranding of whales. For 10 points, identify this underwater acoustic technology.
ANSWER: SONAR [or sound navigation and ranging]
13. During The Anarchy, Empress Matilda escaped siege of this city's castle by walking across a frozen river. In Anglo-Saxon times, this town was at a strategic point between Wessex and Mercia. Historians believe that Geoffrey of Monmouth wrote down his Arthurian legends in this city's chapel. A document written in this city established a 24 -member council which Simon de Montfort intended to use to check Henry III's royal power; those namesake "Provisions" helped kick off the Barons' Wars. For 10 points, name this city where students from Merton and Balliol colleges got into early "town-gown" riots, home to the oldest university in Britain.

## ANSWER: Oxford [or Oxon]

14. In a jealous fit, this novel's protagonist is unable to stop thinking about the phrase, "Do you mind if I pull down the curtain?" Maria Wallis shoots an Englishman at a train station in this novel. In this novel's final scene, the protagonist divorces his wife while the Tour de France is passing by. At a ski lodge, this novel's protagonist meets a rich American heiress named Baby Warren. Abe North's alcohol-driven deterioration parallels the protagonist's own downward spiral, culminating with Tommy Barban marrying his wife. In this novel, Hollywood darling Rosemary Hoyt wins the attentions of a celebrated psychologist. For 10 points, name this semiautobiographical novel about Nicole and Dick Diver, written by F. Scott Fitzgerald.
ANSWER: Tender Is the Night
15. Using Weyl ordering in a formalism due to this scientist leads to the midpoint prescription. In that formalism due to this physicist, the integral kernel, or propagator, of the time-evolution operator is expressed as the sum over all possible paths with a weighting factor proportional to the exponential of the action. That formalism is the path integral formulation. Like Julian Schwinger, this American's work on the renormalization of quantum electrodynamics won him a Nobel, and the arrow-containing-lines and squiggly lines that appear on his namesake diagrams are iconic of particle physics. For 10 points, name this bongo drum enthusiast whose undergrad lectures at CalTech were made into the three volume set Lectures on Physics.
ANSWER: Richard "Dick" Feynman
16. Decompositions of a type of these things are found with the Littlewood-Richardson rule; that type is the characters of irreducible representations of general linear groups, are indexed by partitions, and are named for Schur. A method of proving the Cayley-Hamilton theorem is showing the minimal one of them divides another one of them. A Grobner basis is defined over an ideal over a ring of these things. Eisenstein names a criterion that tells when these things are irreducible. Algebraically closed fields have the property that these thingss associated with that field can be split into linear factors, and the Abel-Ruffini theorem proved that there is no general formula for solutions of these things of degree five or higher. For 10 points, name these functions which consists of the sum of several terms with a variable raised to integer exponents.
ANSWER: polynomial
17. These thinkers' belief in up to three ochemata, or "vehicles" for the soul, was proferred by Iamblichus and Proclus, who both also advocated a form of folk-magic called theurgy. A treatise "On Beauty" from this school was among fifty-four translated by Renaissance scholar Marsilio Ficino. These thinkers thought that Intellect and the World-Soul were first in a hierarchy of "emanations" from The One. Thinkers in this mold included the author of the Isagoge, Porphyry, who edited the Enneads of his teacher Plotinus. For 10 points, name this body-hating, late Roman style of thought, a mystical reworking of ideas from the author of the Symposium. ANSWER: Neoplatonism [or Neoplatonists; prompt on Platonism; prompt on Platonists]
18. Clark L. Hull attempted to explain this psychological process through mathematics. A theory of this process suggests it is most effective when following a progression from enactive to iconic to symbolic representation, and was put forward by Jerome Bruner. The ability of a rat to solve a T-shaped maze based on identifying the color of a box rather than its position was attributed to the "discrimination" type of this process. Albert Bandura incorporated the phenomenon of vicarious reinforcement into a "social" theory of this process, which was tested through the Bobo Doll experiment when children performed it after observing the behavior of others. For 10 points, identify this process which causes a change in behavior based upon previous information or experience, and may be performed by reading books.
ANSWER: learning [or discrimination learning; or social learning; prompt on memorization; prompt on conditioning; do not accept "operant conditioning" or "classical conditioning"]
19. This location was named by Dr. Lafayette Bunnell, who entered it while part of a battalion chasing Chief Tenaya. James Mason Hutchings ran a hotel here, where he employed a ScottishAmerican who had walked from Indiana to Florida in 1867. The Raker Act authorized the building of a dam in the northern portion of this place at Hetch Hetch Valley. A famous photograph shows Teddy Roosevelt and this park's major spokesman, John Muir, at Glacier Point. This park is where the Half Dome and El Capitan can be found. For 10 points, name this national park in the Sierra Nevada Mountains, which covers the eastern portions of Mariposa County in California.
ANSWER: Yosemite National Park
20. Elizabeth Baer was originally a co-defendant with the namesake of this Supreme Court case. The results of this case were ultimately weakened by the "bad tendency" test introduced in Patterson v. Colorado and used in Whitney v. California. This case was overturned by Brandenburg v. Ohio, which used the test of "imminent lawless action" in 1969. The plaintiff in this case was the general secretary of the Socialist Party, and violated the Espionage Act by distributing anti-draft leaflets. For 10 points, identify this 1919 Supreme Court case in which Oliver Wendell Holmes used the analogy of "shouting fire in a crowded theater" in establishing limitations on the First Amendment via the use of the "clear and present danger" test. ANSWER: Schenck v. United States
21. During this event, crowds gathered around a set of stuffed kittens that were drinking tea. According to The Illustrated London News, agriculturalists complained about a lack of air conditioning at this event; transportation to and from which was organized by Thomas Cook. A building used during this event was given its name by "Mrs Amelia Mouser," who was actually Douglas Jerrold. That building was designed by Joseph Paxton and housed an exhibit on the Koh-i-Noor diamond as well as Hiram Powers The Greek Slave. Henry Cole and Prince Albert organized this event, for which a large cast-iron and glass building was built. For 10 points, the Crystal Palace was built for British fair that was held during the reign of Queen Victoria? ANSWER: Great Exhibition of the Works of Industry of all Nations [or The Great Exhibition of 1851; or Crystal Palace Exhibition]
22. This novel's protagonist recalls always doffing his hat to a blind man after helping him across the street. In another scene, the main character confronts a stalled motorcyclist, only to be told by another man it is abhorrent to strike someone "who had a motorcycle between his legs." The protagonist of this novel obtains a stolen panel from the Ghent Altarpiece called The Just Judges. This book is narrated by a man sitting in an Amsterdam bar called Mexico City who undergoes a spiritual crisis after doing nothing to stop a woman jumping off the Pont Royal Bridge. For 10 points, name this Albert Camus novel which consists of a series of monologues by a "judge-penitent" named Jean-Baptiste Clamence.
ANSWER: The Fall [or La Chute]
23. Ganister, a quartzose sandstone, is usually found in the seatearth, or underclay, that underlies this rock. This rock is "treasured" by paleobotanists because nodules in it can be "peeled" by slicing, etching with acid, coating with acetone, and applying a cellulose acetate film to give a detailed view of fossilized plants, including cell nuclei and chloroplasts. Those nodules are namesake "balls" of petrified plant matter. Like kerogen-bearing shales, its composition can be divided into three maceral groups: inertinite, liptinite, and vitrinite. The rank of this rock increases from its lignite type to its anthracite type and is a measure of its percent amount of carbon. For 10 points, name this rock whose formation begins with the burial of peat.
ANSWER: coal
24. Answer the following about Thomas Cole's Voyage of Life series, for 10 points each.
[10] One of these beings flies in front of the boat undergoing the title voyage to protect the man in the boat. Fra Angelico's Annunciation depicts another one zooming into the frame.
ANSWER: archangels
[10] How many paintings are there depicting stages on The Voyage of Life? The first one is called Childhood and the last is called Old Age.
ANSWER: four
[10] The Voyage of Life series is displayed on four corners of a room in this institution. Its oculus-bearing dome is supported by dark marble columns above a fountain with a statue of Hermes, and its Sculpture Garden was completed in 1999.
ANSWER: National Gallery of Art, Washington D.C.
25. The hairy ball theorem states that the tangent one of these over the sphere cannot be everywhere nonzero. For 10 points each:
[10] Name these constructs in linear algebra that consists of elements that add associatively, commutatively, have inverses, and are closed under scalar multiplication.
ANSWER: vector field
[10] This operation defines the norm for normed vector spaces, since the square of the norm of a vector is equal to this operation taken on a vector with itself. For vectors $A$ and $B$ in the standard Euclidean sense, this operation is equal to A B cosine theta.
ANSWER: dot product [or inner product]
[10] This type of space, which is designated by putting an asterisk next to the name of a vector space, consists of all the linear functionals on another vector space. There's an isomorphism from the vector space V to the "double" form of this kind of space over V .
ANSWER: dual space
26. The simplest one of these compounds stimulates the development of flowers and ripening of fruit in its role as a plant hormone. For 10 points each:
[10] Name this group of organic compounds with a double bond, exemplified by ethylene. ANSWER: alkenes [or olefins]
[10] A double bond consists of a sigma bond and one of these bonds formed from overlapping p orbitals.
ANSWER: pi bond
[10] In molecular orbital theory, this type of orbital is located outside of the nuclei, and is denoted with an asterisk. They are higher in energy than another type of molecular orbital. ANSWER: antibonding orbitals
27. The Sanskrit word "Dhyana" is the origin for the name of this religion. For 10 points each: [10] Name this branch of Mahayana Buddhism that asks unanswerable questions called koans and is practiced in Eastern Asia.
ANSWER: Zen Buddhism
[10] Zen Buddhism supposedly had its legend in this story in which Buddha handed the namesake object to his follower Mahakashyapa while sitting at a pond.

## ANSWER: Flower Sermon

[10] This man is considered the founder of Zen Buddhism. He traveled to China from India and ripped out his eyelids after meditating at Shaolin Temple for nine years.
ANSWER: Bodhidharma
5. This experiment determined that most of an atom's mass was located in the nucleus. For 10 points each:
[10] Identify this experiment, headed by Ernest Rutherford, that shot particles at a thin sheet of metal where they were deflected.
ANSWER: Rutherford gold foil experiments [or Geiger-Marsden experiments]
[10] The gold foil experiment was actually conducted by Ernest Marsden and Hans Geiger, who proposed a law with John Mitchell Nuttall that very accurately gave the decay constant for this process.
ANSWER: alpha decay [or the emission of a helium nucleus; or obvious equivalents] [10] The mystery of alpha decay was solved by George Gamow, who used the WKB approximation and this quantum mechanical phenomenon, in which a particle passes through a barrier it cannot classically surmount.
ANSWER: quantum tunneling
6. Because this man held lavish gastronomic feasts, his surname is now an adjective meaning "extremely luxurious." For 10 points each:
[10] Name this optimate who, when away from the home front, defended the besieged city of Cyzicus and won the Battle of Tigranocerta in a series of major victories during the Third Mithridatic War.
ANSWER: Lucius Licinius Lucullus
[10] Lucullus took over command of the Roman armies in the Mithridatic Wars for this general, a late Roman Republic politician who revived the office of dictator, served as consul twice, and was Marius's sworn enemy.
ANSWER: Lucius Cornelius Sulla Felix
[10] Lucullus and Sulla both served in this position held by lowest-ranking magistrates tasked with keeping a watch on the state's treasury.
ANSWER: quaestor
7. The Ptolemaic, Seleucid, and Antigonid dynasties all arose during this era. For 10 points each: [10] Name this term from classical history for the era in which Greek culture flourished across Eurasia and Africa in the wake of Alexander the Great's conquests.
ANSWER: Hellenistic period
[10] This home city of Pindar, which a young Alexander the Great had destroyed in 335 BCE, was rebuilt during the Hellenistic era. Its Sacred Band was a regiment made up of pairs of male lovers.
ANSWER: Thebes [or Thebai]
[10] This region east of the Seleucid empire and south of Sogdiana, surrounding the Amu Darya river in Central Asia, was perhaps the furthest-flung area of Hellenistic influence. The Greek kings of this region converted to Buddhism
ANSWER: Greco-Bactria
8. According to one theory, the mind uses both the situation and the physical response to a stimulus to interpret these phenomena. For 10 points each:
[10] Identify these phenomena explained by the Schachter-Singer and Cannon-Bard theories, which include happiness, sadness, and fear.
ANSWER: emotions
[10] This first theory proposed to explain emotions describes how the mind receives the bodily response first and experiences emotion afterwards.
ANSWER: James-Lange theory [prompt on partial]
[10] This other theory pairs emotions like fear and relief or pleasure and pain, and states the body suppresses the opposite response in certain situations. For example, addicts use drugs to suppress pain, and then feel the pain returning when the drug wears off.
ANSWER: opponent-process theory
9. In the Investiture of the Gods, this goddess' subordinates included the Nine-headed Pheasant. For 10 points each:
[10] Name this creator goddess who cut off the legs of a tortoise to repair the pillar of heaven. ANSWER: Nuwa [or Nu Gua]
[10] Nuwa is a deity from the mythology of this nation. In this mythology, the chief deity is the Jade Emperor.
ANSWER: China
[10] Nuwa's husband, Fu Xi, is often considered a member of this many sovereigns, which are paired with the Five Emperors. This many "Pure Ones" are an important group in Daoist myth. ANSWER: three
10. Answer the following about French sculpture, for 10 points each.
[10] Francois Rude created the sculpture group Departure of the Volunteers, also known as La Marseillaise, for one of the four pillars of this monument; the other three depict events from the Napoleonic Wars.
ANSWER: Arc de Triomphe de l'Etoile
[10] This preeminent Rococo sculptor was working at his porcelain factory at Sevres when Catherine the Great invited him to Russia, where he sculpted the Bronze Horseman as a monument to Peter the Great.
ANSWER: Etienne Maurice Falconet
[10] This component of Rodin's Gates of Hell depicts a sitting man, who may represent intellect or philosophy, with his chin resting on one hand.
ANSWER: The Thinker [or Le Penseur]
11. A magazine entitled "Today" published in this nation often featured the works of the Misty Poets. For 10 points each:
[10] Name this nation, whose other important literary figures included the author of a story about a man who begins to see the order to "eat people" in the lines of old texts, entitled "A Madman's Diary."
ANSWER: China
[10] Lu Xun, the author of "A Madman's Diary," wrote the "true story" of this character, who convinces himself that he has won "spiritual victories" when in reality he keeps losing.
ANSWER: Ah Q
[10] This other Chinese novel's protagonist is the compulsive gambler Xu Fugui, who loses his entire family and buys an ox as a companion. It was written by Yu Hua.
ANSWER: To Live [or Huozhe]
12. This man eventually marries the Indian princess Aouda, whom he had saved from the custom of burning herself on a funeral pyre for her first husband. For 10 points each:
[10] Name this man who wins a bet after realizing that he has returned to the Reform Club a day earlier than he thought.
ANSWER: Phileas Fogg [or Phileas Fogg]
[10] This speculative fiction author of Twenty Thousand Leagues Under the Sea detailed Phileas Fogg's journeys with Passepartout in Around the World in Eighty Days.
ANSWER: Jules Verne
[10] This detective chases after Phileas Fogg, believing that Fogg recently robbed the Bank of England.
ANSWER: Detective Fix
13. In May 2014, the holder of this Cabinet post said he was "mad as hell" over a scandal that had been uncovered. For 10 points each:
[10] Name this Cabinet position, whose now-resigned occupant, Eric Shinseki, was criticized over May 2014 revelations involving deaths, poor health care, and falsification of records.
ANSWER: Secretary of Veterans Affairs [or VA Secretary]
[10] The Secretary of Veterans Affairs is fifteenth in line to the presidency, trailing this position held as of May 2014 by Arne Duncan, a proponent of Race to the Top.
ANSWER: Secretary of Education
[10] Shinseki was raked over the coals by the Congressional Committee on Veterans' Affairs, which is chaired by this Senator. This man sarcastically asked "How many homes can you own?" during a famous eight and a half hour speech railing against the 2010 Tax Relief Act. ANSWER: Bernard "Bernie" Sanders
14. While this man was delivering his first live television speech, a white dove landed on his shoulder and remained for an hour. For 10 points each, [10] Identify this man who was photographed laying a wreath at the feet of the Lincoln Memorial by Alberto Korda. This person represented himself in court after a failed attack on the Moncada barracks.
ANSWER: Fidel Castro
[10] Alberto Korda also took a photo of this right hand man of Castro titled Guerrillero Heroico. This Argentinian doctor oversaw the executions of hundreds of people at La Cabaña prison.
ANSWER: Che Guevara [accept either underlined portion]
[10] Fidel Castro gave this all-day speech, which failed to prevent his conviction for the Moncada attack.
ANSWER: "History Will Absolve Me" [or "La Historia Me Absolverá"]
15. This character complains that, "It's awfully easy to be hard-boiled about everything in the daytime, but at night it is another thing." For 10 points each:
[10] Name this character who, lamenting his impotence, tells Lady Brett Ashley, "Isn't it pretty to think so?" at the end of the novel.
ANSWER: Jake Barnes [or Jake Barnes]
[10] Jake visits Pamplona, watches some bull-fighting, and drinks himself into a stupor, all while narrating this Ernest Hemingway novel set in post-World War I Europe.
ANSWER: The Sun Also Rises
[10] Before going to Pamplona, Jake goes fishing with this other American veteran. This character jokes that the Civil War was really fought over homosexuality in a rare sober moment. ANSWER: Bill Gorton [or Bill Gorton]
16. This ethnic group drew from the native and colonized populations of the Plantation of Ulster. For 10 points each:
[10] Name this primarily Presbyterian ethnic group which settled in the backcountry stretching from Pennsylvania to Georgia.
ANSWER: Scots-Irish [or Scotch-Irish; prompt on partial answer]
[10] This historian called the Scots-Irish "borderers" in his book tracing four groups of American settlers from the British Isles, titled Albion's Seed.
ANSWER: David Hackett Fisher
[10] Perhaps unsurprisingly, many Americans of Scots-Irish descent participated in this 1791 protest against an excise tax on alcohol.
ANSWER: Whiskey Rebellion [or Whiskey Insurrection]
17. Answer these questions about the Flyte family, which owns the estate of Brideshead in Evelyn Waugh's novel Brideshead Revisited, for 10 points each.
[10] This faith is deeply professed by Sebastian Flyte's mother Lady Marchmain and by his sister Julia, who cannot marry Rex Mottram through a sacrament of this faith because of Mottram's prior divorce. Waugh himself converted to this faith.
ANSWER: Roman Catholicism [prompt on Christianity]
[10] Lord Marchmain flees to this city on the continent after renouncing his Catholicism. In Shakespeare's plays, Michael Cassio becomes a lieutenant of this city, where the "quality of mercy" speech is delivered.
ANSWER: Venice [or Venezia]
[10] Sebastian Flyte introduces Charles to this foppish friend of his, who exaggerates his stutter and wears colorful robes to appear as a total aesthete. This character makes open harsh critiques of the Flyte family's "charm."
ANSWER: Anthony Blanche [or Anthony Blanche]
18. This composer of L'estro armonico gained the nickname "Red Priest" after being ordained, and worked at a convent orphanage called the Ospedale della Pieta. For 10 points each:
[10] Name this Italian Baroque composer who composed violin concertos for each time period of his Four Seasons.
ANSWER: Antonio Vivaldi
[10] The Four Seasons is part of this larger collection of twelve violin concertos, which also includes "La tempesta di mare," or "The Sea Storm."
ANSWER: The Contest between Harmony and Invention [or Il cimento dell'armonia e dell'inventione]
[10] Vivaldi's RV 589 is a setting of this hymn for chorus and small orchestra, starting with a jaunty D major rendering of the title phrase before the "Et in terra pax" section in B minor. It ends with the "Cum sancto spiritu" fugue.
ANSWER: "Gloria in excelsis Deo"
19. One member of this chain of islands is a lifeless rock named Redonda whose second-to-last king "Robert the Bald" was succeeded by "Michael the Grey" in 2009. For 10 points each: [10] Redonda, which belongs to Antigua and Barbuda, is a member of the Leeward Islands, which makes up this island chain along with the Windward Islands.
ANSWER: Lesser Antilles [prompt on Antilles]
[10] The Lesser Antilles can be found in this sea. Europeans called islands in this sea the West Indies.
ANSWER: Caribbean Sea
[10] Sir Vivian Richards Stadium hosted matches for the 2007 Cricket World Cup in this capital of Antigua and Barbuda.
ANSWER: St. John's
20. Models generated by this technique are evaluated for quality based on the R-factor. For 10 points each:
[10] Name this technique often used to find the structure of proteins. Rosalind Franklin applied this technique to find the structure of DNA.
ANSWER: x-ray crystallography [or x-ray diffraction]
[10] One of the first proteins whose structure was solved by x-ray crystallography was the sperm whale version of this monomeric iron-binding protein.
ANSWER: myoglobin
[10] A common substitution made when performing MAD phasing in X-ray crystallography is replacing atoms of this element with selenium. This element is found in the side chains of amino acids labelled C and M .
ANSWER: $\underline{\text { sulfur }[\text { or } \underline{\mathbf{S}}] ~}$
21. These agreements ensured that a specific ethnic group had no self-rule from 1795 until the end of World War I. For 10 points each:
[10] Name this set of three agreements opposed by Tadeusz Kosciuszko, which gradually destroyed a country whose traditional legislature was called the Sejm, spelled S-E-J-M.
ANSWER: the three partitions of Poland-Lithuania
[10] Name all three of the powers which partitioned Poland amongst themselves until they had absorbed all its land.
ANSWER: Brandenburg-Prussia, Austrian empire, and Russian empire
[10] This 1830 uprising broke out when military officers from the puppet-state of Congress Poland tried to set up a stronger national government. Nicholas I's Russia troops crushed it. ANSWER: November Uprising [or Cadet Revolution; or powstanie listopadowe]

