



1. One king of this place, Bera, rebels against the Elamite king Kedorlaomer, but is told that another man "will accept nothing belonging to you, not even a thread or the thong of a sandal." One former resident of this place leaves it to go to Zoar, protesting that he cannot reach the mountains. After leaving here, one figure fathers Ben-Ammi and Moab after drunkenly having sex with his two daughters in a cave. In this location, two angels visit a man, who protects them from a crowd that wants to have sex with them. While leaving it, one woman looks behind and turns into a pillar of salt. For 10 points, name this wicked city which Lot flees from, which is destroyed by God along with Gomorrah.

ANSWER: **Sodom**

052-12-59-16102

2. This character preemptively creates an alibi for one action by resetting all the clocks at a friend's house. At the beginning of the novel, this character sets off on his yellow horse with a letter of invitation and is knocked out by the companions of the "man from Meung," who becomes his enemy. This character nearly kills the Comte de Wardes on a trip to London with his servant Planchet and later pretends to be Wardes during a tryst, when he discovers the fleur-de-lis branded on a woman's shoulder. This character once comically schedules three duels at noon, 1 PM, and 2 PM, and falls in love with Milady de Winter. A friend of Athos, Aramis, and Porthos, for 10 points, name this Gascon rascal, the protagonist of *The Three Musketeers*.

ANSWER: **d'Artagnan**

020-12-59-16103

3. Espousing the ideal of a "free church in a free state," this man resigned and forced his king to recall him to push through a bill suppressing any monastery unconnected with education and charity. This man came to power by unifying the center-left with the center-right in a coalition known as the "marriage." This politician negotiated the Treaty of Plombieres with Napoleon III, who agreed to support his cause. As founder of the newspaper *Il Risorgimento*, he advocated his homeland's independence from Austria. For 10 points, name this wily statesman who served as the first prime minister of a unified Italy.

ANSWER: Camillo Benso, Count of **Cavour** [or Camillo **Benso**, count di Cavour]

080-12-59-16104

4. The wealthy financier La Poupliniere patronized this man, who composed "La Timide" and "L'Indiscrete" among other *Pieces de clavecin en concerts*. Telaira sings the aria "Tristes apprets, pales flambeaux" in one of this man's operas, while another has four acts in Turkey, Peru, Persia, and North America. This man's music was held up against the "corrupting" influence of Italian opera during the "War of the Buffoons," though he had earlier been controversial for the techniques he promoted in his *Treatise on Harmony*. This composer's operas include *Les Indes Galantes* and *Castor et Pollux*. For 10 points, name this Baroque composer who, after the death of Lully, was the dominant operatic composer in France.

ANSWER: Jean-Philippe **Rameau**

080-12-59-16105

5. This process is inhibited in culture using cyclohexamide, and the Rotavirus uses the NSP3 protein to trigger it. Some viruses use an IRES to trigger it, which can be performed in vitro using the S30 E. coli extract. Diphtheria toxin targets EF-2, which works with the GTP-hydrolyzing EF-Tu protein during this process' elongation stage. The attachment of a water molecule by the releasing factor is used to terminate this process. This process begins after the Kozak consensus sequence triggers the binding of the small subunit, which finds the start codon. For 10 points, name this process that occurs when tRNA comes to the ribosome, in which a messenger RNA is read in order to create proteins.

ANSWER: **translation** [or **protein synthesis** or equivalents until the very end]

048-12-59-16106

6. This state contains the world's only Leadbeater's possums, which can be found in the Healesville Sanctuary in its Yarra Valley region. Artifacts of its 1850s gold rush include intact mine shafts in Bendigo. This state's northern border is formed by the Murray River. Its capital was founded along Port Philip Bay by the illustrious John Batman. Its city of Ballarat is near the southern terminus of the Great Dividing Range and is the site of an 1854 stockade built by disaffected miners. It is bordered to the west by South Australia, to the north by New South Wales, and is separated from Tasmania by the Bass Strait. For 10 points, name this Australian state named for an English queen.

ANSWER: **Victoria**

015-12-59-16107

7. In one scene, this character looks out the window and sees a young dog watching a flock of wild geese, with the lead goose "bigger than the others." He screams "Air Raid!" while he is being shaven and notes of the story he tells, "it's the truth even if it didn't happen." After being offered a stick of Juicy Fruit, this man reveals that he is not a deaf-mute. This character refers to society as a "Combine" committed to controlling humanity. At the end of the novel in which he appears, this hall-sweeper smothers a lobotomized Randle Patrick McMurphy before escaping from an asylum run by "Big Nurse." For 10 points, name this six-foot eight half-Native American schizophrenic who narrates Ken Kesey's *One Flew Over the Cuckoo's Nest*.

ANSWER: Chief **Bromden** [or Chief **Broom** ; or the **Chief**]

003-12-59-16108

8. This ruler allegedly saved some of his rival's troops from quicksand at the Abby of Mont St. Michel. After this ruler denied Aelfgar the earldom the East Anglia, Aeflgar allied with Gruffyd ap Llywelyn to take the kingdom of Hereford from this man's underling Ralph the Timid. This man's brother defeated this man's brothers-in-law, Edwin of Mercia and Morcar of Northumbria, at the Battle of Fulford. This ruler advanced across the Derwent River in a battle in which he defeated his brother Tostig and Tostig's ally, Harald Hardrada. His force of housecarls was defeated atop Senlac Hill while fighting in 1066. For 10 points, name this Anglo-Saxon King of England who won the Battle of Stamford Bridge and lost the Battle of Hastings.

ANSWER: **Harold Godwinson** [or **Harold II** of England; prompt on **Harold**]

079-12-59-16109

9. In Book Twelve of one work, this thinker claimed that forty-seven or fifty-five gods might be needed to explain the separate motions of the heavenly bodies, but clarified that there could only logically be one, a "thought thinking about thinking" which turns potentialities to actualities. In his *History of the Animals*, this thinker was the first to arrange organisms on a "Great Chain of Being." His works on such concepts as the "unmoved mover" and "the four causes" survive largely as lecture notes. For 10 points, name this author of *On the Heavens* and the books of logic in the *Organon*, a Greek founder of the Lyceum whose thoughts survive in the *Metaphysics* and *Nicomachean Ethics*.

ANSWER: **Aristotle** of Stagira [or **Aristoteles**]

104-12-59-16110

10. Catalytic coating of a quartz tube lined with carbon and this element is required for oxygen to be analyzed in CHN analysis. Organometallic chemistry was kicked off by a coordination complex of this element, known as Zeise's salt. The standard hydrogen electrode is made of this element. A popular chemotherapy drug is a square planar coordination complex of this metal and four chlorine atoms. Also present in Adams's catalyst, this least reactive metal forms an alloy with iridium that has been used to define the kilogram. In the group named for this element, the metal above it catalyzes hydrogenation reactions if "poisoned" by Lindlar catalyst. Palladium is a substitute for, for 10 points, what expensive group 10 transition metal?

ANSWER: **platinum** [or **Pt**]

020-12-59-16111

11. In one story, Tantalus had his friend Pandareus steal a golden one of these creatures from the temple of Zeus. Another of them, Maera, found the grave of Icarus. One of these creatures, who was owned by Eurytion and found on Erytheia, protected the cattle of Geryon before being slain by Heracles, while another had a tail and mane made of snakes. The Sibyl of Cumae prepared a cake made of honey to pacify one of them. Eurystheus hid inside a jar in fear of one of these creatures, whom Heracles captured in his twelfth labor. For 10 points, name this type of creature exemplified by Orthrus and Cerberus.

ANSWER: **dogs**

030-12-59-16112

12. This character says of his wife, "She loved me for the dangers I had passed, and I loved her that she did pity them." In another scene, he describes a gift created by a two-hundred-year-old sibyl that an Egyptian charmer gave to his mother. This character compares himself to a "base Indian" who "threw a pearl away richer than all his tribe" before describing how he took a "circumcised dog" by the throat "and smote him thus." His enemy declares that this man is making the "beast with the two backs" with his wife to enrage Brabantio. His promotion of Michael Cassio angers his lieutenant, who proceeds to turn him against Desdemona. For 10 points, name this Moor deceived by Iago in a Shakespeare tragedy.

ANSWER: **Othello**

080-12-59-16113

13. During this king's reign, rumors abounded that he had a secret marriage to Lucy Walter and had hidden the certificate in a black box. Michael de Ruyt burned several ships at Chatham in response to this king's failed invasion of the Netherlands, which ended with the Treaty of Breda. He was advised by a ministry whose common name was an acronym from the surnames of its members, the "Cabal." Because his wife Catherine of Braganza was sterile, this man faced the Exclusion Crisis, which sought to bar his Catholic brother from the throne. That brother allegedly wanted to assassinate this king as part of the Popish Plot. For 10 points, name this "Merry Monarch," a Stuart who came to power in the "Restoration."

ANSWER: **Charles II** of England [prompt on **Charles**]

080-12-59-16114

14. In one of this choreographer's ballets, three sisters experience flashbacks prompted by chess pieces. The dancer Erick Hawkins made his name by originating the lead role in this choreographer's best-known ballet. This choreographer of *Deaths and Entrances* used music by Norman Dello Joio for a ballet in which three dancers represent the Maid, Warrior, and Martyr aspects of Joan of Arc. In another ballet by this choreographer of *Seraphic Dialogue*, doors open and close to show one dancer using an ax to kill Agamemnon. Isamu Noguchi designed sets for this woman's best-known ballet, in which the Bride and the Farmer dance to the Shaker hymn "Simple Gifts." For 10 points, name this choreographer of Aaron Copland's *Appalachian Spring*.

ANSWER: Martha **Graham**

079-12-59-16115

15. For a node on an undirected graph, this term refers to the longest walk from that node to another node on the graph. In another field, this term refers to a quantity equal to the square root of the flattening factor  $f$  times two minus  $f$ . It can be calculated as the length from the center to the focus divided by the length of the semimajor axis. This quantity is between 0 and 1 for an ellipse and greater than 1 for a hyperbola. For 10 points, name this quantity symbolized epsilon, which measures how different a conic section is from a circle.

ANSWER: **eccentricity**

080-12-59-16116

16. The Hodrick-Prescott filter is often used to isolate these phenomena from data. The Kiyotaki-Moore model shows how credit restriction can affect these phenomena, while the “real” theory of these sees them as due entirely to exogenous changes, mostly technological shocks. Nikolai Kondratiev studied particularly long versions of them. Stanley Jevons suggested these might be due to sunspots, as both last for about eleven years. The increasing magnitude of these will increase the proletarian population until revolution is inevitable, according to Karl Marx, who referred to the “boom and bust” of these phenomena. For 10 points, name these fluctuations of GDP whose troughs can be recessions.

ANSWER: **business cycles**

121-12-59-16117

17. TRIUMF is the largest one of these devices, which can provide strong focusing if the field is allowed to vary azimuthally. A resonance named for these devices is exploited in Fourier transform mass spectrometry and Penning traps. Particles in these devices are braked by the Abraham-Lorentz force because the jerk points opposite the velocity. These devices consist of a vacuum chamber with two barely separated D-shaped electrodes. The quantity  $q B$  over two  $\pi m$  gives a frequency named for these devices. Varying the RF field in these devices to correct for relativistic effects gives a synchrotron. For 10 points, name these accelerators which use electric and magnetic fields to force charged particles into spiral tracks.

ANSWER: **cyclotron** [do NOT accept "synchrotron"; prompt on **particle accelerator**]

048-12-59-16118

18. One senator from this state proposed the forty bale hypothesis. A representative from this state proposed the first gag rule and proclaimed that "Cotton is King." Represented by James Hammond and George McDuffie, this state was the site of a failed uprising that occurred during the mayorship of James Hamilton and in which Peter Poyas participated. This state's former capital was surrendered by Benjamin Lincoln to Henry Clinton and was the site of Denmark Vesey's failed rebellion. One man from this state protested the Tariff of Abominations by writing this state's "Exposition and Protest." For 10 points, what state defied the federal government in the Nullification Crisis and was represented by John C. Calhoun?

ANSWER: **South Carolina**

149-12-59-16119

19. In one poem, this poet wrote, “This is the hour of lead, remembered, if outlived, as freezing persons, recollect the snow.” This poet also wrote, “Orpheus’ sermon captivated, it did not condemn,” in a poem beginning “The Bible is an antique volume written by faded men.” In another poem, she describes “an imperial affliction sent us of the air” whose going is “like the distance on the look of death.” In another of her poems, the speaker notes, “The stillness in the room was like the stillness in the air.” For 10 points, name this American poet who wrote poems beginning “There’s a certain slant of light” and “I heard a fly buzz, when I died.”

ANSWER: Emily **Dickinson**

014-12-59-16120

20. In one of this artist's paintings, Fanny Stevenson lies slumped in a chair as her husband, Robert Louis Stevenson, fidgets about. In another of his works, a single orange sits on an abandoned chair beneath two guitars hanging on the wall; in that work, a man tilts his neck back to shout while sitting next to guitarists who accompany a gypsy dancer. Two tall Japanese vases dwarf four young girls in pinafores in another of his paintings. This artist of *El Jaleo* and *The Daughters of Edouard Darley Boit* controversially painted Virginie Gautreau as a pale woman wearing a black satin dress. For 10 points, name this artist of the *Portrait of Madame X*.

ANSWER: John Singer **Sargent**

052-12-59-16121

21. Plages are highly dense regions that surround these objects that are contrasted with faculae. These objects are composed of the umbra and lighter penumbra. Wilson measured an increase in the appearance of these objects since the previous 11-year Schwabe cycle. Dalton, Sporer, and Maunder all name minimums in the activity of these objects that coincided with the Little Ice Age. Light emitted from these objects indicates Zeeman splitting of the spectral lines. Prominences and flares occur in regions with high activity levels for these objects that are created in pairs by the magnetic field. For 10 points, name these relatively dark regions on the sun.

ANSWER: **sunspots**

124-12-59-16122

22. As President, this man oversaw the ceremonial groundbreaking of the Chesapeake and Ohio Canal. This man noted the strengths of the metric system but recommended using the imperial system in his *Report on Weights and Measures*. This President signed a treaty that set one boundary as the Sabine River up to the 32nd parallel. This man became the only ex-President to serve in the House of Representatives. Earlier, he had negotiated a treaty that ceded Florida to the U.S. with Luis de Onis. This man became President after the House voted him into office over his eventual successor, who defeated him in 1828. For 10 points, name this President who won the election of 1824 over Andrew Jackson.

ANSWER: John Quincy **Adams** [prompt on **Adams**; do not accept "John Adams"]

149-12-59-16123

23. One character in this play questions by why one can stir jam into rice pudding but never unstir it, and earlier questions the meaning of the phrase "carnal embrace." Another character in this play states that "it's wanting to know that makes us matter." Characters in this play include Bernard Nightingale, who gives Hannah Jarvis's book about Lady Caroline Lamb a poor review. A character in this play dies in a fire on the night of her seventeenth birthday, possibly causing Septimus Hodge to become the hermit of Sidley Park. For 10 points, identify this play about mathematics genius Thomasina Coverly and the Croom estate, written by Tom Stoppard.

ANSWER: **Arcadia**

126-12-59-16124



1. In this novel, one character becomes his love's new shepherd after he helps put out a fire. For 10 points each:

[10] Bathsheba Everdene is courted by Gabriel Oak, Farmer Boldwood, and Sergeant Troy in what novel that takes place in Weatherbury?

ANSWER: **Far from the Madding Crowd**

[10] *Far from the Madding Crowd* was written by this English author who set many of his works in the fictional county of Wessex. He also wrote *Jude the Obscure*.

ANSWER: Thomas **Hardy**

[10] In *Far from the Madding Crowd*, Bathsheba Everdene sends a Valentine's Day card with a seal that says this on it.

ANSWER: "**marry me**"

149-12-59-16201

2. The image in this work is taken from an Irv Novick piece in the magazine *All-American Men of War*. For 10 points each:

[10] Name this 1963 painting which depicts a fighter jet destroying an enemy plane. The caption "I pressed the fire control...and ahead of me rockets blazed through the sky" is visible.

ANSWER: **Whaam!**

[10] *Whaam!* is a work by Roy Lichtenstein, who is associated with this art movement that used aspects of mass culture, such as advertising and comic books. Andy Warhol is another member of this movement.

ANSWER: **Pop art**

[10] A 1964 Lichtenstein painting shows a blonde girl thinking "I know how you must feel," about a man with this name. In Lichtenstein's "Drowning Girl," the title character would rather sink than call a man with this name for help.

ANSWER: **Brad**

052-12-59-16202

3. Achilles dragged around the body of this man before eventually giving it up to King Priam. For 10 points each:

[10] Name this son of Priam and Hecuba and wife of Andromache, one of the greatest Trojan warriors during the Trojan War.

ANSWER: **Hector**

[10] This woman was the mother of Hector and wife of Priam. After the Trojan War, she was transformed into a dog instead of becoming Odysseus' concubine.

ANSWER: **Hecuba**

[10] Hector was tricked into fighting Achilles when Athena took the form of this prince. This brother of Hector married Helen after the death of Paris.

ANSWER: **Deiphobus**

064-12-59-16203

4. In one scene in this film, the protagonist proudly introduces her new husband to her children, one of whom responds by kicking in the television screen. For 10 points each:

[10] Name this Rainer Werner Fassbinder film about the prejudice faced by the elderly cleaning woman Emmi and her young Moroccan husband. It was inspired by Douglas Sirk's *All That Heaven Allows*.

ANSWER: *Ali*: **Fear Eats the Soul** [or **Angst Essen Seele Auf**]

[10] This other director of the New German Cinema worked with deranged actor Klaus Kinski on a film about a Spanish conquistador, *Aguirre: The Wrath of God*. He directed the documentaries *Grizzly Man* and *Into the Abyss*.

ANSWER: Werner **Herzog** Stipetic

[10] Fassbinder's film *Whity* subverts the conventions of this Hollywood genre, examples of which include John Ford's *Stagecoach* and *The Searchers*.

ANSWER: **Western**

014-12-59-16204

5. Due to a lack of prevailing winds this area is known as the doldrums by sailors. For 10 points each:

[10] Identify this region that appears as a band of clouds that encircles the globe near the equator.

ANSWER: **ITCZ** ("itch") [or **Intertropical Convergence Zone**]

[10] The northward shift of the ITCZ in the summer, and the corresponding southward shift in the winter, results in these wind systems that undergo seasonal reversals, bringing large amounts of precipitation. A particularly strong version affects Southeast Asia and India.

ANSWER: **monsoon**

[10] Oxygen isotopes from stalagmites can be used as this type of record to demonstrate the decline in the intensity of the East Asia monsoon over the last 9000 years.

ANSWER: **proxy** record

149-12-59-16205

6. This figure was the subject of a book whose title states he was "in Two Worlds." For 10 points each:

[10] Name this last member of the Yahi people, who in 1911 emerged from the wild. He was studied by Alfred Kroeber, who gave him this name, which means "man" in the Yana language.

ANSWER: **Ishi**

[10] Ishi was a resident of this western state, where anthropologists might also study the impact of the Camino Real on local religious practices.

ANSWER: **California**

[10] Kroeber was a student of Franz Boas, much like this man, a pioneer in African American studies, who established Northwestern's anthropology department. His best known work is *The Myth of the Negro Past*.

ANSWER: Melville **Herskovits**

052-12-59-16206

7. The playwright Aeschylus fought in this battle, in which his brother died. For 10 points each:

[10] Name this 490 BCE victory for an Athenian army over the invading Persians. A messenger named Pheidippides supposedly died reporting this victory to the city of Athens.

ANSWER: Battle of **Marathon**

[10] The Greek commander at Marathon was this general, who had been the tyrant over the Chersonese region. He died from a leg wound suffered during his attack on the island of Paros.

ANSWER: **Miltiades** the Younger

[10] This son of Miltiades helped build the Athenian empire as commander of the Delian League. He defeated the Persians at the Battle of the Eurymedon River.

ANSWER: **Cimon**

080-12-59-16207

8. This kind of reaction is balanced by using half-reactions that involve adding hydrogen ions in acidic solution. For 10 points each:

[10] Name this type of reaction in which one element gains electrons and another element loses electrons.

ANSWER: **redox** reaction [or **oxidation-reduction** reaction; or **reduction-oxidation** reaction; prompt on **oxidation**; prompt on **reduction**]

[10] This is the term for a special case of redox reaction in which the same element is simultaneously oxidized and reduced.

ANSWER: **disproportionation** reaction

[10] The Cannizzaro reaction is a disproportionation reaction that transforms an aldehyde into an alcohol and one of these compounds.

ANSWER: **carboxylic acid** [or **carboxylate**]

003-12-59-16208

9. One character in this play, which is split into two parts called "Millennium Approaches" and "Perestroika," claims he is not a homosexual because homosexuals have no "clout." For 10 points each:

[10] Name this Tony Kushner play whose in which Prior Walter has prophetic visions of the title figures and a fictionalized Roy Cohn remains closeted while dying of AIDS in the 1980s.

ANSWER: ***Angels in America: A Gay Fantasia on National Themes***

[10] The epilogue of *Angels in America* takes place along Bethesda Fountain in a park. This American playwright of *Who's Afraid of Virginia Woolf?* set his play *The Zoo Story* in a park.

ANSWER: Edward Franklin **Albee**

[10] This commonly-performed work by Moises Kaufmann's theater company was compiled from interviews done in Wyoming after gay youth Matthew Shepard was left to die on a fence there.

ANSWER: *The **Laramie Project***

104-12-59-16209

10. As part of this agreement, Maine became a state. For 10 points each:

[10] Name this agreement brokered by Henry Clay, which involved the admission of its namesake as a slave state. Ruled unconstitutional by the Dred Scott Decision, this agreement established the 36' 30" parallel as the northernmost boundary for slavery.

ANSWER: **Missouri** Compromise [or Compromise of **1820**]

[10] The Missouri Compromise was prompted by this man's attempts to introduce legislation that prohibited the extension of slavery into Missouri. This New York Representative proposed to free all slaves already in Missouri the age of 25.

ANSWER: James **Tallmadge**

[10] Jesse Thomas, the man who officially introduced the Missouri Compromise, came from this state. This state was also home to the leader of the Old Republicans, John Randolph, as well as Thomas Ritchie.

ANSWER: Commonwealth of **Virginia**

149-12-59-16210

11. This epileptic character faints after seeing a vision of an impaled pig's head ominously promise to "have some fun" with him. For 10 points each:

[10] Name this Christ figure, who realizes that "the beast" is not "something you can hunt and kill" after discovering the corpse of a pilot tangled in a parachute. He is gruesomely murdered by a group of frenzied boys at a feast.

ANSWER: **Simon**

[10] This author of *Pincher Martin* created the characters Jack, Ralph, Simon and Piggy in *Lord of the Flies*.

ANSWER: William Gerald **Golding**

[10] In *Lord of the Flies*, Roger and Maurice bully these younger children by destroying their sand castle. These children, who first discuss the supposed "monster," spend most of their time eating the island's fruit and getting diarrhea as a result.

ANSWER: the **littluns**

124-12-59-16211

12. Name these Charles Dickens novels, for 10 points each.

[10] In this novel, set during the French Revolution, Sydney Carton gives up his life for his lookalike Charles Darnay.

ANSWER: A ***Tale of Two Cities***

[10] This first novel by Charles Dickens follows Tracy Tupman, Augustus Snodgrass, Nathaniel Winkle, and the title character, who travel around England and report on their findings.

ANSWER: ***The Pickwick Papers***

[10] This novel follows a shipping merchant who comes to grief when his son, Paul, dies of overwork at boarding school. The title character is rescued from suicide with the return of his son-in-law, Walter Gay, from the West Indies.

ANSWER: ***Dombey and Son***

080-12-59-16212

13. Answer some questions about poetry and Norse mythology, for 10 points each.

[10] Much of Norse myth survives in the "Poetic" or "Elder" one of these collections compiled in Iceland. The "Prose" one was compiled and composed by the Icelandic statesman Snorri Sturluson.

ANSWER: **eddas** or **eddur**

[10] Odin gained powers of poetry by stealing this substance from the giant Suttung. It had been created from honey and the blood of the murdered god Kvasir.

ANSWER: **mead** of poetry [or **mead** of Kvasir]

[10] This Norse god of poetry is married to Idunn.

ANSWER: **Bragi**

104-12-59-16213

14. Answer these questions about landmark things in Washington State, for 10 points each.

[10] Seattle's tallest landmark is this 605-foot tower built for the 1962 World's Fair, which contains elevators running up to its observation deck.

ANSWER: **Space Needle**

[10] A strait connecting the Salish Sea and Puget Sound to the Pacific is named for this Greek-born Spanish explorer. The smallest tectonic plate, which sits off Washington's western coast, is also named for him.

ANSWER: Juan **de Fuca** [or Ionannis **Fokas**]

[10] This heavily-glaciated volcano in the North Cascades has a namesake ski area located east of the town of Bellingham. It's shorter than Mount Rainier by about 4,000 feet.

ANSWER: Mount **Baker**

104-12-59-16214

15. The losing ruler in this battle personally unhorsed Baron Cheyne during fighting. For 10 points each:  
[10] Name this August 1485 battle that took place near Ambion Hill. During this battle, Thomas and William Stanley held back, waiting to see what force to support.

ANSWER: Battle of **Bosworth** Field

[10] The Battle of Bosworth Field effectively ended this civil war between the Houses of Lancaster and York, which took its name from the different colored flowers used by the houses as symbols.

ANSWER: Wars of the **Roses**

[10] Some historians consider the final battle in the Wars of the Roses to be Stoke Field, in which newly crowned Henry VII's forces defeated Yorkist supporters of this man, who claimed to be the Earl of Warwick. Unlike a later pretender to the throne, he was not executed after his plan failed.

ANSWER: Lambert **Simmel**

052-12-59-16215

16. This metal has the highest thermal conductivity of all metals. For 10 points each:

[10] Name this metal with chemical symbol Ag. The compound that this mineral forms with iodine is commonly used in cloud seeding.

ANSWER: **silver**

[10] Silver atoms were deflected by a magnetic field in this experiment that first demonstrated that particles have spin. Rather than detecting a continuous spread of silver atoms, this experiment detected two bunches of deflected silver atoms.

ANSWER: **Stern-Gerlach** experiment

[10] The magnetic field used in the Stern-Gerlach experiment had this property whereby it did not have a uniform strength or direction.

ANSWER: **inhomogeneous** [or word forms]

149-12-59-16216

17. This poet called the title object a "vain artifice" in "To Her Portrait." For 10 points each:

[10] Name this poet who defended the education of women in a letter responding to Filotea and also wrote the philosophical poem "First Dream."

ANSWER: **Sor Juana** Ines de la Cruz

[10] This later Mexican author wrote *The Traps of Faith*, a biography of Sor Juana. This man also discussed Mexican culture in *The Labyrinth of Solitude*.

ANSWER: Octavio **Paz**

[10] This long poem by Paz about the meaning of life is meant to mirror the 584-day synodic cycle of the planet Venus due to Aztec reverence for the morning and evening star.

ANSWER: "**Sun Stone**" [or "**Piedra de Sol**"]

105-12-59-16217

18. He served as Professor of Egyptology at the University College in London and he wrote about advances in his field in a work titled *Methods and Aims in Archaeology*. For 10 points each:

[10] Identify this archaeologist who made exciting discoveries such as the Fayum portraits and a stone slab from the time of King Mernethat, and who excavated the Royal Palace and the Great Temple of Aten in the city of Amarna.

ANSWER: William Matthew Flinders **Petrie**

[10] This other archaeologist worked under Flinders Petrie at Amarna and was later financed by Lord Carnarvon. He is best known for discovering the tomb of Tutankhamen.

ANSWER: Howard **Carter**

[10] Yet another British Egyptologist was Thomas Young, whose translation of the Rosetta stone was improved upon by this Frenchman. He outlined his research in a primer on Egyptian hieroglyphics.

ANSWER: Jean-Francois **Champollion**

108-12-59-16218

19. This character says that if Shiva handed Patel a million dollars and told him to sign, he would not. For 10 points each:

[10] Name this aggressive salesman in *Glengarry Glen Ross*. He manipulates the timid James Lingk and at the end of the play demands to get the action of Shelley "The Machine" Levene.

ANSWER: **Ricky** Roma [or Ricky **Roma**]

[10] *Glengarry Glen Ross* is a play by this American author, who wrote about a sexual harassment allegation on a college campus in the play *Oleanna*.

ANSWER: David Alan **Mamet**

[10] In another Mamet play, junk shop owner Don and a group including Teach plan on stealing this possession of a wealthy man in revenge for a bad deal.

ANSWER: a **coin** collection [or obvious equivalents]

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20. After a ligand binds to a receptor tyrosine kinase, the "cross" form of this process occurs three times. For 10 points each:

[10] Name this reversible covalent modification that adds a -PO<sub>4</sub> group to a target protein.

ANSWER: **phosphorylation** [accept word forms]

[10] Phosphorylated tyrosine residues can be recognized by this domain found within the Src oncoprotein and many other signal transduction pathways.

ANSWER: **SH2** domain [or **Src Homology 2** domain]

[10] Glucose is phosphorylated in the very first step of this ten-reaction pathway in cellular respiration, which produces a net of 2 ATP.

ANSWER: **glycolysis** [or **Embden-Meyerhof** pathway; or **Entner-Doudoroff** pathway]

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21. Answer the following about aerial warfare in World War I, for 10 points each.

[10] This German flying ace was credited with 80 combat air victories during the war before he was ultimately shot down in combat with Canadian flyer Arthur "Roy" Brown. Give either his real name or his colorful nickname.

ANSWER: Manfred Albrecht Freiherr von **Richthofen** [or **Red Baron**; or Der **Rote Baron**; or **röte Freiherr**; or **röte Kampfflieger**]

[10] The Red Baron was killed while flying a distinctive red colored triplane produced by this Dutchman's namesake aircraft manufacturing company, which moved to the Netherlands in 1919. Knute Rockne died when one of this man's airplanes crashed in 1931.

ANSWER: Anthony Herman Gerard **Fokker**

[10] In 1999, this British medical journal published an article theorizing an old war wound inflicted brain damage on the Baron, making him act erratically in his final battle. This journal, the world's oldest medical journal, is named after a surgical instrument.

ANSWER: *The **Lancet***

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