## Tossups

1. One abortive conflict named for this place was legendarily concluded when the would-be combatants cooked a pot of milk soup on the exact border between the two warring sides, one of which brought the milk, the other of which brought the bread. The First and Second Territorial Peaces, or Landfrieden, were signed in the aftermath of conflicts named for this place. In 1656 and 1712, the two sides that fought a conflict named for this place faced off again in battles at Villmergen. In the aftermath of a battle during the second war named for this place, (*) Heinrich Bullinger was named the successor of a man who perished in the conflict, Huldrych Zwingli. For 10 points, identify this place that names two wars fought between the Protestant and Catholic cantons of Switzerland.
ANSWER: Kappel am Albis [accept Kappel Wars; or Kappelerkriege]
2. Indirect evidence of a phenomenon named for this physicist came from McCall and Hahn's observations of self-induced transparency. Mollow triplets are the frequency-domain equivalent of a phenomenon named for this scientist, the typical form of which is subject to "collapse" and "revival" in the Jayne-Cummings model. The quantity defined by the transition dipole moment times the amplitude of the electric field over $h$-bar determines the frequency of that phenomenon named for this person, which occurs in two-state systems driven by coherent radiation and results in a sinusoidal oscillation of populations between the two states. A technique developed by this scientist was improved by the labs of (*) Purcell and Bloch and involved flipping the magnetic moment of nuclei in a molecular beam. For 10 points, name this man who used a modified Stern-Gerlach apparatus to discover namesake "oscillations" that paved the way for magnetic resonance imaging. ANSWER: Isidor Isaac [I.I.] Rabi
3. The composer of this work claimed that listeners were free to imagine the singer of the aria "distinguished guests, I have attended many feasts" playing the piano at this work's end, which is played as though a gramophone is winding down. In the middle of this work, the strings play repetitive chords to a beat set by woodblock, depicting a woman who shows up uninvited to an official banquet, hangs paper lanterns, and sways seductively. This piece, which was commissioned by the Milwaukee Symphony and whose second word is a verb and not a plural noun, recalls an (*) Act III scene in an opera in which a character motions to a forty-foot-tall portrait and beckons it to come to life. For 10 points, name this "Foxtrot for Orchestra," an "outtake" from Nixon in China in which Mao serenades his wife, by John Adams.
ANSWER: The Chairman Dances
4. One novel by this author, which contains a digressionary review in which the narrator trashes John Grisham's book The Firm, opens with the murder of the narrator's father for his affair with his cleaning lady Aicha. Another of this writer's novels, partly set at a New Age resort that offers courses like "Success Through Dance," includes a mother who joins a commune in Big Sur. This author wrote about a vacation in the Canary Islands in his novella Lanzarote, which stars the Azraelians from a previous book about the comedian Daniel1 and his clone, Daniel24. This author was charged for inciting racial hatred with his book about sex tourism in Thailand, which called Islam a (*) "stupid religion." This author of Platform wrote a book about half-brothers Bruno and Michel, a genetic engineer who pushes for cloning to replace sex. For 10 points, name this French author of The Possibility of an Island and Atomised, also translated as The Elementary Particles. ANSWER: Michel Houellebeca [or Michel Thomas]
5. Cassius Dio relates a story in which this person, restrained by a crowd and unable to get to the emperor, flung a tablet that read "Pray rise at last, executioner!" onto the emperor's lap, thus saving many people from being condemned. This first Roman to install a warm swimming pool was also the first to devise shorthand writing, which he taught to many through his freedman, Aquila. On the Esquiline Hill, this person erected the first Hellenistic-Persian gardens in Rome. Lucius Varus Rufus introduced one of his man's protégés to him, and his many mentees included Plotius Tucca and Domitius Marsus. He was the dedicatee of works by (*) Propertius, Horace, and Virgil, the foremost of the many poets that he sponsored. For 10 points, name this rich man whose name is synonymous for a wealthy patron of the arts.
ANSWER: Gaius Cilnius Maecenas
6. One of this artist's works shows a young woman wearing a blue ribbon sitting side-saddled on a horse in the White Mountains. This artist of a series of five paintings showing people playing croquet showed Francis Channing Barlow and four prisoners in an artwork that was executed when Harper's Weekly sent this artist to the Civil War. A work produced during this artist's "Darwinian" period shows a group of (*) crows attacking an animal whose movement is impeded by snow. This artist of Prisoners from the Front executed another work that shows a black man and a shattered boat on a beach in the Bahamas titled After the Hurricane. For 10 points, name this American artist who painted a work showing a man nonchalantly staring into the distance as his tiny boat is circled by sharks titled The Gulf Stream.
ANSWER: Winslow Homer
7. In order to illustrate this concept, one authority brought a purse full of gold before an audience, asking them what it was worth; hearing "a lot," he then emptied the contents of the purse and repeated his question. Hymns to this concept celebrate a trait that is "more spacious than the Heavens" and regard it as "more honorable than the Cherubim, and more glorious beyond compare than the Seraphim." It is also celebrated in the hymn "Sub tuum praesidium," which goes "Beneath thy compassion, we take refuge." Cyril of Alexandria mounted a spirited defense of this doctrine. The liturgical year contains feasts dedicated to the nativity, presentation, (*) annunciation, and dormition of this concept. This doctrine was affirmed at the 431 council at Ephesus over the loud objections of Patriarch Nestorius, who preferred "Christ-bearer" to it. For 10 points, name this Eastern Orthodox title for the Virgin Mary, which emphasizes her role as "God-bearer."
ANSWER: Theotokos [or God-bearer and synonyms before mentioned, prompt on Virgin Mary, do not, under any circumstances, accept "Christ-bearer" or the like]
8. The concentration of this compound is quantified in a colorimetric assay under a yellow-green filter conducted at 540 nanometers that based on this compound's reaction with diacetyl monoxime. It forms a strongly eutectic mixture when combined with choline chloride. A breath test conducted on patients with stomach ulcers exploits H. pylori's high production of an enzyme that cleaves this compound. A reaction that causes the release of this compound is preceded by a reaction in which (*) glutamate is converted to alpha-keto-gluterate. The synthesis of this compound, which was conducted by treating silver cyanate with ammonium chloride, dismissed the theory of vitalism. For 10 points, name this compound in which two primary amines are bonded to the same carbonyl, which was first synthesized by Friedrich Wohler.
ANSWER: urea [or carbamide]
9. Nearly half of the world's supply of this material was controlled by the Australian Sons of Gwalia corporation before its 2005 bankruptcy. George W. Bush's 2004 Secretary of Energy appointee, Sam Bodman, was a former CEO of Cabot Corporation, which made possibly illegal purchases of this material from Eagle Wings Resources. Similar to diamonds, this material may be "fingerprinted" using WD-X-ray analysis diffraction analysis to determine its provenance, in a method endorsed by the trade group TIC. A 2003 UN report labeled Uganda, Burundi, and Rwanda (*) smugglers of this material, the sale of which partly financed the Ituri conflict between the Lendu and Hema tribes. For 10 points, name this ore important to the creation of the tantalum capacitors found in cell phones and other electronic devices, which is a conflict mineral in the Democratic Republic of the Congo.
ANSWER: coltan [accept columbite-tantalite or tantalum before "tantalum"]
10. One myth from this tradition describes a messenger with a red belt and purple robe who emerged from a chest, bearing five grains and three girls, each of whom married a demigod. One hero from this tradition was once cornered at a river while being pursued by enemy horsemen, but was able to cross on the backs of fish. This tradition holds that two heavenly men and two heavenly women were the progenitors of mankind, having been birthed by Mago. In this tradition, a tiger chased a pair of siblings who became the sun and moon. After passing a hundred-year trial in a dark cave, a (*) bear transformed into a beautiful woman on the last day in this tradition, in which the gumiho is a fox who can seduce men in the guise of a beautiful woman. Many myths in this tradition have different versions in the mainland and on Cheju Island. For 10 points, name this tradition, many of whose myths were created during the Silla and Goguryeo Dynasties.
ANSWER: Korean mythology
11. Mathematically, this quantity can be expressed by a function if an agent satisfies the axioms of completeness, transitivity, continuity, and independence, according to the Von Neumann-Morgenstern theorem. Daniel Bernoulli introduced this quantity to resolve a quandary about the value of a gamble that has an infinite expected payoff but is only worth a small amount, the St. Petersburg paradox. The key insight of the General Mathematical Theory of Political Economy by (*) William Stanley Jevons is that this quantity for a good is inversely related to the amount of that good already owned. For 10 points, name this concept that measures the total satisfaction that a person gets from consuming a good or service, which diminishes marginally.
ANSWER: [marginal] utility
12. This character reflects on a Persian rug received as a gift, likening the weaver who made it purely for aesthetic reasons to a man living his entire life with pleasure and dying knowing that he lived happily. The giver of that gift, the poet $J$. Cronshaw, dies of cirrhosis at the residence of this character, who renounces his religion after meeting a pious American named Weeks during his year-long stay in Heidelberg. He has a brief fling with a penny-romance novelist named (*) Norah Nesbitt in the interlude of his destructive relationship with a waitress who prostitutes herself to feed her baby. The reader first meets this character in his aunt and uncle's vicarage in Kent. This character, who eventually becomes a doctor, spends the majority of the novel in which he appears conducting unhappy affairs with Miss Wilkinson and Mildred Rogers. For 10 points, name this man who marries Sally Athelney, the club-footed protagonist of W. Somerset Maugham's Of Human Bondage. ANSWER: Philip Carey [accept either]
13. The exact dimensions of one building in this city are referenced in the expression "eight cho square," which means "splendid estate and grounds." One ruler responded to an awful stretch of epidemics and crop failures by building the Todai-ji in this city, which houses a gigantic bronze Buddha statue. Until 1637, it was a capital offense to kill one of the many cute sacred deer that roam this city's namesake park. The capital was moved from this city to Kuni-kyo for a brief four years. In the court of this city, also known as Heijo-kyo, poets spun (*) waka verses and the Nihon Shoki and Kojiki were compiled. Officials from this city were often sent to contemporaneous Tang China to take civil service examinations, though China didn't send envoys back. During the period named for this city, which followed the Asuka period, the kanji writing style emerged. For 10 points, name this city, the Japanese capital for most of 710 to 794 CE, before the move to Kyoto.
ANSWER: Nara-shi [accept Heijo-kyo before it is mentioned]
14. One person with this surname was paraded through the capital on a broken-down hack with a crown of straw on his head in a mock procession and then immediately forced to arrange the marriage of his punisher to Princess Renata of Lorraine. Three people with this surname were among the accused in the Svartsjo trials, for which they were sentenced to death, but the impatient Erik XIV personally stabbed them in their jail cells instead. A man with this surname lost to King John of Denmark at Rotebro and triumphed at Brunkeberg during his first regency in 1471. That man's son, who bore this surname, was mortally wounded at the Battle of Bogesund. Supporters of a party named after this surname were killed by Archbishop (*) Trolle in an event in which the corpse of a man with this surname was exhumed and burned. For 10 points, name this surname of Swedish nobles, possessed by Sten the Younger, whose supporters were killed in the Stockholm Bloodbath. ANSWER: Sture
15. These entities underlie a theory of natural history found in the Syntagma Philosophicum. One thinker attempted to undermine a paradox about these entities by claiming that "all perception is true." Under one theory, these entities did not explain properties that exist "by convention," but instead explained only "reality." Aristotle considered the existence of these entities absurd in his On Generation and Corruption, which claims that they were first postulated to address the possibility of (*) change. These entities, which are central to Pierre Gassendi's theories, "swerve" to meet one another, thus explaining free will, according to Epicurus. For 10 points, name these indivisible entities that exist in a void, which make up all matter, according to Leucippus and Democritus.
ANSWER: atoms [accept word forms]
16. In the memoir Other Septembers, Many Americas, Ariel Dorfman recalled trying to use this poem to woo a girl, who turned him down and told him that four boys before him tried the exact same trick. Despite the "whitening" of the "same trees" in this poem, the speaker notes that "we, of that time, are no longer the same." After realizing that the "voice," the "bright body," and the "infinite eyes" will be "another's," its speaker lets the title objects fall "to the soul like dew to the pasture." The speaker of this poem remembers that "I (*) kissed her again and again under the endless sky" and "held her in my arms," noting "I loved her, and sometimes she loved me too...she loved me, sometimes I loved her too." Its speaker provides, as an example of the title object, the sentence "The night is starry and the stars are blue and shiver in the/distance." For 10 points, name this twentieth love poem in a collection by Neruda, whose speaker puts his melancholy thoughts to verse.
ANSWER: "Tonight I Can Write (The Saddest Lines)" [or "I Can Write the Saddest Lines Tonight"; or "Puedo escribir (los versos mas tristes esta noche)" ; or "the twentieth love poem in Twenty Love Poems and a Song of Despair" before "twentieth"]
17. Igor Pavlov developed a variant of this scheme that uses range encoding and Markov chains, which is typically stored in an $x z$ container. The first of these schemes uses a sliding window divided into a search buffer and a look-ahead buffer. That scheme of this type codes a sequence as a combination of a previously occurring string, the prefix string, and a new bit. A variation of the first of these schemes was introduced in the paper "A Technique for High Performance Data Compression," by Terry Welch. That variation of this scheme was patent-encumbered and led to a licensing controversy between (*) Unisys and CompuServe and the development of the PNG. For 10 points, name this doubly eponymous, dictionarybased compression scheme that provides asymptotically optimal compression, was used in the GIF image format and is variously suffixed 77,78 , MA and W.
ANSWER: Lempel-Ziv algorithm [or $\mathbf{L Z}$ algorithm; accept "coding," "compression," and other equivalents for "algorithm"]
18. Only two movements survive of this composer's String Sextet in D minor, a "Mendelssohnian" piece intended to "please the Germans." One of this composer's symphonies uses the harp to represent a boyan, or a type of bard, playing the zither-like gusli, suggesting themes from one of this person's operas. This composer used a Beethoven-esque "questionanswer" style in the finale of another chamber work, whose third movement nocturne was made into the song "And This is My Beloved." Rostropovich was a founding member of a (*) quartet named for this composer, who died before finishing a third symphony and also wrote two string quartets. The musical Kismet draws from his Alexander II-celebrating symphonic poem that uses pizzicato in a "traveling" theme meant to represent the plodding of horses and camels in a desert caravan. For 10 points, name this member of the Five, the composer of In the Steppes of Central Asia.
ANSWER: Alexander [Porfiryevich] Borodin [accept Aldol Aldolovich Condensatiev]
19. The most commonly studied portion of this structure is often abbreviated as "DLP." Ojala et al. published a model of this structure in which it is modeled as "punctuated." In humans, the majority of the light strand of this structure is responsible for production of tRNA. The Reversed Cambridge Revised Sequence includes the most current data about this structure, which in humans includes a (*) 7s rRNA gene that is lost in many other mammals. This structure encodes for several NADH dehydrogenase and cytochrome oxidase subunits. A database of information about this structure is housed at the "MitoMap." For 10 points, name this genome that is housed within the "powerhouses" of cells. ANSWER: human mitochondrial genome [accept mitochondrial DNA; or mtDNA]
20. This disaster inspired the construction of a project whose chairman was the author of Robert's Rules of Order, Henry Martyn Robert. In the period following this disaster, the place most affected was the home of the Maceo crime family during the so-called "Free State" period. The first reporter to the scene of this event was a female William Randolph Hearst employee who was dressed as a man, Winifred Bonfils. Passengers on the Pherabe were deputized to report this disaster, which resulted in a "White City on the (*) Beach" of tents springing up. A similar event to this one fifteen years later, in 1915, resulted in much less loss of life because of the construction of a seawall. For 10 points, name this 1900 disaster in which a massive storm surge destroyed an island city in Gulf Coast Texas.
ANSWER: the 1900 Galveston hurricane [accept anything involving $\underline{\text { Galveston }}$ storms/disasters]
21. One character with this profession gets bailed out by understudy Ronnie Clarke after failing to rescue a girl in Tasmania in Nevil Shute's novel The Rainbow and the Rose. A Buenos Aires-based company headed by Riviere hires several of them, including the protagonist, Fabiene, in another novel. A person with this job muses "I balanced all, brought all to mind, the years to come seemed waste of breath" and counts himself among (*) "Kiltartan's poor." A drawing of a snake bookends a novel in which a person with this job meets an alien from an asteroid in the Sahara Desert. Steve Deever is falsely accused of shipping damaged cylinder heads, thus killing 21 people with this profession, in Arthur Miller's All My Sons. One of these characters says "I know that I shall meet my fate / somewhere among the clouds above" in a Yeats poem. For 10 points, name this profession shared by an Irishman who foresees his death, the narrator of The Little Prince, and Antoine-de-Saint Exupery. ANSWER: pilot [or airman or other synonyms; accept mailman or synonyms in the second sentence; accept specific kinds of pilots, like fighter pilots]

## Minnesota Open V

Packet by the editors (5): Auroni Gupta, Andrew Hart, Gaurav Kandlikar, and Cody Voight

## Bonuses:

1. Instead of making you name successively minor Soyinka plays, just name successively minor things about Death and the King's Horsemen, for 10 points each.
[10] The play is set during British colonial rule of this country, where Wole Soyinka is from.
ANSWER: Federal Republic of Nigeria [or Jamhuriyar Taraiyar Nijeriya; or Oha Njiko Ohaneze Naijiria; or Orile-ede Olominira Apapo ile Naijiria]
[10] The central ritual in the play, in which a chief's death must be accompanied by the suicide of his chief horseman, is declared illegal by this jerkwad British District Officer.
ANSWER: Simon Pilkings [either name is fine]
[10] A character with this role questions Elesin's theory of the Not-I bird, continuously affirms the need to hold on to cultural traditions, and later grapples with questions of death, asking "if that world leaves its course and smashes on boulders of the great void, whose world will give us shelter?"
ANSWER: praise-singer
2. This composer's sole surviving orchestral work is an Overture in C. For 10 points each:
[10] Name this composer who set a Heine poem to music in the lied "Swan Song" and received a postcard inscribed with the opening phrase of a piece that evokes the colorful basalt pillars of the title location.
ANSWER: Fanny [Cacilie] Mendelssohn Bartholdy [both underlined names needed; accept Fanny Hensel; prompt on Mendelssohn or F. Mendelssohn]
[10] The aforementioned postcard was inscribed with the opening phrase of this overture by Felix Mendelssohn, written during the same trip that resulted in the creation of the Scottish Symphony.
ANSWER: Hebrides Overture [or Fingal's Cave; or Die Hebriden; or Die Fingalshöhle]
[10] Fanny helped her brother organize a series of historic concerts in this city, where Bach worked for twenty-seven years as cantor of the St. Thomas Church. This city also hosts the annual Bach Music Festival.
ANSWER: Leipzig
3. Inclusions rich in this element and aluminum can be found in chondrite meteorites. For 10 points each:
[10] Name this element whose singly ionized form has prominent absorption lines dubbed H and K by Fraunhofer. It is also a principal constituent of limestone.

## ANSWER: calcium

[10] In this doubly eponymous effect, the logarithm of the width of the H - and K-lines of calcium(II) at their half-intensity points is linearly related to the absolute visual magnitude of a star.
ANSWER: Wilson-Bappu effect [or WB effect]
[10] The Wilson-Bappu effect implies a relation between effects in this layer of a star and the underlying structure. Helium was discovered as spectral lines in this second layer of the Sun, which spikes of gas called spicules rise through.
ANSWER: chromosphere
4. Answer the following about a theme in comparative mythology, for 10 points each.
[10] In Hindu mythology, virtuous souls hold the tail of a cow in order to cross the river Vaitarani and gain an audience with this god, who became the god of death after being the first mortal to die.
ANSWER: Yamaraja
[10] This country's mythology includes the river of the three crossings, which virtuous souls may cross via bridge, mild sinners may cross at a ford, and wicked people must wade through at the deepest, most snake-infested point.
ANSWER: Japan [or Nihon-koku; or Nippon-koku]
[10] Coins are required to pay the ferryman Charon to cross this river from Greek myth, from whose waters oaths were sworn. ANSWER: Styx
5. Sherlock fans might be delighted to know that Benedict Cumberbatch has been given the lead role in Sir Tom Stoppard's BBC adaptation of this novel cycle, in which a statistician romances a young suffragette named Valentine Wannop. For 10 points each: [10] Name this tetralogy about Christopher Tietjens, the last Tory.

## ANSWER: Parade's End

[10] This third volume of Parade's End is set on Armistice Day, where the streets are littered with celebrations and celebratory fireworks while Tietjens gets drunk with Valentine and her mother, who is determined to separate the two.
ANSWER: A Man Could Stand Up-
[10] Parade's End and The Good Soldier were written by this author, a close friend and collaborator of Joseph Conrad's. ANSWER: Ford Madox Ford [or Ford Hermann Hueffer]
6. From 1929 to 2000, Mexico was continuously ruled by one political party. For 10 points each:
[10] Name the centrist party that ruled during that era, until the 2000 victory of PAN candidate Vicente Fox drove them out of power. Current President-elect Enrique Peña Nieto, a member of this party, will try to begin another seventy-one-year streak.
ANSWER: Partido Revolucionario Institucional [or PRI; or Institutional Revolutionary Party]
[10] Ten days before one of these events, during which John Carlos made a notable gesture, the Tlatelolco massacre resulted in the deaths of forty-four anti-PRI protesters who chanted "we do not want [this event], we want a revolution!"
ANSWER: Olympic Games [or Summer Olympics; or 1968 Summer Olympics]
[10] The loosening of tight currency controls by Ernesto Zedillo, exacerbating the 1994 economic crisis in Mexico, was described as the "mistake" of this month by Zedillo's predecessor Carlos Salinas de Gortari.
ANSWER: the December mistake [or el error de Diciembre]
7. The hysteresis of this quantity is equal to the difference between the value of this quantity at the advancing and receding edges. For 10 points each:
[10] Name this quantity, which is a measure of the "wettability" of a surface. This quantity is related to various interfacial tensions by Young's equation.
ANSWER: contact angle
[10] These structures can form at the top of a liquid layer in test tubes due to the capillary pull of the liquid up the walls of the tube. Tubes with mercury have convex versions of these structures due to the greater power of cohesive forces.
ANSWER: menisci [or meniscuses]
[10] This equation, which is a consequence of the Laplace equation, describes the effect of a liquid's meniscus on its vapor pressure. This equation explains why larger drops tend to grow whereas smaller ones tend to evaporate.
ANSWER: Kelvin equation [or Kelvin-Thomson equation]
8. A man at the bottom right of this work struggles to move a rudder, and this painting used to be the only seascape in a room filled with portraits in a Boston museum. For 10 points each:
[10] Name this Rembrandt seascape, whose fourteen men are thought to represent Jesus, the twelve apostles, and Rembrandt himself. This painting's theft from the Isabella Stewart Gardner Museum in 1990 remains unsolved today.
ANSWER: Christ in the Storm on the Sea of Galilee [accept close equivalents because it is a translation]
[10] This John Singer Sargent painting, which shows a woman dressed in a dark top and a bright white skirt dance to the music made by the men behind her while two guitars hang on the wall, was spared from that heist.
ANSWER: El Jaleo
[10] Two girls dressed in white are shown lighting Chinese lanterns in this Sargent work set in a flower garden.
ANSWER: Carnation, Lily, Lily, Rose
9. This thinker's interest in tarot and playing cards led him to write many book reviews and opinion columns for the International Playing-Card Society's magazine. For 10 points each:
[10] Name this British analytic philosopher who died in 2011. He placed schools of thought into "realist" and "anti-realist" categories in his 1963 paper Realism and did important work in logic and voting theory.
ANSWER: Michael Dummett [or Sir Michael Anthony Eardley Dummett]
[10] Michael Dummett wrote books on the "Philosophy of Language" and "Philosophy of Mathematics" of this German mathematician and philosopher who wrote The Foundations of Arithmetic and On Sense and Reference. ANSWER: [Friedrich Ludwig] Gottlob Frege
[10] Dummett's seminal contribution to voting theory was devising the "quota" form of this voting system, in which voters rank candidates by order of preference.
ANSWER: Borda count [accept Quota Borda system]
10. Among the "crowd of twisted things" seen by the speaker of this poem is a smooth branch on the beach, "polished/As if the world gave up the secret of its skeleton." For 10 points each:
[10] Name this poem in which a streetlamp mutters things like "Regard the moon, la lune ne garde aucune rancune" at different times during the speaker's stroll through a deserted city. It closes with "the last twist of the knife."
ANSWER: "Rhapsody on a Windy Night"
[10] "Rhapsody on a Windy Night" is one of the "other observations" published by this Anglo-American poet alongside his "Love Song of J. Alfred Prufrock."
ANSWER: Thomas Stearns [T.S.] Eliot
[10] In this "other observation" of Eliot, "four rings of light on the ceiling overhead" evoke "an atmosphere of Juliet's tomb" as the speaker pays four visits to an elderly woman who "sit[s] here, serving tea to friends." Its amusing epigraph from The Jew of Malta reads "Thou hast committed- / Fornication, but that was in another country, / And besides, the wench is dead."
ANSWER: "Portrait of a Lady"
11. An imbroglio surrounding this foodstuff began when Secretary of War Russell A. Alger negotiated a cut-rate contract with the Morris, Swift, and Armour companies. For 10 points each:
[10] Name this food that was horribly preserved and led to many American casualties from dysentery and food poisoning in a scandal in which it was allegedly "embalmed."
ANSWER: beef [accept any equivalent but do not accept more specific answers; prompt on meat or equivalents]
[10] The embalmed beef scandal occurred during this "splendid little war" during which the U.S. kicked a European power out of Cuba.
ANSWER: the Spanish-American War
[10] This Commanding General during the Spanish-American War went on a crusade against embalmed beef. Wikipedia notes that, even when other generals reported no problem with the beef, this man "would not be silenced."
ANSWER: Nelson [Appleton] Miles
12. In the U.S., many form contracts stipulate that disputes arising from them must be subject to this process under the rules of the AAA. For 10 points each:
[10] Name this form of alternative dispute resolution in which two parties agree to allow a neutral third party to issue a binding decision, exemplified by the process that governs some baseball salaries.
ANSWER: arbitration [accept word forms]
[10] One way to invalidate an arbitration clause in a form contract is to invoke this defense, which requires that the clause excessively favors the drafting party both procedurally and substantively.
ANSWER: unconscionability [accept word forms such as unconscionable]
[10] In deciding the case of $A T \& T$ Mobility $v$. Concepcion, the Supreme Court effectively overruled this court, which had earlier ruled that arbitration clauses could not preclude class-action suits. Under the guidance of Chief Justice Roger Traynor, this court became the first to contemplate strict product liability.
ANSWER: the California Supreme Court
13. Data among this group was used to disprove the universality of the Oedipus complex in the 1929 work The Sexual Life of Savages in North-Western Melanesia. For 10 points each:
[10] Name this group of island people that Bronislaw Malinowski analyzed in Argonauts of the Western Pacific.
ANSWER: Trobrianders [or Trobriand Islanders]
[10] The Kula Ring of the Trobrianders is more complex and dominated by chiefs than the Kula of this island, which is the subject of a 1932 work about its paranoid, black-magic-obsessed people. That account is reiterated in Ruth Benedict's Patterns of Culture, which concerns the Zuni, the Kwakiutl, and the residents of this island.
ANSWER: Dobu Island [or Dobuans]
[10] This erstwhile husband of Margaret Mead, who shouldn't be confused with Gregory Bateson, penned Sorcerers of Dobu. ANSWER: Reo [Franklin] Fortune
14. The name of these riots may be derived for the acronym of the Latin for "Jerusalem is lost." For 10 points each:
[10] Name these anti-Semitic riots that swept Bavaria in 1819, the name of which identifies the rallying cry of the crowds that was probably inspired by shepherd calls.
ANSWER: the Hep-Hep riots
[10] The Hep-Hep riots were examples of these violent mob attacks against Jews, a favorite activity of nineteenth-century Odessans.
ANSWER: pogroms
[10] The horrible Lviv pogrom took place during a 1918 to ' 19 war between these two Eastern European countries, one of which won after Josef Pilsudski took control of its army following the Chortkiv Offensive.
ANSWER: Poland and the Ukraine [accept word forms; for "Poland," accept any of Second Commonwealth of Poland, interwar Poland, Second Polish Republic, or Polska; for "Ukraine," accept any of West Ukraine People's Republic, ZakhidnoUkrayins'ka Narodna Respublyka, or ZUNR]
15. The owner of these items ordered five of them in black and five in a slightly darker shade of black. For 10 points each: [10] Name these items whose owner was the first to recognize their "potential as a tactical garment."
ANSWER: Sterling Archer's black turtlenecks [or tactlenecks]
[10] Archer is voiced by this voice actor whose other credits include the title character Bob's Burgers, Coach McGuirk in Home Movies, and some show in which he "has a van."
ANSWER: H. Jon Benjamin [or Henry Jon Benjamin]
[10] Archer's turtlenecks are hand-woven from cashmere wool from this country, which cracked a twenty-two-member Iranian spy ring in 2012 and is led by president Ilham Aliyev.
ANSWER: [Republic of] Azerbaijan [or Azerbaycan Respublikasi]
16. This diagram shows the relationship between the $\log$ of relative saturation of a protein and the $\log$ of substrate concentration, and for myoglobin, the line shown in this diagram has a slope of one. For 10 points each:
[10] Name this eponymous plot. The slope of the line in this diagram is greater than one for proteins that exhibit cooperativity and is referred to as its namesake "coefficient."
ANSWER: Hill plot [accept synonyms like "graph" in place of "plot"; accept Hill coefficient]
[10] This protein has an unusually large Hill coefficient of 2.8. This iron-containing protein carries oxygen in the blood stream. ANSWER: hemoglobin [or Hb]
[10] Hemoglobin's affinity for oxygen is allosterically modulated by this three-carbon molecule. Concentrations of this molecule increase in hypoxic zones so that hemoglobin can deliver more oxygen to tissues.
ANSWER: 2, 3-BPG [or 2,3 Bisphosphoglycerate or 2,3 Bisphosphoglyceric Acid]
17. This man's namesake crusade sought to free Ghent from the clutches of Antipope Clement VII. For 10 points each:
[10] Name this "Fighting Bishop" of Norwich who personally led a charge on the Wat Tyler rebels at North Walsham.
ANSWER: Henry le Despenser [prompt on le Despenser]
[10] In his later years, Henry le Despenser supported this king, who reigned during the Peasants' Rebellion, against Henry
Bolingbroke's claim to the throne. This royal lost, and Bolingbroke became Henry IV.
ANSWER: Richard II of England [prompt on Richard]
[10] Richard's reign was marred by the influence of this group of nobles who tried to impeach various of the king's favorites. Thomas of Woodstock was one leader of this group that controlled the Merciless Parliament.
ANSWER: the Lords Appellant
18. The story of Virginia from Livy's $A b$ Urbe Condita provided the basis for this play, whose events are set into motion after the Prince drools over a portrait produced by the painter Conti. For 10 points each:
[10] Name this Gotthold Lessing tragedy, whose protagonist is murdered by her father Odoardo in order to preserve her virtue. ANSWER: Emilia Galotti
[10] A copy of Emilia Galotti lies open at the writing desk of this character, who kills himself with two pistols after being rejected by Lotte in an epistolary novel by Goethe.
ANSWER: Young/Jungen Werther
[10] Gotthold Lessing railed against Winckelmann's aesthetics in this "essay on the limits of painting and poetry," named after a mythological priest.
ANSWER: Laocoon: An Essay on the Limits of Painting and Poetry [or Laokoon oder Über die Grenzen der Malerei und Poesie]
19. Answer the following about things that Indian parents might drag you to, for 10 points each.
[10] Probably the first such thing is this ritual, which happens six months to a year after a baby's birth. In it, the baby gets to choose either a book, a jewel, a pen, some clay, or some food, each symbolizing a different virtue, shortly after consuming solid food for the first time.
ANSWER: rice-eating ceremony [or annaprashan vidhi; or first rice; liberally accept synonyms for "ceremony" and "eating"] [10] Your white friends will probably have as much, if not more, enthusiasm than your parents for this spring "festival of color" in which everyone throws colored powder at everyone else.
ANSWER: Holi [or Phagwa; or Dolajata; or Basantotsav]
[10] In India, the Lakshmi, Kali, and Durga rituals of this type are badass occasions for fireworks, drunkenness, and general revelry. In the United States, they are usually sad affairs in rented high school gymnasiums.
ANSWER: pujas [or pujos if you're Bengali]
20. This architect's flexibility in creating the design of the General Motors Technical Center in Warren, Michigan earned him commissions for several other corporate headquarters. For 10 points each:
[10] Name this architect who also designed headquarters for John Deere, IBM, and CBS.
ANSWER: Eero Saarinen
[10] Saarinen created an airfoil-like concrete roof in his design for this Washington, D.C.-area airport.
ANSWER: Washington Dulles International Airport [or IAD]
[10] Eero Saarinen furnished the interiors of his corporate headquarters buildings with his own "Grasshopper," "Womb," and "Tulip" chairs from this furniture company.
ANSWER: Knoll
21. This theorem is so named for the placeholder used to represent any neutrinoless double beta decay process in the paper it was proposed in. For 10 points each:
[10] Identify this theorem that relates the amplitude of neutrinoless double beta decay and the effective Majorana mass. ANSWER: black box theorem [or Schechter-Valle theorem]
[10] The observation of neutrinoless double beta decay would demonstrate the violation of the conservation of the quantum number associated with these particles. These elementary particles are not affected by the strong force and include the electron. ANSWER: leptons
[10] The Heidelberg-Moscow experiment, the most sensitive probe of neutrinoless double beta decay, uses an isotope of this element. The first transistor was made in this material.
ANSWER: germanium

