ACF NATIONALS 2018

ROUND 16 PLAYOFFS 8

packet by THE EDITORS (8)

## Tossups

1. Jim Bradbury critiqued the claim that this battle was an early demonstration of the power of infantry soldiers from commune militias by noting that the victor was forced to lead a cavalry charge from the center to salvage their ineffectiveness. Its victor was pulled off his horse by links in his chainmail and saved only by mounting the horse of Peter Tristan. Despite being banned from taking up arms, the bishop of Beauvais personally clubbed William Longsword over the head during this battle, which ended with Reginald of Boulogne making a last stand with 700 pikemen arranged in a schiltrom ring. Contemporaneously with this battle, the future Louis VIII fought over the county of Anjou while his father battled a broad alliance that included Ferdinand, the prince of Portugal. Frederick II became Holy Roman emperor after the abdication of one of the losers of this battle, Otto IV. For 10 points, what 1214 defeat of an alliance formed by the English King John led to the signing of the Magna Carta?
ANSWER: Battle of Bouvines
2. Eugene Dynkin showed that the smallest one of these objects generated from a pi-system is the lambda-system generated from that pi-system, and a related result relates monotone classes to these objects. The Kolmogorov zero-one law states that any event belonging to the "tail" one of these objects must have probability zero or one. Constantin Carathéodory (KAH-ra-tay-oh-doh-ree) demonstrated that a measure on a ring of subsets can be extended to one of these objects generated by that ring. The collection of all Borel sets on a topological space X is the smallest one of these objects containing all open sets. The join of two of these objects over the same set is the coarsest one of these objects containing both. These objects are the collection of subsets of a set X that contains the empty set and is closed under countable unions, countable intersections, and complements. For 10 points, name this type of set algebra used to define a measure.
ANSWER: sigma-algebra laccept sigma-field; "algebra" is not required after that word is read in the last sentence]
3. A figure at the bottom left plays a flute while a woman in a blue cloak guides one of these objects using two red tasseled cords in a painting at the National Gallery likely by Bernardo Cavallino, but possibly by Artemisia Gentileschi. In Italian art, the writings of the poet Angelo Poliziano inspired both scenes commonly depicting these objects, including one best exemplified by a painting executed for the Villa Farnesina of the banker Agostino Chigi. That painting by Raphael is exemplary of scenes showing Galatea standing directly atop one of these objects serving as a chariot and equipped with a small paddle wheel. One of these objects features prominently in another scene, exemplified by a painting showing the Hora of spring emerging with a red cloak from an orange grove, in which a goddess comes to life from ocean foam. Zephyr blows in from the left while a love goddess rides, for 10 points, what kind of object in Sandro Botticelli's The Birth of Venus? ANSWER: seashells [accept scallop or clam or crab shells; accept answers mentioning seashells such as shell boats or shell chariots or half shells; prompt on "boats" or "chariots"]
4. In an entry in this series, a pale man dressed in all white who calls himself "Mr. Sad" delivers a lengthy monologue peppered with nonsense words like "crumblechaw" and repeated sentences like "that is not my name." In an entry of this series, the protagonist reads letters a man wrote on an oil tanker and in Paris while obsessively working on a biography of an author whose widow, Sophie, he marries. In one of these novels, a character discovers that the routes an old man takes while collecting junk off the sidewalk spell out the words "TOWER OF BABEL," contributing to a mental breakdown that leads him to spend months in a garbage bin outside the Stillmans' apartment. A man's research on the supposedly deceased author Fanshawe, Blue's investigation of Black, and Daniel Quinn's pretending to be a PI are among the plotlines of this series inspired by detective fiction. Ghosts, The Locked Room, and City of Glass make up, for 10 points, what set of Paul Auster novels titled for a city?
ANSWER: The New York Trilogy
5. A legend among these people in Germany held that, if they used wood from a tree that grew over the grave of a child who died unbaptized, the child's spirit could help them in the form of a pipe-smoking fairy. After these people died, their souls were said to become birds named for a Latin phrase meaning "Dear Mother." Sorcerers in Lapland sold magical cords with three knots to these people, whose monster legends inspired the illustrations on the left of a 1539 map published by Olaus Magnus. Their folklore includes a kobold called the Klabautermann (klah-bau-tehr-mahn) and a cruel witch named Mother Carey. These people told of an afterlife where people never tired of singing and dancing, known as Fiddler's Green. In the Örvar-Oddr (UR-vahr OHD-ur) saga, members of this profession encounter the Lyngbakr and Hafgufa, which may be an early reference to a giant many-armed monster from Scandinavian legends. For 10 points, name these people who considered it unlucky to shoot an albatross and avoided the Kraken on their voyages.
ANSWER: sailors [accept synonyms such as seafarers]
6. Each of the 200-plus Pulitzer-winning dispatches about this man in the Eagle-Tribune were read on the floor of the U.S. House of Representatives. An infamous photo of this man was taken after he spent weeks in solitary confinement recovering from gunshot wounds. This man was convicted for being a party to the murder of Joseph Fournier, a 17 -year-old gas station employee. According to the book The Loudest Voice in the Room, Roger Stone was called "a pussy" for criticizing a piece featuring this man created by Lee Atwater. Joe Biden once claimed that "one of my objectives, quite frankly," in the 1994 Violent Crime Control and Law Enforcement Act was to "lock [this man] up in jail." This man was described stabbing a boy "19 times" in a commercial that focused on George H. W. Bush's tough position on the death penalty. For 10 points, name this man who murdered Angela Miller while on furlough from prison as part of a program supported by Massachusetts governor Michael Dukakis.
ANSWER: Willie Horton [or William R. Horton]
7. Liliana Porter created a piece that places an object made by this company on a Che Guevara plate. As part of the recent Pacific Standard Time exhibitions, Jesse Lerner and Ruben Ortiz-Torres looked at this company's influence in Latin America, such as when Marxists started manufacturing the Pascual fruit drink. For an exhibition parodying this company, one artist made a sculpture of a beach ball hovering over blades titled The Fragility of Love and another of a unicorn preserved in formaldehyde. Damien Hirst contributed to a parody of this company in 2015 at Weston-super-Mare organized by Banksy. In the 1940s, employees of this company toured South America on a research expedition for The Three Caballeros. One character created by this company stands on a yellow dock and has accidentally grabbed his shirt with his fishing rod in a Pop Art painting. For 10 points, name this company whose characters appear in the Roy Lichtenstein painting Look Mickey.
ANSWER: Disney [or the Walt Disney Company; of the Walt Disney Studio; or Walt Disney Productions]
8. In a story's Gogol-inspired last sentence, a member of this organization states, "And everything that ever happened to me afterwards, I never felt the same about again." In that story, members of this organization stay at an old woman's house, where they play cards with Hawkins and Belcher before killing them. The main characters of "Guests of the Nation" are part of this group, as is a character who sees the silhouette of a man in front of "a row of chimney pots" after pulling off a ruse in which he raises his hat above a parapet. At the end of that story, that member of this organization descends to the street and discovers that the man he killed was his brother. Minnie Powell fawns over the poet Davoren because he lets her believe that he is a fugitive member of this organization in the play The Shadow of a Gunman. Liam O'Flaherty's "The Sniper" is about a member of, for 10 points, what organization that appears in Sean O'Casey's plays about the Anglo-Irish War? ANSWER: IRA [or Irish Republican Army; do not accept or prompt on "P(rovisional) IRA" or "Provos"] ["Guests of the Nation" is by Frank O'Connor.]
9. The terpene grandisol is a substituted version of this compound. A unit equivalent to this molecule experiences the bis•homo•aromaticity found in di•valent cations of pagodanes. Multiple equivalents of this compound are oddly found in the fatty acid backbones of lipids present in the membranes of anammox bacteria. An equivalent of this compound is found in a CPD, which, like a 6,4 product, is a class of thymine dimer. Two carboxyls are bound to this compound in the CBDCA ligand found in carboplatin. One of these molecules forms from an excited enone and an alkene in a [2+2] photo•cyclo•addition. This compound exists in a puckered conformation called the butterfly, in which one of the central carbon atoms is at a 25 -degree angle from the plane. This molecule is found at each face of cubane. For 10 points, name this alkane that contains a four-membered ring.
ANSWER: cyclobutane
10. In the structural understanding of this subfield of study, the three approaches of "item and arrangement," "item and process," and "word and paradigm" were distinguished by Charles Hockett. Operations such as Fusion and a type of Merger named after this subfield were posited by Alec Marantz and Morris Halle in a framework named after a "distributed" form of this subfield. A paper concluding that English-speaking children have an innate understanding of the processes studied in this linguistic subfield was published in 1958 by Jean Berko Gleason and introduced the "wug test." The Schlegel brothers developed a typology that was based on the terminology of this subfield and in which analytic languages are those having relatively little inflection. Roots, stems, prefixes, and suffixes are studied in, for 10 points, what subfield of linguistics that studies word formation based on fundamental units often contrasted with phonemes?
ANSWER: morphology lor morphological processes; accept morphosyntax or morphosyntactic processes or morphophonology or morphonology; accept Morphological Merger; do not accept or prompt on "morpheme(s)"|
11. A man with this surname backed out of plans to build a refinery in Haiti under the Duvalier regime after discovering that Haitian-provided crude oil samples were actually low-grade molasses. That man with this surname rose to power serving as an intermediary between the sultan of Brunei and the British government during financial crises in the Thatcher ministry. After the government spurned Tiny Rowland's bid, that man of this surname bought a controlling stake in House of Fraser. Ian Greer acted on behalf of a man with this surname in paying members of Parliament in the "cash-for-questions affair." A man with this surname erected a statue of Michael Jackson as the longtime owner of Fulham F.C. and also owned the department store Harrods. Another man with this surname died in the Pont de l'Alma tunnel while pursued by paparazzi. For 10 points, what surname was shared by Egyptian billionaire Mohamed and his son, a lover of Princess Diana named Dodi?
ANSWER: Al-Fayed [or El-Fayed; accept Mohamed Al-Fayed or Dodi (El or Al) Fayed or Emad El-Din Mohamed Abdel Mena'em El-Fayed or Dodi (El or Al) Fayed or Emad El-Din Mohamed Abdel Mena'em El-Fayed]
12. In one poem, this author imagined Franz Liszt "at the Grand Canal / together with the restless woman who is married to King Midas." A long poem by this author tells of how "some monks who liked escargots" introduced the snail Helix pomatia to an island, a "greeting from the Middle Ages." That poem by this author says there are days when the title sea is "a calm, limitless roof" under a "flag that's so frayed by the wind and smoked by the funnels and bleached by the sun that it could be anybody's." The close of that poem by this author takes place in the "archipelago people's ghetto cemetery" and describes "the people carried by the certain wave, the certain wind, / out here to their fates." This poet of "Sorrow Gondola No. 2" wrote of how his grandfather ferried people over the title sea in a poem that begins, "It was before the time of radio masts." This author of The Half-Finished Heaven drew on the treacherous islands near Runmarö ("rune"-mahr-eu) for his poem Baltics. For 10 points, name this Nobel-winning Swedish poet.
ANSWER: Tomas Tranströmer [or Tomas Gösta Tranströmer]
13. CITRs may undergo this phenomenon in the cytoplasm, which is the subject of the sentinel RNA hypothesis. High rates of this phenomenon lead to a form of regulation called RUST, which couples this process with NMD. Data regarding this process is stored in AspicDB and the ASAP database. TIA1 regulates this process for the FAS gene. This process was first observed in adenoviruses, which regulate this process through E4ORF4's dephosphorylation of SR proteins. The Sex lethal gene causes this process in tra during sex determination in Drosophila. This process allows the $L M N A$ gene to code for both type A and C lamins. Modes of this phenomenon occur due to exon skipping, by changing donor and acceptor sites, or via intron retention. For 10 points, name this phenomenon that allows a gene to code for multiple isotypes of a protein when its mRNA transcripts are modified to contain different sets of exons.
ANSWER: alternative splicing [or differential splicing; prompt on partial answer]
14. The scherzo of one symphony of this number starts with pianissimo strings under a solo trumpet which plays a motif that, at concert pitch, jumps from E up an octave to a high E, then down to play a dotted rhythm on A, and then back down to low E. Some percussion parts in that symphony of this number are believed to have been added at the urging of the composer's students and Arthur Nikisch. That symphony of this number calls for four Wagner tubas and opens with the cellos and a solo horn arpeggiating an E-major triad against violin tremolos. In the first movement of a different symphony of this number, the flute introduces the main theme following a string of repeated E's during the transition from an unusually long poco sostenuto introduction. The second movement of that symphony is built around a repeating "quarter - eighth eighth - quarter" rhythm, and Richard Wagner called that piece "the apotheosis of dance." For 10 points, give the number shared by a symphony in E major by Anton Bruckner and one in A major by Ludwig van Beethoven that followed the "Pastoral."
ANSWER: seventh symphony [ or Symphony No. 7]
15. A paper by this philosopher questions the primacy of the "direct and oblique intentions" distinction by imagining a lifesaving gas that will release toxic fumes into one patient's room. In another paper, this thinker questioned the difference between the "binding force" of morality and the "should" of club etiquette rules in arguing, against Kant, that moral judgements are "hypothetical imperatives." This philosopher's major book holds that the evaluations of operations in the living world, such as the strength of a tree's roots, have the same conceptual structure as evaluations of human conduct. In a paper on the doctrine of double effect and abortion, this author of Natural Goodness introduced a thought experiment that Judith Jarvis Thomson wrote about in a paper titled for "killing, letting die, and" it; Thomson also added cases such as "The Fat Man" and "Bystander at the Switch" to that scenario introduced by this philosopher. For 10 points, name this philosopher who originated the trolley problem.
ANSWER: Philippa Foot [or Philippa Ruth Foot; or Philippa Ruth Bosanquet]
16. An author with this surname opened the "Disintegration" section of one of his novels with the words "fuck all this lying look what im really trying to write about is writing not all this stuff about architecture." That author with this surname was inspired by a fortune teller's card to include rectangular holes in the pages of one novel and wrote a "book-in-a-box" consisting of 27 reorderable pamphlets. The author of the experimental novels Albert Angelo and The Unfortunates, Bryan Stanley, shared this surname with an earlier British author who stated that "nothing odd will last" in opposition to the innovations of Laurence Sterne's Tristram Shandy. In the only novel by that author with this surname, Pekuah is kidnapped at the pyramids after leaving the Happy Valley with the title Ethiopian prince. For 10 points, give this surname of the author of Rasselas and subject of a James Boswell book.
ANSWER: Johnson [accept Samuel Johnson or Bryan Stanley Johnson]
17. A function named for this scientist can be approximated by the simpler Fang-Howard function, which is often used in conjunction with the variational method to estimate the ground state energy for 2D electron gases. For a 2D body in equilibrium, the components of the stress tensor can be set equal to the second derivatives of a stress function that satisfies the biharmonic equation and also bears this man's name. The solutions to the Schrödinger equation in a triangular well-and more generally, any differential equation of the form " d -squared- y " by " d -squared- x " equals " x times y "-are named for this scientist. He was harshly criticized for his role in allowing the Germans to discover Neptune before the British, which occurred during his 45 -year appointment as astronomer royal. For 10 points, identify this British astronomer who established Greenwich as the location of the prime meridian and who names the bright "disc" at the center of circular diffraction patterns.
ANSWER: George Biddell Airy [accept $\underline{\text { Airy function(s) or Airy stress function or Airy disc] }}$
18. In 1885, several birds of the pheasant family were introduced to this country after three gunboats of the British Royal Navy occupied it during an incident called the Port Hamilton Affair. Corporal Charles Brown captured the flag of this country and displayed it aboard the USS Colorado after a punitive expedition led to the bombardment of this country's Selee River Forts. That action was taken to investigate the destruction of a merchant ship called the General Sherman, which had been seeking trade in this country. Starting in 1896, the Independence Club published a namesake newspaper in this country, where 33 religious leaders echoed Woodrow Wilson's Fourteen Points by proclaiming the March First Movement, also called the Samil Movement. That movement called for the independence of this country after the alleged poisoning of its leader, which led one of its nationalists to assassinate Ito Hirobumi. For 10 points, name this country where an empire succeeded the Joseon Dynasty.

## ANSWER: Korea [or Korean Empire; accept Republic of Korea or South Korea or North Korea]

19. This holiday, whose cuisine is typically "salty" as opposed to "sweet," is the year's second major opportunity to use outdoor spaces known as "gah." The second of two Bengali celebrations known as Chaand Raat, and the only one whose exact date is known well in advance, takes place the night before this holiday, which coincides with the end of one day's fasting on the Day of Arafah. A special khutbah on this holiday, which begins on the tenth of Dhu al-Hiijah, includes instructions for qurbani. In many countries, the name of this holiday incorporates the word "bakri," meaning "goat," referencing a ritual slaughter of livestock that leads some English speakers to call this holiday the "Feast of the Sacrifice." Hajij participants undertake the rami-al-jamarat, or Stoning of the Devil, on, for 10 points, what holiday that celebrates the willingness of Ibrahim to sacrifice his son and is the "Greater Eid" of the Islamic calendar?
ANSWER: Eid al-Adha [or Eid al-Kabir; accept Eid al-Adha or Eid al-Kabir after "Eid"; accept Bakr-Eid or Bakrid before "bakri"; prompt on "Greater Eid" before "Eid"; prompt on "al-Adha or "al-Kabir" before "Eid"; prompt on "Feast of the Sacrifice" or "Sacrifice Feast" before "sacrifice"
20. This non-bassist's collaborations with Lionel Hampton include a trio album with Art Tatum and one in which Hampton "presents" this artist. This artist's live album Big Swing Face features versions of both Sonny Bono's "The Beat Goes On" and The Beatles' "Norwegian Wood." Omar Hakim and Billy Cobham both appeared on a tribute album released after this man's death, which is titled after "burning for" this artist, who collaborated with his teacher, Henry Adler, on a now-classic book of rudiments for his instrument. As a child, this son of vaudeville performers was billed as "Baby Traps" and became, after Jackie Coogan, the highest-paid child entertainer. This man, who frequently ended performances with a nearly eleven-minute-long West Side Story medley, made several television appearances playing in "duels" with Gene Krupa, another player of his instrument. For 10 points, name this man billed throughout his career as the "World's Greatest Drummer." ANSWER: Buddy Rich [or Bernard Rich]

## Bonuses

1. The sound holes on the body of this instrument are sometimes referred to as "flaming swords." For 10 points each: [10] Name this instrument popular during the Baroque period that has six or seven strings played with the bow and another set of sympathetic strings underneath that resonate when the instrument is played.
ANSWER: viola d'amore laccept love viol or other reasonable translation containing viola or viol and the idea of lovel [10] Although the viola d'amore fell out of use by the 19th century, this composer called for one to accompany the aria "Plus blanc que la blanche hermine" (ploos blahnk kay lah blawnsh air-meen) in his grand opera Les Huguenots. He also composed the opera L'Africaine.
ANSWER: Giacomo Meyerbeer [or Jacob Liebmann Beer]
[10] This composer included a partita for the unusual combination of two violas d'amore and continuo in his Harmonia artificioso-ariosa. Like his Mystery Sonatas for the violin, that collection explored the possibilities of scordatura tuning. ANSWER: Heinrich Biber [or Heinrich Ignaz Franz (von) Biber]
2. In November 2017, the Economist wrote that the selection of José Antonio Meade (MEED) represented a return to this process. For 10 points each:
[10] Give either the Spanish or English term for this process by which a current Mexican president handpicked his successor, which was in force for much of the 20th century.
ANSWER: el dedazo [or the big finger; or tap of the finger; accept answers mentioning finger tap or similar; prompt on lessspecific answers mentioning "finger"|
[10] El dedazo was, and now may again be, the succession mechanism of this historically dominant Mexican political party, whose 71 -year uninterrupted rule was broken in 2000 by Vicente Fox.
ANSWER: PRI ("P-R-I" or "pree") [or Institutional Revolutionary Party; or Partido Revolucionario Institucional]
[10] After Ernesto Zedillo ended el dedazo, this PRI candidate was the first to be nominated through primary elections. He lost the 2000 election to Fox and subsequently served his home state, Sinaloa, in the Mexican Senate.
ANSWER: Francisco Labastida [or Francisco Labastida Ochoa]
3. This theory explains the homogeneity and isotropy of the universe between points that are causally disconnected in the present day. For 10 points each:
[10] Name this theory that proposes that the universe underwent a period of rapid expansion shortly after the big bang.
ANSWER: cosmic inflation [or cosmological inflation; accept answers mentioning inflationary such as inflationary epoch or inflationary cosmology]
[10] Expansion of the universe is conveniently modeled with these coordinates, which have a dependence on the scale factor such that distances remain fixed with respect to the overall expansion, or Hubble flow.
ANSWER: comoving coordinates
[10] Comoving coordinates are often used when writing down this metric, which describes expansion in a homogeneous and isotropic universe and forms the framework for the Lambda-CDM model.
ANSWER: Friedmann-Lemaitre-Robertson-Walker metric [or FLRW metric]
4. A table illustrating this mathematical inequality shows that, in the world economy, it did not hold from about 1940 to 1950 because of taxation policy, postwar reconstruction, and demographic transition. For 10 points each:
[10] Name this mathematical inequality, couched in terms of two variables, that underlies the argument about wealth inequality in the book Capital in the Twenty-First Century.
ANSWER: $\underline{r}$ is greater than $g$ laccept any answer mentioning $\underline{r}>\mathrm{g}$ or net rate of return to capital exceeds growth rate of output]
[10] This French economist's discussion of " $r$ is greater than g" is central to his 2014 book Capital in the Twenty-First Century.
ANSWER: Thomas Piketty
[10] This economist's 2015 paper "Yes, r > g. So What?" argues that "r is greater than g " is unremarkable because it holds true in most models' steady-state equilibria. In 2013, this man published a paper titled "Defending the One Percent" in which he argued that wealth was the "just deserts" of "significant economic contributions."
ANSWER: Greg Mankiw [or Nicholas Gregory Mankiw]
5. In one poem, a man who repeatedly uses the word "Zooks" states that "if you get simple beauty and nought else, / you get about the best thing" that this figure invents. For 10 points each:
[10] Name this figure whose location, according to a short song from Pippa Passes, is one of many indications that "all's right with the world." In that song, this figure is mentioned after a lark "on the wing" and a snail "on the thorn."
ANSWER: God laccept "God's in his heaven / all's right with the world"
[10] "Fra Lippo Lippi" and Pippa Passes are works by this English poet. The statement "And yet God has not said a word!" closes this man's poem "Porphyria's Lover," in which a man strangles a woman with her "yellow hair."
ANSWER: Robert Browning
[10] In this early long poem by Robert Browning, the title alchemist converses with an Italian poet named Aprile, who tells him that "God is the perfect poet, / who in his person acts his own creations."
ANSWER: Paracelsus
6. SUPER experiments isolate lineshapes generated by anisotropies of this phenomenon, which can be described using Herzfeld-Berger notation. For 10 points each:
[10] Name this phenomenon whose anisotropy along with dipolar coupling and quadrupolar interactions, is averaged in magic-angle spinning.
ANSWER: chemical shift anisotropy
[10] Magic-angle spinning is used in solid-state forms of this technique that, more generally, uses a magnetic field generated by a superconducting magnet to analyze nuclei.
ANSWER: NMR spectroscopy [or nuclear magnetic resonance spectroscopy; accept solid state NMR spectroscopy or SSNMR spectroscopy]
[10] In this decoupling technique, a weak RF field is applied to target a particular resonance, which causes coupled multiplets to show additional splitting as opposed to collapsing to a singlet. Experiments using this technique can determine the relative signs of coupling constants.
ANSWER: spin tickling [prompt on "tickling"]
7. David Damrosch wrote a book whose title asks, "What is" this subject, and he edited the "Routledge Companion" to it. For 10 points each:
[10] Name this subject of a 2013 debate touched off by Emily Apter's book "against" it. The German word from which this term derives was coined in a conversation with Johann Eckermann to describe how poetry is becoming the "universal possession of mankind."
ANSWER: world literature laccept weltliteratur or What Is World Literature? ${ }^{\text {? }}$. The Routledge Companion to World Literature or Against World Literaturel
[10] Apter's Against World Literature claims that Goethe's idea of world literature ignores the politics of works that can't fully be subjected to this general process. Wole Soyinka performed this task on Daniel Fagunwa's Yoruba language work to bring it to an Anglophone audience.
ANSWER: translation [accept word forms such as translating; accept more specific answers such as translating into English]
[10] The $n+1$ article published with Apter's book cites this author's supposedly fading powers after his university appointment as an example of the university insulating "World Lit from the world it wants to describe and address" and criticizes his 2006 book The Wizard of the Crow.
ANSWER: Ngugi wa Thiong'o [accept James Ngugi]
8. This man's second wife, Thóra Borgarhjörtr (TOH-rah BOR-gar-hyor-tur), received a newborn lindworm from her father that eventually grew to encircle her bower and spew venom at her suitors. For 10 points each:
[10] Name this legendary Norse ruler who later married a poor girl named Kráka after she came to him wearing only a net, accompanied by her dog and with the smell of leek on her lips. His sons led the Great Heathen Army.
ANSWER: Ragnar Lodbrok [accept Ragnar Sigurdsson]
[10] Kráka, originally called Aslaug, was given her name by peasants who adopted her after killing her grandfather Heimer and discovering her in one of these objects, which they had opened expecting Heimer's gold.
ANSWER: harp(s)
[10] By prophesying that her fifth son would be born with the image of a dragon on this body part, Aslaug proved to Ragnar that she was the child of Sigurd and Brynhild. Odin gave up one of these things in exchange for wisdom.
ANSWER: eye(s) [accept left eye or right eye; accept Sigurd Snake-in-the-Eye]
9. Africa's first plant for processing this resource became active in 2017 in Rwanda, its leading exporter. For 10 points each: [10] Name this ore whose constituent metals are used in most modern electronic devices.
ANSWER: coltan [or columbite-tantalite; prompt on "columbite" or "tantalite"
[10] Much of the world's coltan is found in this African country, which neighboring countries Uganda and Rwanda have been exploiting for resources since two civil wars were fought in this country beginning in the late 1990s.
ANSWER: Democratic Republic of the Congo [or DRC; prompt on "Congo"; do not accept or prompt on "Republic of the Congo"
[10] Coltan mining has contributed to the conflict between the Lendu and Hema peoples in this northeastern region of the DRC.
ANSWER: Ituri Province
10. This man challenged the state's case in the trial of Lotta Continua's leader Adriano Sofri in his book The Judge and the Historian. For 10 points each:
[10] Name this Italian historian who analyzed the trial of a 16th-century miller named Menocchio with heterodox views about the origin of the universe in The Cheese and the Worms.
ANSWER: Carlo Ginzburg
[10] In his book Ecstasies, Ginzburg analyzed the development of European beliefs about these people. The Malleus
Maleficarum was a guide supposedly enabling the identification and hunting of these people.
ANSWER: witches [accept any answer indicating practitioners of witchcraft; accept Hammer of Witches]
[10] In The Night Battles, Ginzburg analyzes the "fertility cult" of these Friulian "good witches," who claimed to fight evil witches with fennel stalks in their dreams.
ANSWER: benandanti [or good walkers]
11. A tracking shot of the Griffith Park Observatory was recorded using this medium for the opening shot of the film Last Days in a Lonely Place, part of a series of films commemorating filmmaker Mark Lapore. For 10 points each:
[10] Name this artistic medium that Phil Solomon used to generate found footage in his In Memoriam trilogy. Solomon's shot of the Brooklyn Bridge in Still Raining, Still Dreaming is from Grand Theft Auto IV, a work in this medium.
ANSWER: video games [accept machinima; prompt on "games"]
[10] This art museum made a controversial decision to add video games to its permanent collection in 2012. Design curator Paola Antonelli oversaw an exhibit modeled on Philip Johnson's Machine Art 1934 show at this museum.
ANSWER: Museum of Modern Art [or MoMA]
[10] One of the first entries in the MoMA's video game collection was this 2007 work by Jason Rohrer. In this game, the player character moves from left to right as he ages and experiences life events before invariably dying at the end.
ANSWER: Passage
12. After spending time in prison, Alger Hiss once sold stationery in this publication's namesake building. For 10 points each:
[10] Name this magazine published in the late 1800s and early 1900s. Its cartoon "The Bosses of the Senate"-in which large, portly trusts stand behind senators-was drawn by its founder, Joseph Keppler.
ANSWER: Puck
[10] Bernhard Gillam produced 22 caricatures for Puck depicting this politician as a "Tattooed Man" inked up with his various misdeeds. One such cartoon shows this politician's portly stomach bearing the words "Mulligan Letters."
ANSWER: James G. Blaine [or James Gillespie Blaine]
[10] In a Puck cartoon known as "The Raven," a raven-like Blaine looms above this 19th-century president, who is depicted as a very short man wearing an oversized hat, a reference to his presidential grandfather.
ANSWER: Benjamin Harrison [prompt on "Harrison"]
13. This story's child narrator is shocked by how easy a grammar lesson seems after his teacher describes their language as "the most beautiful . . . in the world." For 10 points each:
[10] Name this Alphonse Daudet short story that ends with the schoolmaster Monsieur Hamel writing "VIVE LA
FRANCE!" on the blackboard.
ANSWER: "The Last Class" [or "The Last Lesson"; or "La Dernière Classe"]
[10] The words "you handed over our brother; you will pay for this" are found on a schoolmaster's blackboard at the end of this later French author's short story "The Guest."
ANSWER: Albert Camus
[10] "The Last Class" is set during the occupation of Alsace during this war, which also provides the setting of Guy de Maupassant's stories "Mademoiselle Fifi" and "Boule de Suif."
ANSWER: Franco-Prussian War [or Franco-German War]
14. The relativistic generalization of this formula depends on the Lorentz factor raised to the sixth power. For 10 points each:
[10] Name this expression in which the time-averaged power is proportional to the square of the acceleration of the charges. It can be used as a crude model of small dipole antennas.
ANSWER: Larmor formula [or Larmor's formula]
[10] It is often easier to express dipole antenna power as a function not of acceleration but of the product of the square of the current amplitude and this constant, which has a value of 120 pi ohms in MKS units.
ANSWER: impedance of free space lor radiation resistance of free space; accept the "vacuum" in place of "free space" for those answers]
[10] The Larmor formula works equally well for describing this form of radiation emitted by electrons moving parallel to a magnetic field. It is the nonrelativistic analog of synchrotron radiation.
ANSWER: cyclotron radiation
15. Answer the following about the 13th-century scholastic philosopher Henry of Ghent, for 10 points each.
[10] Henry specially privileged theologians in his theory of the "divine" form of this process, which holds that God's grace is necessary for human knowledge. Book VI of the Republic contains an analogy comparing this phenomenon to truth's source in the Good.
ANSWER: illumination [or light; or sunlight]
[10] Henry participated in the commission that enacted the 1277 one of these events at the University of Paris. Stephen Tempier banned the teaching of over 200 theses in that one of these events, which Pierre Duhem credited with ending the chokehold of Aristotle and paving the way for modern science.
ANSWER: condemnations
[10] In Henry's philosophy, this concept, called quidditas, is more central than existence. Jean-Paul Sartre claimed that existence precedes this concept, which is the fundamental set of properties or intrinsic nature of an entity.
ANSWER: essence
16. These organisms can be divided into plasmodial or cellular varieties, and a sizable amount of these organisms are part of the mycetozoan group. For 10 points each:
[10] Give this name for a loosely defined set of organisms that begin as individual cells but may assemble to form either a multicellular grex acting as a single organism or an enormous cell containing many nuclei.
ANSWER: slime molds
[10] The slime mold Dictyostelium uses this compound as an acrasin (ah-KRAY-sin), a messenger that encourages cells to aggregate to form a pseudoplasmodium. This second messenger activates protein kinase A.
ANSWER: cyclic AMP [or cAMP; or 3',5'-cyclic adenosine monophosphate]
[10] The spiral pattern formed during Dictyostelium aggregation resembles the patterns formed in this chemical oscillator. The first publication of this reaction involved interconversion between cerium (IV) and (III), and typically, malonic acid and bromate are contained in mixes for it.
ANSWER: BZ reaction [or Belousov-Zhabotinsky reaction]
17. The murder of José Robles helped spark this author's break with Hemingway and conversion to conservatism, which he championed in late novels like Midcentury. For 10 points each:
[10] Name this author whose earlier activism included his advocacy against the conviction of Sacco and Vanzetti, whom he wrote about in his U.S.A. trilogy. He also wrote Manhattan Transfer.
ANSWER: John Dos Passos [or John Roderigo Dos Passos]
[10] A section about the Sacco and Vanzetti trial from Dos Passos's The Big Money declares, "America . . . has been beaten by strangers," after an oft-quoted sentence that begins "all right" before making this four-word declaration. Exact phrase required.
ANSWER: "all right we are two nations"
[10] The "all right we are two nations" passage occurs in one of these stream-of-consciousness sections that appear throughout the U.S.A. trilogy along with "Newsreels" and short biographies.
ANSWER: "Camera Eye" sections
18. In an August 2017 article for $\operatorname{EDGE}$ magazine, Thomas Metzinger imagined a superintelligent computer adopting the "benevolent artificial" form of this stance, thus causing it to terminate humanity. For 10 points each:
[10] Name this position, which is also advocated in the book The Conspiracy Against the Human Race by Thomas Ligotti. In general, this stance argues against bringing new, sentient life into the world.
ANSWER: (benevolent) antinatalism [accept forms of the word antinatal such as antinatalists; accept digital antinatalism or benevolent artificial antinatalism]
[10] Metzinger discusses antinatalism and claims that the self is a purely fictitious construct in a book titled for the "tunnel" of this concept, the component of Freud's model of the psyche that denotes the self.
ANSWER: ego laccept The Ego Tunned
[10] This reclusive South African author advocated a "misanthropic" form of antinatalism in Better Never To Have Been. His 2017 book The Human Predicament purports to be a guide to "life's biggest answers."
ANSWER: David Benatar
19. This performance was first staged in Kyoto in 1964, and its "score," or instructions, were published in the artist's book Grapefinuit. For 10 points each:
[10] In what series of performances did an artist invite audience members to come on stage one at a time and use scissors to slice away her clothes?
ANSWER: "Cut Piece"
[10] This Japanese-born artist of "Cut Piece" made the experimental film "Bottoms," in which she filmed the nude buttocks of people walking on a treadmill. In 1969, she staged a "Bed-In for Peace" in Amsterdam with her musician husband.
ANSWER: Yoko Ono
[10] Yoko Ono was part of this affiliation of artists organized by George Maciunas; it included artists such as Nam June Paik and Josef Beuys ("boys").
ANSWER: Fluxus
20. Answer the following about the Victorian activity of "slumming," in which wealthy London elites and tourists visited poor neighborhoods to observe the daily lives of the impoverished, for 10 points each.
[10] Seth Koven's sensory history Slumming opens with journalist James Greenwood's account of spending a night at a workhouse in this London neighborhood, whose Victorian-era gasworks were shown in an engraving in Gustav Doré's
London: A Pilgrimage.
ANSWER: Lambeth [accept South Lambeth or North Lambeth]
[10] Many sightseers took a hiatus from slumming when this man terrorized prostitutes in London's Whitechapel neighborhood in 1888.
ANSWER: Jack the Ripper [prompt on "Jack" or "Ripper"]
[10] Koven's book also notes the efforts of Irish philanthropist Thomas Barnardo, who set up institutions of this type. George Müller founded a Victorian-era institution of this type in Bristol known as Ashley Down.
ANSWER: orphanages [accept children's home or similar answers; prompt on "group homes" or similar answers]
