2021 ACF Nationals

Packet 1 by the Editors

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## Tossups

1. This text describes a ritual in which villages put away iron implements before a touring earth goddess arrives on a cow-drawn chariot; afterwards, the goddess is cleansed in a lake by slaves, who are then themselves drowned. The "Codex Aesinas," discovered in 1902, contains portions of a 15th-century manuscript of this text first prominently analyzed by Pope Pius II. The humanist Konrad Celtis helped bring this text to prominence with an edition that removed all mentions of human sacrifice. Reactionary political actors seized on this text's claim that its subjects were "unpolluted by intermarriage." In 1943, Heinrich Himmler dispatched SS agents to retrieve the oldest surviving manuscript of this text, which deals with peoples like the Suebi, Chatti, and Marcomanni. For 10 points, name this ethnographic work by Tacitus about barbarian tribes beyond the Rhine.

ANSWER: *Germania* [or *Germany*]

- 2. Since 2010, this task has been most successfully performed using Alexander Yee's y-cruncher software. Rabinowitz and Wagon coined the term "spigot algorithm" for algorithms that can perform this task at an arbitrary starting point. The difference of two arctan functions performs this task in Machin-like formulas. A series expansion of the j-function performs this task in a formula given by Bailey, Borwein, and Plouffe. One algorithm used to perform this task relies on an identity derived from a Ramanujan-Sato series; that is the Chudnovsky algorithm. This task can be performed by dropping needles on lines and relating the number of drops to hits in Buffon's problem. Archimedes' method for this task relies on bounding a shape using two polygons: one circumscribed and one inscribed. For 10 points, name this task of attempting to quantify the ratio of a circle's circumference to its diameter. ANSWER: approximating pi [or calculating pi] or other equivalents]
- 3. Daniel Day-Lewis built one of this non-British fashion designer's dresses from scratch after his biography inspired Paul Thomas Anderson to write *Phantom Thread*. This designer worked with the Abraham company to develop a type of silk as stiff as aluminum called "gazar," which he used for his kimono-like "tulip dress." After experimenting with the "cocoon" jacket and "square coat" in the 1940s, this mentor of Oscar de la Renta and Hubert de Givenchy eliminated waists entirely from his 1957 "baby doll" dress and "sack" dress. This designer, whom Christian Dior called "the master of us all," took inspiration from his home country with creations based on Catholic clerical mantles and a 1939 dress based on the princess in *Las Meninas*. For 10 points, name this avant-garde dressmaker, the most famous fashion designer from Spain, whose company logo is a pair of back-to-back Bs. ANSWER: Cristóbal **Balenciaga** Eizaguirre
- 4. In a 2019 book, *New York Times* reporter Ian Urbina noted that these objects make heavy use of polluting "magic pipes." Residents of Red Hook, Brooklyn have complained that a Bloomberg-era power station for these objects has been used only about 30% of the time, raising asthma rates. A legal loophole has made Ogden Point in Victoria, British Columbia an attractive site for these objects, causing a massive pollution problem due to "hotelling." Italy passed new regulations on these objects after a 2012 incident blamed on Francesco Schettino, but those regulations exempt Venice, where poor operations in the Giudecca in 2019 threatened a UNESCO World Heritage site. A think tank concluded that all the diesel cars in Europe produced ten times less sulfur emissions than a popular operator of these objects, Carnival. For 10 points, name these vehicles that might transport tourists around the Caribbean.

  ANSWER: cruise ships [prompt on passenger ships or boats] (Ian Urbina's book is *The Outlaw Ocean*.)

- 5. This author collaborated with David Lan on a dance-drama in which Doreen, possessed by Agave, dismembers Derek, possessed by Pentheus. A play by this author whose second act takes place in a dystopian hat factory ends with a monologue about a nonsensical world war with combatants like gravity, Bolivia, the weather, and mallards. This author of *A Mouthful of Birds* and *Far Away* drew accusations of antisemitism for a work subtitled "A Play for Gaza," *Seven Jewish Children*. Victoria, Lin, and Edward invoke a sex goddess before starting an orgy in a park in a play by this author that jumps settings from colonial Africa to 1979 London. In another play by this author, Pope Joan, Lady Nijo, and the Patient Griselda attend a dinner party celebrating the ruthless Marlene's promotion at the title agency. For 10 points, name this contemporary British feminist playwright of *Cloud Nine* and *Top Girls*. ANSWER: Caryl **Churchill**
- 6. This thinker drew a 5-by-5 matrix that contains 20 primordial fundamental determinations of knowing, as well as five more based on the "five-fold synthesis" derived from one of his other works. This author's review of a former student's treatise *Aenesidemus* led him to posit that "empirical representations of consciousness" allow for the creation of a system of morality. This philosopher promoted a doctrine of *Anstoss*, arguing that a certain subject must be "checked" or "limited" by an entity called the "Not-I." A book by this thinker claims that the self, or *Ich*, is the source of all knowledge; that book was derided as "nihilism" by his former ally Karl Reinhold, who later got this thinker fired from the University of Jena by accusing him of atheism. For 10 points, the *Wissenschaftslehre* ("VISS-en-shofts-LAY-ruh") system was proposed by what German idealist who wrote *An Attempt at a Critique of All Revelation*?

ANSWER: Johann Gottleib Fichte

7. Specific term required. In one story, an army of these creatures in the water made whips out of seaweed and fought another army of them on land. Before being killed, one of these creatures curses his opponent to never grow any stronger, limiting him to half the strength he would have attained, after raising a bull over his head and breaking its back on a stone wall. One of these creatures named Thrain is a cat with razor nails, while another shape-shifts into a cat that rests on a sleeping man and gets heavier until it suffocates him. The king Hrolf Krakki is killed with his berserkers after being encircled by these creatures, who are all under the command of Skuld. The most powerful of these beings, Glam, is killed by Grettir the Strong in a wrestling match after having originated as a man who got stuck to the ground in the winter snow and died. For 10 points, name these rotting corpses of Norse myth who rise from the dead and attack at night.

ANSWER: <u>draugr</u> [or <u>aptrganga</u>; or <u>aptrgangr</u>; or <u>haugbui</u>; prompt on general terms such as <u>vampires</u>, or <u>revenants</u>, or <u>night-walkers</u>, or <u>barrow-dwellers</u>, or <u>cairn-dwellers</u>]

8. A drawing of this woman is clutched by Benedetto Pesaro's wife, who wears a puffy, orange-and-green dress with fur-lined slits, in a Lorenzo Lotto painting. A Corinthian column topped by a marble statue of David with Goliath's head dominates the center of a Botticelli *spalliera* painting depicting three incidents of her life simultaneously. Rembrandt copied the pose of Caravaggio's *David with the Head of Goliath* for his painting of this woman tearfully pulling on a bell cord. One of Titian's final paintings for Philip II, a Giulio Romano-inspired *istoria*, depicts a dagger-wielding man grabbing this naked woman in her bed. The death of this woman was avenged by a man who sits brooding in the shadows in front of attendants carrying a bier ("beer") to his weeping wife in a Jacques-Louis David painting. For 10 points, name this wife of Collatinus who committed suicide after her rape by Sextus Tarquin. ANSWER: Lucretia [or Lucrezia; or Lucrece]

9. In one poem, this writer imagines learning from a neighbor's paper on the subway that the addressee had died, and vows to react only by reading "where to store furs and how to treat the hair." Another poem by this writer ends with the prediction, "Now will the god, for blasphemy so brave / punish me, surely, with the shaft I crave!" This poet wrote about an abstraction that "can not fill the thickened lung with breath, nor clean the blood, nor set the fractured bone" in a poem included in *Fatal Interview*. This poet collected six sonnets with a long poem that controversially only received fourth prize in a contest in *The Lyric Year*, which opens, "All I could see from where I stood / was three long mountains and a wood." For 10 points, name this poet of "Renascence" and the collection *A Few Figs from Thistles*, the latter of which contains a poem about a candle burning at both ends.

ANSWER: Edna St Vincent Millay

ANSWER: **iron** [or **Fe**2+; or **Fe**3+; prompt on <u>hemoglobin</u>]

10. This substance is sensed by the Sensei riboswitch. Poly-rC proteins serve as chaperones for this substance. Accessibility to DFO can be used to define the labile pool of this substance. A colloidal form of this substance is used to stain mucin and acidic mucopolysaccharides ("muco-poly-saccharides") blue. Duodenal cytochrome b acts on this substance to allow its uptake by DMT1 ("D-M-T-one"). A conserved C in the bulge connecting an upper and lower helix characterizes this substance's namesake RNA response element, which controls the mRNA stability of TFR1 and FTH1. Deferoxamine is used to treat an overload of this substance, which can cause a bronze diabetes. Methylene blue reduces the oxidized form of this substance to treat a condition that turns babies blue, called methemoglobinemia ("meth-emo-globin-emia"). For 10 points, name this element whose levels are increased in hemochromatosis ("hemo-chroma-tosis"), and which is found complexed to heme ("heem") in hemoglobin.

11. US Ambassador to Chile Edward Korry said he was blackmailed by this man for dirt on Henry Kissinger. This man was duped by Lawrence X. Cusack into believing John F. Kennedy bribed Marilyn Monroe to stay quiet about an affair; those revelations were published in his 1997 book *The Dark Side of Camelot*. This man, who was the *New York Times'* Washington correspondent during Watergate, got a tip from Geoffrey Cowan at the *Village Voice* for his biggest story. In 2015, the *London Review of Books'* website crashed after publishing a story by this man alleging that the ISI was warned about a pending raid on a complex in Abbottabad to kill Osama bin Laden. An earlier story reported by this man involved "an unspecified number of civilians" being killed by Lieutenant William L. Calley. For 10 points, name this reporter who broke the story of the My Lai ("me lie") massacre.

ANSWER: Seymour Hersh [or Sy Hersh; or Seymour Myron Hersh]

12. This man identified himself with the Bodhisattva Sadaparibhuta in his treatise *Liberation from Blindness*, which he wrote in exile after his beheading was called off due to a glaringly bright moon. This man's splenetic tirades against rival sects are summed up in his "Four Sayings," including "*Nenbutsu* leads to Avicii hell." Followers of this man interpreted the Mongol invasions of Japan as confirmation of the conveniently-vague warnings of coming disasters in his treatise *Rissho Ankoku Ron*. This man depicted the "Ceremony in the Air" episode on a calligraphic mandala called the *Gohonzon*. An enormous cult called the "Value-Creation Society" is a branch of this man's religious sect, which venerates the Lotus Sutra by chanting its Japanese title, *Namu Myoho Renge Kyo*. For 10 points, name this 13th-century Japanese monk who founded a namesake branch of Mahayana Buddhism. ANSWER: Nichiren

- 13. Late in this century, a type of cheap-to-produce ship called the fluyt ("FLIGHT") was invented, which helped stimulate the Dutch economy. According to Immanuel Wallerstein, the "long" version of this century is when the modern world-system emerged. This century included the majority of the period of inflation in Western Europe known as the price revolution, partly caused by this century's many monetary debasements. During this century, the number of cities in Europe with a population greater than 100,000 rose from five to about fourteen. During this century, agrarian revolts like Kett's Rebellion sprung up in response to the ramping up of enclosure in England. The emergence of modern capitalism is typically traced back to, for 10 points, what century in which Europe's population finally recovered after being devastated two centuries earlier by the Black Death?

  ANSWER: 16th century [or 1500s]
- 14. This city is the home of an early music male a cappella group called Suspicious Cheese Lords. A research institute and historic estate in this city commissioned Caroline Shaw's string quartet *Plan & Elevation* for its 75th anniversary. The second movement of a concerto written for that institute in this city features a jaunty stepwise F E F E-flat F motif. After defecting, Mstislav Rostropovich was the music director of an orchestra in this city. Leonard Bernstein's theatrical *Mass* was composed for the opening of a performing arts center in this city. The two-step dance was popularized by a John Phillips Sousa march written for a newspaper from this city. Nadia Boulanger ("boo-lawn-ZHAY") conducted the premiere of Igor Stravinsky's "Dumbarton Oaks" Concerto in this city. For 10 points, name this home city of the Kennedy Center and the National Symphony Orchestra.

  ANSWER: **Washington**, **D.C.** [accept either underlined part]
- 15. This operation appears multiplying the homoclinic orbit function in the integrand of the Poincare-Melnikov integral. This operation is real bilinear, skew-symmetric, and satisfies Jacobi's identity, with the consequence that smooth functions on a manifold form a Lie ("lee") algebra under this operation, which is identical to a Lie ("lee") directional derivative. The time derivative of any function on a symplectic manifold can be rewritten as the sum of the time partial of the function and this operation applied to the function and the Hamiltonian. This operation on two functions, f and g, of canonical position p and momentum q is given by the sum over the coordinates i of quantity partial-f-partial-q-sub-i times partial-g-partial-g-sub-i minus partial-f-partial-g-partial-g-partial-g-partial-g-sub-i. For 10 points, identify this operation from mechanics named for a French mathematician. ANSWER: Poisson bracket [accept Lie bracket] before mention; prompt on commutator with "what is its classical analogue?"]
- 16. The first author to translate this work became so excited upon first reading it that he tore his clothes off and ran around the room. The first German translator of this work was stripped of his professorship after he lectured on its implications in front of Wilhelm II. William Gladstone attended the reveal of this work's first translation by George Smith. The first complete translation of this work was published in Germany, where Friedrich Delitzsch used it to argue that Jesus was Aryan and Peter Jensen used it to argue that Jesus did not exist. This work, which inspired the "Babel und Bibel" controversy, was first translated in a book that focused on its fragmentary 11th section, titled *The Chaldean Account of Genesis*. That section of this work describes the building of a 120-cubit boat that gets stuck on Mt. Nimush. For 10 points, name this poem in which flood survivor Utnapishtim is visited by a certain king of Uruk. ANSWER: the Epic of Gilgamesh [accept descriptions that refer specifically to the flood tablet from the epic of Gilgamesh; prompt on the flood myth with "Which work was the flood myth found in?"]

- 17. This scholar and John Campbell co-wrote a 1988 paper from which this man developed a cyclically-averaged market metric called CAPE. He examined historical market fluctuations to argue that volatility was too large to be explained by rationality in his landmark 1981 critique of the efficient-market hypothesis titled "Do Stock Prices Move Too Much to Be Justified by Subsequent Changes in Dividends?" He warned of the impending collapse of the dot-com bubble in the first edition, and the impending collapse of the real-estate bubble in the second edition, of a 2000 bestseller that this behavior finance scholar titled after an Alan Greenspan quote. An S&P "repeat sales" index that tracks the housing market is named after Karl Case and, for 10 points, what Nobel-winning economist at Yale who wrote the 2000 book *Irrational Exuberance* and co-authored 2009's *Animal Spirits* with George Akerlof? ANSWER: Robert [James] **Shiller**
- 18. A character in this novel compares civilized men to swimmers being eaten by Brazilian piranhas and explains his theory that men have wives and pets to feel powerful upon seeing a house topped with the head of two slaves. In the final chapter of this novel, snowflakes on a windowpane are said to resemble the doves in a country's sky. The protagonist of this novel explains his "need to feel above" while bragging about his virtue for never accepting bribes. Its protagonist uses "debauchery" to suppress the nagging memories of laughter he heard on the street and the humiliation of being punched by a motorcyclist. The protagonist of this novel regrets not saving a woman he saw jumping from a bridge and compares a city's canals to the concentric circles of hell. For 10 points, name this series of monologues told from the Amsterdam bar *Mexico City* by the judge-penitent Clamence, a novel by Albert Camus. ANSWER: *The Fall* [or *La Chute*]
- 19. Opponents of this movement tried to control its influence by calling together the "Father-and-Son Cabinet" or "Great Cabinet," featuring past military heroes. This movement supported a party that cruised to victory in the "Big Stick Election," named for intimidation of opposing voters. This group's opponents ended an ongoing war by signing the Treaty of Ouchy ("ow-SHE"). Upon its final collapse, its intelligence division members reformed as the Black Arm, or Karakol. This movement was opposed by a secret society called the Savior Officers. This movement, which embroiled its nation in the Tripolitan War, rose to power at the start of the Second Constitutional Era and allied with the Committee of Union and Progress. This group was founded by a triumvirate dubbed the Three Pashas, including Enver Pasha. For 10 points, name this movement of secular activists in the years before Kemal Ataturk.

ANSWER: <u>Young Turk</u>s [or the "Party of <u>Union and Progress"</u>; accept <u>Committee of Union and Progress</u> or <u>CUP</u> or <u>Committee For Union and Progress</u> before "Committee" is read]

20. Analysis of VPDs obtained from chirped-pulse millimeter-wave spectroscopy may be used to infer the properties of these structures. Richard Bernstein was a pioneer in the observation of these structures, which have exactly one imaginary frequency. Early molecular beam experiments could not detect these structures as time-averaging resulted in poor signal-to-noise ratios. An early direct measurement of these structures was made while observing cyanogen iodide. Ahmed Zewail's 1999 Nobel in Chemistry was for a technique he pioneered for observing these structures. Because their lifetimes are on the scale of molecular vibrations, pump-probe experiments with femtosecond lasers are needed to observe these structures. For 10 points, name these short-lived structures with lifetimes shorter than reaction intermediates, defined as the highest-energy points on a reaction coordinate.

ANSWER: transition states [or activated complex]

- 1. Robert Browning's "The Lost Leader" blasts this writer for his turn towards conservatism, which is evidenced by his "Ode to Duty." For 10 points each:
- [10] Name this writer who related his political disillusionment through the story of "The Solitary" in his long poem, *The Excursion*.

ANSWER: William Wordsworth

[10] This poet lamented Wordsworth's abandonment of "songs consecrate to truth and liberty" in his poem "To Wordsworth." He gave voice to his own political ideals in such poems as "Ode to the West Wind."

ANSWER: Percy Bysshe **Shelley** 

[10] In a letter to Richard Woodhouse, Keats coined this critical two-word phrase for the way Wordsworth's "poetical character...stands alone." Keats also called himself a "chameleon poet" in contrast to this type of genius.

ANSWER: the egotistical sublime

- 2. These people's king Tirigan retreated to his capital at Dabrum after a defeat by Utu-Hengal. For 10 points each:
- [10] Name these hill people who, according to the "Curse of Akkad," barked like dogs and pushed down from the North to destroy the Akkadian empire while it was ruled by the great-grandson of Sargon the Great.

ANSWER: Gutians [or the Guti; or Quti; or Gutium]

[10] The Guti invasion coincided with the "4.2 kiloyear event" and the appearance of the Hale-Bopp one of *these* astronomical events, which later caused Heavensgate cultists to drink vodka and phenobarbital.

ANSWER: comets

[10] After defeating the Guti, the Sumerians under Ur-Nammu created this unit of silver weight, later set equal to 60 shekels. In ancient Greece, 70 drachmae equaled this unit, until it was later changed to 100 drachmae, and sixty of these equaled one Talent.

ANSWER: mina [or mene]

- 3. A 17-year-old Georges Bizet wrote a symphony in this key that wasn't premiered until 60 years after his death. For 10 points each:
- [10] Name this key. Bizet, Stravinsky, and Wagner all wrote symphonies titled for this key also used in the *Jupiter* Symphony. Its relative minor is A minor.

ANSWER: C Major

[10] Bizet modeled his Symphony in C after a Symphony in D written by his teacher, who was this composer of the operas *Mireille* ("meer-EY") and *Roméo et Juliette*.

ANSWER: Charles **Gounod** [or Charles-François **Gounod**]

[10] Bizet's Symphony in C was premiered under the baton of this Austrian conductor, who was the first to record all the Beethoven symphonies. This conductor led the Vienna Philharmonic from 1903 to 1927.

ANSWER: Felix <u>Weingartner</u> [accept Paul Felix <u>Weingartner</u>, Edler von Münzberg]

- 4. In the solid state, these materials are divided into three broad classes: glassy, semicrystalline, and network-forming. For 10 points each:
- [10] Name this general class of macromolecules, in which individual strands can assemble into networks.

ANSWER: polymers

[10] This class of network-forming polymers irreversibly forms rigid structures via "curing," usually through the application of heat. Examples include epoxy resins and Bakelite.

ANSWER: thermosetting polymers [do not accept or prompt on "thermoplastics"]

[10] Given a collection of polymers with degree of polymerization N, the critical extent of reaction needed to form an infinite network, also called the gel point, is approximately given by what function of N? You may assume that N is considerably larger than 1.

ANSWER: 1 over N [or 1 divided by N; or the inverse of N; or the reciprocal of N; or 1 over (N minus 1)]

- 5. Answer the following about intellectual "Revolutions" in American history, for 10 points each.
- [10] This agronomist, who won the Nobel Peace Prize in 1970 for his work as the father of the Green Revolution, which focused on increasing agricultural yield in developing countries using products like his dwarf wheat strain developed at Campo Atizapan.

ANSWER: Norman Borlaug

[10] Samuel Slater brought the Industrial Revolution to America, creating his first spinning mill for Moses Brown in this U.S. state. Roger Williams founded its colony after getting kicked out of Massachusetts Bay.

ANSWER: Rhode Island

[10] In 1941, James Burnham wrote about this kind of revolution, which George Orwell responded to in an essay on some "Second Thoughts." Burnham argues that FDR's New Deal drove American capitalism toward this revolution, allowing the rise of a class in control of the means of production.

ANSWER: Managerial Revolution

- 6. Answer the following about the life of Shneur Zalman of Liadi, for 10 points each.
- [10] This best-known book by Shneur Zalman, formally called the Likkutei Amarim, is the cornerstone of his Chabad philosophy of Hasidic Judaism. It is known by the Aramaic word that opens it, which refers to an oral teaching in a "baraita."

ANSWER: Tanya

[10] This leader of the Jews in Lithuania, otherwise known as Elijah ben Solomon Zalman, refused to meet with Shneur Zalman. He headed the "Misnagdim," or opponents of the Hasidim.

ANSWER: the Vilna **Gaon** [or the "**Gaon** of Vilnius"; or "**Gaon** z Wilna"; or the Ha**Gra**]

[10] Schneir Zalman was thrown in the Peter and Paul Fortress for sending money to Palestine, but allowed religious freedom by this Russian Tsar who ruled after Tsar Paul from 1801 to 1825.

ANSWER: Tsar Alexander I of Russia [prompt on Alexander]

- 7. Jamie Peck co-wrote a 2002 paper with Adam Tickell that takes a process-oriented approach to this concept's application to "space." For 10 points each:
- [10] Peck and Tickrell characterized this concept as having destructive "roll-back" and creative "roll-out" phases. ANSWER: **neoliberalism** [or "**Neoliberalizing Space**"; accept answers mentioning forms of the word **neoliberal**; do not accept or prompt on "liberalism" or answers mentioning only "liberal"]
- [10] A 2001 article by Loïc Wacquant and this sociologist calls the "newspeak" of neoliberalism a "new planetary vulgate." His book *The Weight of the World* deploys his concepts of "field" and "doxis."

ANSWER: Pierre Bourdieu

[10] Quinn Slobodian's book *Globalists* examines how the term "neoliberalism" was coined by Alexander Rüstow at the 1938 Walter Lippmann Colloquium, a gathering that inspired this Austrian arch-neoliberal and author of *The Road to Serfdom* to found the Mont Pelerin Society.

ANSWER: Friedrich <u>Havek</u> [or Friedrich August von <u>Havek</u>; or F. A. <u>Havek</u>]

- 8. One use of this assay is to isolate antigen-specific lymphocytes. For 10 points each:
- [10] Name this assay in which the release of mediators from single cells is measured by an antibody-coated well. It was developed by Cecil Czerkinsky.

ANSWER: **ELIspot** [or **Fluorospot**]

[10] One of the original uses of the ELIspot assay was to characterize these cells, which are used to manufacture monoclonal antibodies. They're a fusion between a B cell and a myeloma cell line.

ANSWER: hybridomas

[10] Hybridomas are usually isolated from the spleen of mice. In people with this condition, which is caused by a glutamic acid to valine mutation in the beta-chain of hemoglobin, the spleen often auto-infarcts.

ANSWER: sickle-cell anemia

- 9. This author suggested that accepting conclusion Z based on premises A and B requires a third premise C that states "If A and B are true, Z must be true," and so on ad infinitum for each new premise. For 10 points each:
- [10] Name this author of an 1895 paper published in *Mind* titled "What the Tortoise said to Achilles." This writer presented the earliest modern "truth tree" method in his textbook, *Symbolic Logic*.

ANSWER: Lewis **Carroll** [or Charles Lutwidge **Dodgson**]

[10] In the paper "Practical Tortoise Raising," Simon Blackburn replaced Carroll's premises A and B with "fact" and "reason" to defend the compatibilist view of free will in this philosopher's *A Treatise of Human Nature*.

ANSWER: David Hume

[10] Carroll's paper was called "an infinitely long red herring" by James F. Thomson, who coined this term for activities with infinitely many steps, such as the act of turning a lamp on and off at ever-shorter intervals.

ANSWER: supertasks

- 10. The semi-mythical Jewish woman Esterka was reputed to be the mistress of this king, who built most of the castles located on the Trail of the Eagle's Nests. For 10 points each:
- [10] Name this king who foresaw that he would die without a male heir, so he agreed to the "Angevin Succession" and named his nephew Louis I of Hungary to take the throne on his death.

ANSWER: <u>Casimir</u> the <u>Great</u> [or <u>Casimir III</u> of Poland, prompt on "Casimir"]

[10] Casimir was a member of this dynasty, the first ruling dynasty of Poland, which started with Mieszko in 960 CE and ran through 1370. For most of their run, they ruled alongside the Premyslids of Bohemia.

ANSWER: Piast Dynasty

[10] Casimir the Great called a massive Congress at this Polish city in 1364, featuring a legendary feast, and founded the first Polish university here. It was the largest city until Sigismund III moved the capital to Warsaw.

ANSWER: **Krakow** [or **Cracow**]

- 11. To avoid bothering his neighbors, this musician learned to pluck guitar strings with the side of his thumb, a skill he used to produce his distinctive soft sound. For 10 points each:
- [10] Name this jazz guitarist behind albums like *Movin' Along* and *Full House*. After signing with A&M Records, he pivoted to recording jazz covers of popular hits, such as the songs on his 1967 album *A Day in the Life*.

ANSWER: Wes **Montgomery** [or John Leslie "Wes" **Montgomery**]

[10] This guitarist recorded the album *Idle Moments* and later covered the Beatles' "A Day in the Life." Samples of his funk-influenced music appear on many hip-hop songs, including Kendrick Lamar's "Sing About Me, I'm Dying of Thirst."

ANSWER: Grant Green

[10] In the late 1960s, this jazz bandleader produced two albums of Beatles covers with his namesake "orchestra." His band is better known for its work during the swing era, such as the standard "One O'Clock Jump."

ANSWER: Count **Basie** [or William James "Count" **Basie**]

- 12. In this author's most popular novel, White Man's Dog gains a new name for himself after killing the leader of a rival tribe in the 1870s. For 10 points each:
- [10] Name this author of *Fools Crow* and *Winter in the Blood*, a member of the Blackfeet and Gros Ventre tribes who became one of the earliest members of the Native American Renaissance.

ANSWER: James Welch

[10] The Native American Renaissance is generally considered to have begun with the publication of this 1969 novel about Abel's return to New Mexico that won the Pulitzer Prize for N. Scott Momaday.

ANSWER: *House Made of Dawn* 

[10] Many Native American Renaissance novels feature people with this characteristic, such as the protagonist of Welch's novel *The Death of Jim Loney*. Authors with this characteristic include Gerald Vizenor and Louise Erdrich. ANSWER: being of <u>mixed race</u> [accept equivalents such as being <u>part white</u>]

- 13. This creature shapeshifted into a deer to try to sink three calabashes, or gourds, thrown into the Kawashima River. For 10 points each:
- [10] Name this water dragon slain by Agatamori after failing that challenge, turning the river into a blood red pool.

ANSWER: Mizuchi

[10] This better-known Japanese water dragon with an eight-forked tail was slain by Susanowo, who found inside the Kusanagi sword.

ANSWER: Yamata no Orochi

[10] A sea monster called the *wani* appears in the Japanese tale named for this animal "of Inaba," who gets flayed by some sharks after deviously using them as a bridge. This animal is later found by Okuninushi, who fixes its skin by telling it to bathe in fresh water and roll in cattail pollen.

ANSWER: <u>hare</u> or <u>rabbit</u> [or "The <u>White Hare</u> of Inaba"]

- 14. These equations set pressure proportional to the density raised to the power n + 1 over n, where n is an integer. For 10 points each:
- [10] Identify these equations of state, which are typically used to model stellar interiors. The integer n is known as their namesake index.

ANSWER: **polytrope**s

[10] Polytropes are solutions to the Lane-Emden equation, which has analytical solutions for a polytropic index of 0, 1 and this other value. A polytrope of this index can model a self-consistent star system and has infinite radius.

ANSWER: 5

[10] Depending on how relativistic its contents are, polytropes of either index 3/2 or 3 can be used to model this type of star, whose maximum mass of about 1.4 solar masses is called the Chandrasekhar limit.

ANSWER: white dwarf

- 15. This man published a newspaper *The Crusader* with his wife Mabel and, after he was exiled to Cuba, Fidel Castro gave him a radio station called Radio Free Dixie. For 10 points each:
- [10] Name this civil rights leader who became one of the first black voices to advocate violence, spelled out in his 1962 book *Negroes With Guns*.

ANSWER: Robert F. Williams

[10] Williams' book became a standard text for this party founded by Huey Newton in Oakland, with its minister of defense Bobby Seale.

ANSWER: <u>Black Panther</u> Party [or the <u>BPP</u>; or the <u>Panthers</u>; or the <u>BPP</u> for Self-Defense]

[10] This collection of essays, written in 1965 at Folsom State Prison by the one-time Minister of Information for the Black Panthers, includes three love letters to and from its author's lawyer Beverly Axelrod.

ANSWER: Soul on Ice

- 16. Answer the following about the early 20th-century Viennese writer Jakob Wassermann, for 10 points each.
- [10] In his novel My Marriage, Wassermann fictionalized himself as a writer named Alexander with this last name.

A divorced Jewish intellectual with this last name writes letters he never sends in a Saul Bellow novel.

ANSWER: <u>Herzog</u> [or Alexander <u>Herzog</u>; or Moses <u>Herzog</u>]

- [10] Wassermann may be most famous for a book about this young man, who appeared mysteriously on the streets of Nuremberg in 1828 claiming to have spent his entire life in a dungeon. His "enigma" titles a Werner Herzog film. ANSWER: Kaspar Hauser [or Kaspar Hauser]
- [10] Wassermann also contributed to this satirical Munich-based weekly. Founded by Albert Langen, it took its name from a 17th-century work of German literature and featured many caricatures in an Art Nouveau style by Theodor Heine.

ANSWER: **Simplicissimus** 

17. Answer the following about painters claimed to be the creator of the first abstract painting, for 10 points each.

[10] One candidate is this Russian artist of the 1911 painting *Composition V*, who also wrote *Concerning the Spiritual in Art*.

ANSWER: Wassily Kandinsky

[10] The title has also been claimed for this French painter's 1909 painting *Caoutchouc*, although it looks a little bit like a bowl of fruit. This richest member of the Dadaists published *391* Magazine and painted a set of turning gears in *Machine Turn Quickly*.

ANSWER: Francis Picabia

[10] Swedish artist Hilma af Klint started moving away from figuration in 1906 with her "Paintings for the Temple" series. Her esoteric spiritual inspirations are investigated by Maureen in this Olivier Assayas film, which stars Kristen Stewart as a woman seeking contact with her dead brother.

ANSWER: **Personal Shopper** 

18. Spheroidal mineral grains called chondrules are found in an iron-poor stony class of these objects called chondrites. For 10 points each:

[10] Name these pieces of debris from outer space that survive an impact with Earth.

ANSWER: <u>meteorite</u>s [do not accept or prompt on "meteors" or "meteoroids"]

[10] The area containing the remnants of a meteorite fall is given this name. The impact that generated the Australasian one of these regions may have caused the Brunhes–Matuyama reversal.

ANSWER: strewn fields [or Australasian strewn field]

[10] Almost all L-chondrites date to the time of this event, suggesting that this event may have been triggered by an instability of the L-chondrite parent body. This event generated the brachiopod-rich assemblage in Jack Sepkoski's concept of evolutionary fauna.

ANSWER: Ordovician radiation [or Great Ordovician Biodiversification Event; or GOBE]

19. The Gao Kinglist records fourteen kings from this dynasty, including Kusoy, who converted to Islam in 1010 CE, and its mythical first ruler who came from Yemen and settled at the town of Kukiya. For 10 points each:

[10] Name this early dynasty, from which Sunni Ali and the Songhai people descended. An indigenous people of western Niger is still named for being descended from this Dynasty.

ANSWER: Za Dynasty [or Zuwa Dynasty] (the Zarna are the people meaning "descended from the Za")

[10] Although Sonni Ali was briefly succeeded by his son Baru, the Songhai Kingdom was soon taken over by this great Islamic ruler, who restored the Timbuktu scholars.

ANSWER: Askia Muhammad I Ture [or Askia the Great]

[10] Born Diego de Guevara, this eunuch was captured as a child by the Saadi Dynasty of Morocco and then sent with a small army of musketeers to massacre the Songhai kingdom at Tondibi.

ANSWER: Judar Pasha

20. A decade after this character's death, the narrator looks into a tiny sphere and simultaneously sees her tangled hair, her growing cancer, and her rotting bones. For 10 points each:

[10] Name this woman loved by the narrator of "The Aleph." A publishing house named after this character has published novels like *How I Became a Nun* and *An Episode In The Life of a Landscape Painter*.

ANSWER: **Beatriz Viterbo** [accept either underlined part]

[10] The aforementioned novels were written by Cesar Aira, a novelist from this country. The publisher and character Beatriz Viterbo are also from this country.

ANSWER: **Argentina** 

[10] In a Cesar Aira novel titled after one of these events, a fictionalized version of the author tries to conquer the world with an army of Carlos Fuentes clones. The largest one of these events in North America is held annually by an organization abbreviated AWP.

ANSWER: a literary conference [accept similar answers, like a writer's conference; prompt on conference]