



ACADEMIC
COMPETITION
FEDERATION

ACF NATIONALS 2018

ROUND 18
PLAYOFFS 10

packet by
THE EDITORS (10)

Tossups

1. This man married a woman who had unsuccessfully pursued the namesake of *Roget's Thesaurus*, Jane Griffin, after the death of his first wife, the poet Eleanor Anne Porden. During the first expedition led by this man, Michel Tero Haute was shot and killed after being accused of cannibalism. During that expedition, the members of this man's party were rescued by Akaitcho after they were forced by starvation to eat leather from their own shoes. A popular folk song chronicled the "lament" of the widow of this leader of the Coppermine Expedition. He served as lieutenant governor of Van Diemen's Land before embarking on his final voyage. British society largely rejected John Rae's unpopular conclusion that this naval officer's men had engaged in cannibalism while stranded in the Arctic after he and his crew left the HMS *Erebus* and *Terror*. For 10 points, name this 19th-century British explorer who disappeared with his men during the last of several unsuccessful expeditions to find the Northwest Passage.

ANSWER: John Franklin

2. Ditolylguanidine and 4-PPBP bind to a receptor previously thought to serve as a receptor for these compounds. The anti-diarrheals eluxadolone and loperamide bind to receptors for these compounds. These compounds are the most common identified by a mixture of sulfuric acid and molybdic acid called the Froehde reagent. Prolonged exposure to this class of compounds can result in hyperalgesia. Enkephalin and nociceptin are endogenous examples of these compounds. These compounds bind to a class of G protein-coupled receptors with mu, kappa, and delta varieties. The effects of these compounds are blocked by naloxone and naltrexone. The binding of these compounds to their mu receptors is believed to prevent nociceptive neurons from releasing substance P, causing analgesic effects. For 10 points, methadone and codeine are examples of what type of compound that acts on the same receptors as morphine?

ANSWER: opioids [or opiates; prompt on "narcotics"]

3. In an essay responding to this work of philosophy, the author gives the example of approaching someone with his hands cupped around nothing and saying that "this is a fine red one." That response to this work is criticized for focusing only on referential use, while this work is criticized for focusing only on attributive use, in a paper by Keith Donnellan that analyzes a statement about the man who murdered Smith being insane. This essay is critiqued using the Wittgensteinian conception of "meaning" as "use" in a P. F. Strawson paper whose title alludes to this essay. This essay introduces the distinction between "primary" and "secondary" occurrences to resolve a puzzle about George IV's curiosity. This essay holds that assertions partly of the form "there exists an x such that x is a C , and x is a " are disguised in sentences such as "the present king of France is bald." For 10 points, a theory of definite descriptions is laid out in what Bertrand Russell essay?

ANSWER: "On Denoting"

4. A trip to this city, which an artist viewed as a "homecoming of sorts," was chronicled in a book by Christopher Benfey. In a book about the "business of art," Marilyn Brown wrote that the sale of a painting made in this city to the Museum of Fine Arts marked a turning point toward financial viability for its artist. Paintings made in this city include one of two women singing to each other while a man plays piano, titled *The Song Rehearsal*, and a depiction from the inside of a house of *Children on a Doorstep*. An artist produced a painting of a blind woman arranging flowers, titled *Portrait of Estelle*, and complained of his own advancing vision problems in a letter to Henri Rouart while staying with his brothers and cousins at a house on Esplanade Avenue in this city. A painting made in this city during an 1872-73 trip shows Michel Musson inspecting product on a table while his cousin, the artist's brother René, reads the *Daily Picayune*. For 10 points, name this city where Edgar Degas painted a "cotton exchange."

ANSWER: New Orleans, Louisiana [accept answers mentioning New Orleans Cotton Exchange or New Orleans Cotton Office or similar translations]

5. A poem by Galway Kinnell compares eating this fruit to writing poetry using "certain peculiar words," meaning "many-lettered, one-syllabled lumps, / which I squeeze, squinch open, and splurge well / in [a] silent, startled, icy" language. Another poem rejects the notion that the word for this fruit "is elegy to what it signifies," instead choosing to revel in the memory of a woman the speaker once made love to and "moments when the body is as numinous / as words, days that are the good flesh continuing." Robert Hass's poem "Meditation at Lagunitas" ends by recalling the tenderness of afternoons and evenings when he would say the word for this fruit over and over again. A third poem about this fruit says that "summer's blood was in it" and laments that "each year I hoped they'd keep, knew they would not" when a "rat-grey fungus" spoils this fruit. A poem in Seamus Heaney's *Death of a Naturalist* in which the speaker's palms are "sticky as Bluebeard's" is about picking, for 10 points, what dark fruit that grows on bushes?

ANSWER: blackberry [or blackberries; accept "Blackberry Eating" or "Blackberry-Picking"]

6. A garrison of troops stationed on an island in this body of water inducted the first black Freemasons, led by Prince Hall, into the order. In response to military action in this body of water, sympathetic legislators led by Robert Carter Nicholas introduced a bill proposing a “Day of Fasting” to be held on June 1. Islands within this body of water were used to detain natives forcibly removed from “praying towns” such as Natick and some inhabitants of the Dedham Grant. A large amount of “Bohea” ended up in this body of water in an event whose planners met in the Green Dragon Tavern. An anonymous play titled *The Blockheads* was written, possibly by Mercy Otis Warren, after this body of water was blockaded under the terms of the Port Act, which was passed by Lord North’s government along with the other Intolerable Acts. For 10 points, name this body of water where, on December 16, 1773, the Sons of Liberty held a so-called “Tea Party.”

ANSWER: **Boston Harbor** [prompt on “**Boston**”; prompt on “**Massachusetts Bay**”]

7. In fluid mechanics, additional mass or inertia added to a system when a moving body accelerates is referred to by this adjective. In atmospheric thermodynamics, this adjective denotes the temperature at which a parcel of dry air would have the same density as a corresponding parcel of moist air. Particles described by this adjective are responsible for an attractive force proportional to “cross-sectional area divided by the fourth power of distance.” On short timescales, the time-energy uncertainty principle allows particle-antiparticle pairs described by this adjective to form, which explains the Casimir effect. In mechanics, displacements consistent with the kinematic constraints of the system are denoted by this adjective, and the work denoted by this adjective must be zero in equilibrium. For 10 points, give this adjective that also denotes the images formed by objects placed inside the focal length of a converging lens, which are contrasted with real images.

ANSWER: **virtual** [accept **virtual** mass or **virtual** inertia or **virtual** temperature or **virtual** particles or **virtual** displacement or **virtual** work or **virtual** image or other specific answers mentioning **virtual**]

8. The Japanese ancestry of one prosecutor in this investigation has led to the popular ditty “oh my God, I am politically dead! Knocking at my door is the Japanese fed.” This investigation, which rocketed Newton Ishii to national prominence, is the subject of a book by Deltan Dallagnol, who had a leading role in this investigation. This investigation uncovered that some 40 million dollars in illicit money was being hidden in a shell company called Jesus.com and that the world’s largest meat company, JBS, had paid some 185 million dollars in bribes. This investigation originally focused on *doleiros* but has expanded to include a former president whose lawyers claim he is too old to have to answer to charges. As a result of this scandal, thousands of layoffs have hit employees of the oil company Petrobras. For 10 points, identify this “operation” that has uncovered massive money laundering in Brazil and that is named for the fact that a service station was used to move illicit payments.

ANSWER: Operation **Car Wash** [or Operação **Lava Jato**; prompt on “ongoing **corruption investigation in Brazil**” or similar answers before “Brazil”]

9. The theory that rituals based on this substance constitute a millennia-old pan-continental religious tradition is found in Jordan Paper’s 1988 book on “offering” this substance. Dabbing the body with this substance, which is typically produced from *sema* or one of the other three items represented on the traditional medicine wheel, is a ritual known as “smudging.” Southwestern Minnesota contains a national monument preserving sacred grounds from which catlinite was quarried to make items used to produce this ritual substance. This substance, which was produced using a *chanupa* passed down from White Buffalo Calf Woman among the Lakota, was often produced from a mixture including willow bark that was known as kinnikinnick. The calumet ceremony culminated in two unrelated groups forging kinship bonds by sharing, for 10 points, what Native American ritual substance produced using a ceremonial tobacco pipe?

ANSWER: **smoke** [accept tobacco **smoke** or **Offering Smoke**; accept answers mentioning forms of the word **smoke**; prompt on “**tobacco**” before “tobacco”]

10. In the first chapter of this work, the ostentatiously sombre mood of a visit is interrupted when a man struggles with his squeaky seat and a woman catches the lace of her mantilla on a table. The protagonist of this work contrasts himself, with all his “feelings and thoughts,” with the mortal man “Caius” in a syllogism from Kiesewetter’s *Logic*. A character in this work enlists the man who carries out his stool every night to stand for hours at a time holding his legs over his shoulders. While the protagonist’s thoughts return to the question of whether he has lived as he “ought” to in the last scene of this story, his thrashing hand strikes the face of his son, who seizes and kisses it. This story opens with the colleagues and vint-playing companions of the protagonist reading a news item in the *Gazette*. This novella’s title character is cared for by the young servant Gerasim during an illness that begins when he falls while hanging curtains. For 10 points, name this novella about the demise of a judge, by Leo Tolstoy.

ANSWER: *The **Death of Ivan Ilyich*** [or ***Smert’ Ivána Ilyichá***]

11. Before a military action in this city, a group known as the Parasol Battalion performed drive-bys in a heavily modified Opel Kapitän. Insurgent filmographers in this city captured footage that was made into newsreels shown in the Palladium cinema. Boy scouts in this city removed a plaque containing information about the nationality of an astronomer. Those boy scouts in this city, known as the Gray Ranks, made the first use of a mark that joins the letters P and W, which resembled an anchor and symbolized the longer message “we shall avenge Wawer.” This city was where people who hunkered down in the rubble after a military action were dubbed “Robinson Crusoes.” Jürgen Stroop’s command of part of this city was challenged in an action that included the gassing of a bunker known as Mila 18. Operation Tempest, the largest European resistance movement action against Nazi occupation, was centered on, for 10 points, what capital city that was also the site of a 1943 uprising in its Jewish ghetto?

ANSWER: Warsaw [or Warszawa; accept Warsaw Uprising or Powstania warszawskiego or Warsaw Ghetto Uprising or Powstanie w getcie warszawskim]

12. The oboes join the bass soloist in an air from a piece of this type in which a ground bass represents the title “machine,” likely referring to the organ. Another piece of this type contains a countertenor duet that exhorts “sound the trumpet” and “on the sprightly hautboy (OH-boy) play.” That piece of this type survives only in a copy edited by Robert Pindar with several dubious scoring choices and contains the countertenor aria “Strike the viol, touch the lute.” The bass aria “Bacchus, ever fair and young” appears in a piece of this type which centers on Timotheus’s legendary entertainment of the title character. John Dryden provided the lyrics for a John Blow piece of this type following the death of the latter’s former student, who had previously written several, such as “Come Ye Sons of Art” for the birthday of Queen Mary II. For 10 points, name these pieces exemplified by Handel’s *Alexander’s Feast* and Henry Purcell’s “Hail! Bright Cecilia,” both written for that saint’s feast day.

ANSWER: odes [accept Ode to St. Cecilia or Ode for Queen Mary’s Birthday]

13. In tandem mass spec, a fragmentation mode consisting of one of these phenomena that occurs alpha to a carbonyl competes with the McLafferty rearrangement. This process may immediately be undone in a cage rearrangement if the products of this process do not escape a solvent cage. An inner-sphere electron transfer that results in this process transfers a halogen from a carbon to a metal center in ATRP polymerization. Radiative events that follow one of these processes may have a quantum yield of up to two. The enthalpy change due to this process defines the bond-dissociation energy. This process can be represented by a pair of fishhook arrows pointing away from a bond and typically forms the radicals needed for radical initiation. Peroxides readily undergo this process in the presence of light or heat. For 10 points, name this process in which a bond is broken and each bonded atom receives one of the electrons.

ANSWER: homolytic cleavage(s) [accept homolysis; accept homolytic fission; prompt on “bond cleavages” or “scission” or “radical initiation”; prompt on any answer indicating “formation of radicals”; prompt on any answer indicating “a bond is broken” or “bond breaking” before “broken”]

14. The first of these conflicts was sparked by a forged telegram that read, “In three months’ time all of you will come round and enjoy the work you have done,” and threatened signing a document for self-determination, which was circulated by Reverend Saturlino. During both of these conflicts, a movement named for a word for “snake venom” was led by Gordon Muortat Mayen, who was implicated in a scandal for commandeering arms from Israel and replaced by his chief of staff, Joseph Lagu. Those two guerilla groups, known as Anyanya I and Anyanya II, fought in these conflicts together with an army under John Garang, which opposed the designs of president Gaafar Nimeiry to seize control of border oil fields. These conflicts, which began in 1955, were interrupted by an eleven-year period of peace under the Addis Ababa Accord. For 10 points, name these internal conflicts that resulted after the 1947 Juba Conference failed to quell north-south tensions in a North African country.

ANSWER: Sudanese civil wars [accept First Sudanese Civil War or Second Sudanese Civil War; accept any answer mentioning civil wars or civil conflicts in Sudan; accept Anyanyas or Anyanya I or Anyanya II before “Anyanya”]

15. This book's narrator recalls his mother's gift of a four-foot-long pencil that was displayed in the window of a stationary shop. The images of a "cradle" that "rocks above an abyss" and of existence as a "brief crack of light between two eternities of darkness" open this book, which recalls an excursion to Biarritz in which the narrator becomes infatuated with a girl called Colette. Its chapter "Lodgings in Trinity Lane," which is framed by two episodes in which the narrator destroys his tutor's tea set, describes how the narrator often played goalkeeper in soccer games at Cambridge. This book ends with the narrator about to board a steamship bound for America, includes the chapter "Mademoiselle O," and was first published in 1951 under the U.S. title *Conclusive Evidence*. The narrator directly addresses his wife, Vera, in this book that recounts a loss of country resulting from the Russian Revolution and frequent excursions to hunt butterflies. For 10 points, name this memoir by Vladimir Nabokov.

ANSWER: Speak, Memory [or Drugie berega; or Other Shores; accept Conclusive Evidence before "Conclusive"]

16. *Description acceptable.* According to al-Tabari, prior to this event, its principal figure gave camels to his family, after which 'Abd al-Rahman ibn 'Awf redistributed those camels to the general public. The account of Sayf ibn 'Umar claims that the group that carried out this event was led by a Jewish convert named Abdullah ibn Saba'. Na'ila lost her fingers as a result of this event, which did not happen while its intended victim was praying but did allegedly occur while he was reading from the Qur'an. This event was perpetrated by a group of Egyptian soldiers who had come to Medina as a result of their grievances regarding the distribution of war booty and government favoritism toward the Umayyad family. After this event, that victim's cousin Mu'awiyah rose in revolt in the First Fitna against 'Ali, who succeeded this event's victim as caliph. For 10 points, identify this event that violently ended the reign of the third caliph.

ANSWER: assassination of Uthman [accept answers mentioning Uthman ibn Affan or Osman and the idea that he was killed or murdered]

17. This place lends its name to an ancient sculpture that supposedly inspired a later artist to say, "Truly, this was created by a man who was wiser than nature!" An ancient bronze sculpture of a pinecone lends a nickname to one section of this place found below the Pirro Ligorio-designed *nicchione*, the largest niche built since antiquity. The poses of Goya's *This Is Worse* and Michelangelo's St. Bartholomew in *The Last Judgment* were inspired by an ancient sculpture named after this place that Julius II repeatedly asked Michelangelo to repair. A Greek god's robe is draped over his outstretched arm in a copy of a Leochares statue named for being displayed in this location along with *Laocoon and His Sons*. This outdoor location composed of a series of terraces was constructed from Donato Bramante's designs. The Pio-Clementine Museum now displays sculptures of Apollo and a "torso" named after, for 10 points, what Vatican courtyard?

ANSWER: Belvedere Courtyard [or Cortile del Belvedere; accept Apollo Belvedere or Belvedere Torso; accept Villa Belvedere; do not accept or prompt on "Belvedere Palace"]

18. The definitive reference text on these things, which was updated in 2014 with the aid of Jolene Smyth and L. M. Christian, was originally written in 1978 and is centered on Don Dillman's "tailored design" approach. In a 1992 paper, John Zaller and Stanley Feldman make 17 deductions from the three axioms, including "ambivalence" and "accessibility," to theorize why these things sometimes produce "instability" over time. Harvard professor Donald Rubin wrote a textbook on using the estimation technique of "multiple imputation" to avoid bias in these things. "Contrast effects" and "consistency effects" can affect these things, which can also exhibit "mode effects" such as the differential impact of social desirability bias. In the written mode, these things are often constructed using a Likert scale. "Response effects" and "nonresponse bias" are among the methodological concerns when analyzing the results of, for 10 points, what lists of questions that often solicit opinion data?

ANSWER: surveys [accept polls or opinion polls or censuses; accept answers mentioning survey responses or polling responses; accept questionnaires before "questions"; prompt on "tests"; prompt on "questionnaires" after "questions"]

19. The transit time in these devices is reduced by a factor of up to two in the Webster effect, which occurs under high-level injection. One region of these devices lends its name to an "injection efficiency," which is one when all injected charge carriers are of the appropriate type. The I-V ("eye vee") curve for these devices is approximately linear in the saturation regime, and families of I-V curves for these devices are plotted on a logarithmic scale on a Gummel plot. These devices are approximated by two back-to-back diodes in parallel with controlled current sources in the Ebers-Moll model. These devices are categorized as PNP or NPN depending on the doping of their three regions, which are called the "emitter," "base," and "collector." For 10 points, name these devices whose current consists of both moving holes and electrons, in contrast to "field-effect" devices of the same general type.

ANSWER: bipolar junction transistors [or BJTs; prompt on "transistors" or answers mentioning "bipolar junction" that do not mention "transistor(s)"]

20. A character in this story is contemplating the prospect of monogamous marriage when he makes a tasting motion with his mouth and remarks, "Must get a bit stale, I should think." That character in this story peppers his speech with ostentatious French, such as calling the bartender *garçon* and swearing by his *parole d'honneur*. The protagonist of this story examines an old photo of his wife and recalls how nervous he was when he overpaid for the blue blouse she was wearing. Its protagonist admires the melancholy style of Lord Byron's "On the Death of a Young Lady" and dreams that critics will praise his own sappy writing as possessing the "Celtic Note." Feeling that he is a "prisoner for life" in his dull marriage, the protagonist of this story shouts, "Stop!" at his crying child after returning home from a meeting with his London-based journalist friend Ignatius Gallaher. For 10 points, what story from James Joyce's *Dubliners* centers on aspiring poet Thomas Chandler, who is called by a diminutive nickname?

ANSWER: "A Little Cloud"

Bonuses

1. This author of the novel *The Venetian Glass Nephew* asked her husband, “Is that all it is?” before dying of a stroke in 1928, in the middle of editing her book *Angels and Earthly Creatures*. For 10 points each:

[10] Name this New Jersey-born poet who wrote that “we’ll swim in milk and honey till we drown” and that “down to the Puritan marrow of my bones / there’s something in this richness that I hate” in her poem “Wild Peaches.”

ANSWER: Elinor **Wylie** [or Elinor Morton **Hoyt**]

[10] This woman published some of Wylie’s earliest poems, such as “Velvet Shoes.” She supported many American modernist poets through her role as founder and editor of *Poetry* magazine, which now runs a blog named for her.

ANSWER: Harriet **Monroe** [prompt on “**Harriet**”]

[10] Early on, this poet worked closely with Monroe and went as far as to accept her suggestion that he remove three stanzas from his poem “Sunday Morning.” He also wrote “Thirteen Ways of Looking at a Blackbird.”

ANSWER: Wallace **Stevens**

2. This artist earned a commission from his brother’s business partner to paint a portrait of two older children, one of whom holds a toy whip, pulling their youngest sibling through a garden in a wagon. For 10 points each:

[10] Name this German painter whose *The Hülsenbeck Children* was painted about four years before small and large versions of a scene showing a nude woman walking toward the viewer surrounded by a lavish, mythologically themed border, both titled *The Morning*.

ANSWER: Philipp Otto **Runge**

[10] Runge carried on an extensive correspondence with this polymath about color theory. This leading German Romantic summarized his own views in *Theory of Colors*, which influenced the design of Colombia’s flag.

ANSWER: Johann Wolfgang von **Goethe**

[10] Goethe’s color theory greatly influenced this artist, who added the parenthetical “Goethe’s theory” to a painting depicting “light and colour” on “the morning after the deluge” when Moses wrote the Book of Genesis. He also used the dominant colors of red, yellow, and blue in *War: The Exile and the Rock Limpet*.

ANSWER: J. M. W. **Turner** [or Joseph Mallord William **Turner**]

3. Under certain conditions, performing a Galilean transformation on this equation results in the simple diffusion equation. For 10 points each:

[10] Name this equation that describes the time evolution of the probability density function for a stochastic process, which this equation says is equal to the sum of drift and diffusion terms.

ANSWER: **Fokker-Planck** equation [accept **forward Kolmogorov** equation; prompt on “**Kolmogorov** equation” or “**master** equation”]

[10] The Fokker-Planck equation can be combined with the Langevin equation to model the time-dependent behavior of this process, which consists of the random motion of particles suspended in a fluid.

ANSWER: **Brownian** motion

[10] The Fokker-Planck equation can be rewritten as a continuity equation by equating the time derivative of the distribution with the right-hand side as the divergence of this quantity.

ANSWER: **probability current** [or **probability flux**; prompt on “**current**” or “**flux**”]

4. This man was mocked posthumously for screaming while waiting for the guillotine, which his executioners stopped inches above his neck four times as a joke before letting it behead him. For 10 points each:

[10] Name this leader of the “Exaggerators,” the ultra-radical editor of the periodical *La Pere Duchesne*, whose followers converted 2,000 French cathedrals into “temples” that promoted his “Cult of Reason.”

ANSWER: Jacques-Rene **Hebert**

[10] To replace Hebert’s atheistic “Cult of Reason,” Maximilien Robespierre created this less radical state religion, a “cult” dedicated to a generic divinity.

ANSWER: Cult of the **Supreme Being** [or Culte de l’**Être Suprême**]

[10] Hebert gained influence within this revolutionary club, which required a lower fee from members than the Jacobin Club. Camille Desmoulins challenged Hebert’s faction in a periodical named for the “old” version of this club.

ANSWER: **Cordeliers** Club [accept *Le **Vieux Cordelier***]

5. Kenneth Williams worked with this psychologist on experiments in which infant rats were put through mazes and retained problem-solving skills into adulthood, which helped inspire the Head Start program. For 10 points each:

[10] Name this Canadian psychologist whose 1949 book *The Organization of Behavior* introduced a postulate about neurons, now thought to be correct, that is often summarized as “cells that fire together wire together.”

ANSWER: Donald **Hebb** [or Donald Olding **Hebb**; accept **Hebb**'s postulate or **Hebb**'s rule or **Hebbian** learning]

[10] Hebb's insight flowed from the idea of the “perception-action cycle,” which traces to this American psychologist's paper criticizing “The Reflex-Arc Concept in Psychology.”

ANSWER: John **Dewey**

[10] Hebb's postulate was influential on David Marr's attempt to create a computational model of this one of the five human senses, which Eleanor Gibson tested in infants using a simulated “cliff.”

ANSWER: **vision** [or **eyesight**; or **visual** faculty; accept **visual** cliff]

6. Stephen Sondheim praised the “cleverness, humor, even a pseudo-aphoristic grace” of British examples of these things and singled out the one in *The Listener* as particularly worthy of praise. For 10 points each:

[10] Name these things that Sondheim, on the request of Gloria Steinem, produced for *New York* magazine in the late 1960s.

ANSWER: **crossword** puzzles [or **crosswords**; accept cryptic **crosswords** or **crucigram**(a)s; prompt on “**puzzles**”]

[10] In 1942, people who solved the *Daily Mail*'s crossword in a matter of minutes were secretly invited to join the British cryptanalysts at this “park,” where Alan Turing was trying to break the Enigma code.

ANSWER: **Bletchley** Park

[10] Fred Jesson is obsessed with crosswords, to the detriment of his marriage, in the David Lean film *Brief Encounter*, whose screenplay was written by this playwright and based on his play *Still Life*. He also wrote the play *Hay Fever*.

ANSWER: Noël **Coward** [or Noël Peirce **Coward**]

7. Answer the following about audience participation in Latin American theater, for 10 points each.

[10] In the “Forum Theatre” developed by this country's Augusto Boal (ow-GOO-stoh boh-AHL), the audience can stop the play to suggest actions to the characters. Under Boal, the Arena Theater troupe often performed in this country's *favela* slums.

ANSWER: **Brazil** [or Federative Republic of **Brazil**; or República Federativa do **Brasil**]

[10] The audience is led through a house in Griselda Gambaro's site-specific play about this period, *Information for Foreigners*. Nathan Englander's *The Ministry of Special Cases* and Luisa Valenzuela's story “I'm Your Horse in the Night” are about this period.

ANSWER: **Dirty War** [or **Guerra Sucia**; prompt on “forced disappearances in Argentina” or similar answers; prompt on the “dictatorship in Argentina” or similar answers]

[10] The audience is forced to look at themselves in a giant mirror that descends onto the stage in Act III of this Chilean author's play *Death and the Maiden*.

ANSWER: Ariel **Dorfman** [or Vladimiro Ariel **Dorfman**]

8. This phrase, which likely found its first use in the work of G. W. F. Hegel, makes up the adverbial part of the Edmund Husserl concept of the “immer schon da.” For 10 points each:

[10] Name this two-word adverbial phrase, popularized by Martin Heidegger and Jacques Derrida, that denotes the ever-present existence of a concept or condition.

ANSWER: **always already**

[10] Lisa Gitelman's 2006 book *Always Already New* traces new media through the development of this system from ARPANET. Sociologists have studied the “social implications” of this system, including the “digital divide.”

ANSWER: **internet** [or world wide **web**; accept any answer indicating **cyberspace** or **online** or similar]

[10] Paul Ricoeur wrote that this concept applies to human experience, which “is always already symbolically mediated,” in a book about “time” and this concept.

ANSWER: **narratives** [or **récit**; accept **Time and Narrative** or **Temps et récit** or **narratology** or other forms of the word **narrative**; prompt on answers mentioning “story” or “stories” or similar]

9. These entities can be isolated through the use of a cold 1% Triton X-100 solution, which has led to them being called Triton-insoluble membranes or detergent-resistant membranes. For 10 points each:

[10] Name these liquid-ordered microdomains of the plasma membrane that contain large amounts of cholesterol and glycosphingolipids.

ANSWER: **lipid rafts**

[10] These proteins are named for a subtype of lipid raft that consists of an invagination in the membrane. These integral proteins assist in receptor-independent endocytosis; the third member of this family is found only in smooth and striated muscle.

ANSWER: **caveolins**

[10] Lipid rafts restrict the lateral diffusion predicted by this model of the cell membrane as a lipid bilayer containing embedded proteins, which was proposed by S. J. Singer and G. L. Nicolson.

ANSWER: **fluid mosaic** model

10. This author's book *Means of Ascent* deals with the 1948 Texas primary lost by Coke Stevenson. For 10 points each:

[10] Name this author whose 2012 book, *The Passage of Power*, is the fourth in an ongoing biographical series.

ANSWER: Robert **Caro** [or Robert Allan **Caro**]

[10] Caro's as-yet-unfinished fifth book in that series will focus on the presidency of this Texan, whose time as majority leader in the late 1950s and early 1960s was documented in Caro's *Master of the Senate*.

ANSWER: Lyndon **Johnson** [or Lyndon Baines **Johnson**; or **LBJ**]

[10] In an April 2018 talk, Caro said that the sweep of Johnson's presidency could be traced from the hopefulness of "We Shall Overcome" to the despair of this protest song, which was notoriously censored by CBS during a 1967 performance on *The Smothers Brothers Comedy Hour*.

ANSWER: "**Waist Deep in the Big Muddy**" [by Pete Seeger]

11. A Francis Perkins book treats Gottfried Leibniz's interest in this country, with which he wanted to establish a "commerce of light." For 10 points each:

[10] Name this country, whose "natural theology" is the subject of a discourse by Leibniz. Leibniz also corresponded with the Jesuit Joachim Bouvet about hexagrams used for divination in this country.

ANSWER: **China**

[10] Part I of *Discourse on the Natural Theology of the Chinese* ends by arguing that Chinese philosophy contains this Leibnizian doctrine, which holds that mind and body do not interact, but appear to because they have been synchronized by God.

ANSWER: principle of **pre-established harmony**

[10] This thinker delivered the 1721 *Speech on the Ethics of the Chinese* as his farewell address to the University of Halle. This leader of the German Enlightenment is traditionally seen as the link between Leibniz and Kant.

ANSWER: Christian **Wolff**

12. Hector Berlioz was inspired to use these instruments after seeing them in the Pompeiian museum in Naples. For 10 points each:

[10] Name these pitched percussion instruments consisting of small metal discs, which Berlioz introduced to the orchestra in the "Queen Mab Scherzo" of his *Romeo and Juliet* symphony.

ANSWER: **crotales** [accept **antique cymbals** or **ancient cymbals**; prompt on "cymbals"]

[10] Berlioz also found a place for this unusual percussion instrument in his opera *Benvenuto Cellini*. Giuseppe Verdi featured them in the chorus "Vedi! Le fosche notturne spoglie" from *Il Trovatore*, in which gypsies strike them to welcome dawn.

ANSWER: **anvils**

[10] Berlioz's percussion innovations include greatly expanding the possibilities of the timpani, as in this third movement of *Symphonie fantastique*, which calls for four players to play chords and simulate thunder.

ANSWER: "**Scène aux champs**" [accept "**Scenes** in the **Fields**" or "**Scenes** in the **Country**"]

13. Answer the following about 20th-century Italian short fiction, for 10 points each.

[10] Rosario recounts his affair with a mermaid in a Giuseppe Tomasi di Lampedusa story titled for “the professor and” one of these figures. In the *Odyssey*, Odysseus ties himself to his mast in order to listen to these figures.

ANSWER: Sirens [or Seirenes]

[10] People in one of these places argue about the deaths of their sons on the front in Luigi Pirandello’s story “War.” The title novel-within-a-novel opens with a man waiting for someone to exit one of these places in Calvino’s *If On a Winter’s Night a Traveler*, whose 1981 Harcourt edition has one of these things on its cover.

ANSWER: trains [accept answers such as train cars or railcars or locomotives; accept train stations]

[10] In a Tommaso Landolfi story about this 19th-century author’s “wife,” this man is married to an inflatable rubber doll named Caracas, whose rubber son he throws in a fireplace at the story’s bizarre climax.

ANSWER: Nikolai Gogol [or Nikolai Vasilievich Gogol; accept “Gogol’s Wife”]

14. This company first published a set of guidelines known as its namesake “way” in 2001, although its policy of *kaizen*, or continuous improvement, had been in place for decades. For 10 points each:

[10] Name this Japanese company whose namesake “production system” was originally called “just-in-time.” This company developed the Kanban system for scheduling.

ANSWER: Toyota Motor Corporation [or Toyota Jidosha KK]

[10] Toyota benefited from the efforts of this woman, an American economist tasked with breaking up the *zaibatsu* in postwar occupied Japan, paving the way for the rise of the *keiretsu* system in which Toyota thrived.

ANSWER: Eleanor Hadley [or Eleanor Martha Hadley]

[10] Toyota established its first offshore manufacturing facility, in Australia, during this “golden” decade of Japan’s postwar “economic miracle.” Tokyo hosted the Summer Olympics in the fifth year of this decade, four years before the Mexico City Olympics.

ANSWER: 1960s [accept sixties]

15. A method of determining this quantity puts a sample in a capillary tube, which is then placed over a heated plate, and recording when the desired transition occurs when viewed through a lens. For 10 points each:

[10] Name this temperature at which a substance changes from a solid to a liquid.

ANSWER: melting point [accept freezing point]

[10] By assuming that every atom in a crystal vibrates at the same frequency, one can derive an expression to predict the melting point of a bulk crystal using this assumption that melting occurs when the RMS amplitude of vibration exceeds some threshold related to atomic spacing.

ANSWER: Lindemann’s criterion

[10] Carnelley’s rule states that molecules with higher symmetry will have a higher melting point, a textbook example of which is this five-carbon alkane that melts at a higher temperature than its “n” and “iso” counterparts.

ANSWER: neopentane

16. As retribution for this woman’s actions, Artemis sent a plague and famine to the lands near Patrae, whose people were instructed by the Delphic oracle to sacrifice a youth and maiden every year onward. For 10 points each:

[10] Name this priestess who slept with her lover, Melanippus, in the temple of Artemis. She shares her name with a Taphian princess who betrayed her people to Amphitryon by cutting off her father’s golden hair.

ANSWER: Comaetho [or Komaitho]

[10] The sacrifices at Patrae stopped after Eurypylyus arrived there with an image of this god. Eurypylyus was himself cured of the madness that struck him when he first discovered the sculpture of this Greek god of wine and revelry.

ANSWER: Dionysus [or Dionysos]

[10] Like the second Comaetho, Scylla helped this man sack Megara by removing a magical lock of purple hair from her father’s head. As she swam after this man’s ship, Scylla was attacked by her father in the form of a sea-eagle.

ANSWER: Minos

17. Poles displaying this animal were originally supplemented by ones displaying wolves, ox-men, horses, and boars before those were phased out under Gaius Marius. For 10 points each:

[10] Name this animal that was displayed at the top of poles carried by standard-bearers and that symbolized the Roman legion.

ANSWER: eagles [or aquilae]

[10] At this battle in modern-day Turkey, a Roman standard was lost when Emperor Valerian was captured by the Sassanids under Shapur I. The Second Crusade was called after the site of this battle was captured by Zengi in 1144.

ANSWER: Battle of Edessa [accept Siege of Edessa or capture of Edessa or County of Edessa]

[10] While the symbol of the legion was the eagle, the symbol of the cohort was this standard, which emitted a shriek as wind passed into the cloth tube at its back. It was taken from a conquered people led by Decebalus.

ANSWER: Dacian draco [or the Dacian dragon; prompt on “Dacian serpent”]

18. This novel’s narrator analogizes egoism to a candle illuminating a “pier-glass” that is “scratched in all directions.” For 10 points each:

[10] Name this novel whose famously intrusive narrator notes that, “if we had a keen vision and feeling of all ordinary human life, . . . we should die of that roar which lies on the other side of silence” while describing a woman sobbing on her honeymoon in Rome.

ANSWER: Middlemarch, *A Study of Provincial Life*

[10] In the first sentence of Chapter 29, the narrator breaks off a sentence about Dorothea Brooke to ask, “But why always Dorothea?” and proceeds to delve into the consciousness of this character, who is writing *The Key to All Mythologies*.

ANSWER: Edward Casaubon [accept either underlined name]

[10] In another aside, the narrator contrasts “we belated historians” with this self-styled “great historian,” the 18th-century author of *Tom Jones*.

ANSWER: Henry Fielding

19. This is the smallest projective plane such that distinct points P and Q will both be on a distinct line L , that every pair of lines intersects in a point, and that there are three points on each line. For 10 points each:

[10] Name this projective plane over the finite field with two elements, which consists of seven lines and seven points.

ANSWER: Fano plane

[10] For an affine plane of order n , adjoining $n + 1$ points at this location will form a projective plane. The Alexandroff one-point compactification adds one point at this location.

ANSWER: infinity [accept at an infinite distance]

[10] Forming that projective plane involves adjoining the points at infinity to each pencil of this type of line. In an affine plane, the axiom of this name states that if a point P is not contained in a line L , there is a unique line M such that P is in M and M has this property with respect to L .

ANSWER: parallel

20. In this show, Reno Sweeney predicts that even a sniff of cocaine would bore her in “I Get a Kick Out of You.” For 10 points each:

[10] Name this classic musical set aboard an ocean liner that contains the hit song “You’re the Top.”

ANSWER: Anything Goes

[10] The music for *Anything Goes* was written by this composer, who won the inaugural Tony for best musical with *Kiss Me, Kate*.

ANSWER: Cole Porter [or Cole Albert Porter]

[10] Frank Sinatra later found success covering many of Cole Porter’s hits on Capitol Records with the help of this legendary arranger, who also arranged Great American Songbook standards for such artists as Linda Ronstadt and Ella Fitzgerald.

ANSWER: Nelson Riddle [or Nelson Smock Riddle Jr.]