Chicago Open 2016: "An Insatiable Kingpin of International Meme-Laundering"
Packet By Editors (2)
Edited by John Lawrence, Mike Cheyne, Matt Jackson, Adam Silverman, Mike Bentley, Aaron Rosenberg, Jake Sundberg, and Shan Kothari, with contributions from Ewan Macaulay and Jonathan Magin

Tossups

1. **The speaker of a poem set in one of these places sought "the simple life that Nature yields", but "Rapine and Wrong and Fear usurped her place / And a bold, artful, surly, savage race." That poem set in one of these places states: "Where Plenty smiles—alas! She smiles for few," and those who do not taste her "Are as the slaves that dig the golden ore." In one of these places, a man heard "The watch-dog's voice that bayed the whispering wind / And the loud laugh that spoke the vacant mind." That one of these places was declared to be "by luxury betrayed." Decades before writing "The (*)** Borough," George Crabbe established his reputation with a poem titled for one of these places. Crabbe's poem was written in response to another poem about one of these, in which "trade's unfeeling train / Usurp the land and dispossess the swain." For 10 points, Sweet Auburn is what sort of place that has been "deserted" in an Oliver Goldsmith poem?
ANSWER: **village**s

2. **A 1728 treatise by a theorist from this city contains the first circle-of-fifths diagram known outside of Russia. This city was the main home base of a Bohemian Baroque composer known for his capriccios and for the *Missa votiva*. Johann David Heinichen was succeeded by Jan Dismas Zelenka as this city's *Kapellmeister*. This city's preference for a five-part choir is seen in the Kyrie of Bach's Mass in B minor, a section originally written for this city. The Venetian polychoral style was spread to Germany by the *Psalmen Davids* written in this city by the star pupil of Giovanni (*)** Gabrieli. Johann Gottlieb Naumann wrote a sequence named for this city, which is quoted in a symphony written for the 300th anniversary of the Augsburg Confession. It was home to Heinrich Schütz for the last 47 years of his life. For 10 points, name this city whose namesake "Amen" appears in the opening of Mendelssohn's "Reformation" Symphony, the capital of Saxony.
ANSWER: **Dresden**

3. **A sign error by this scientist led Bruno Rolf to erroneously predict zero field intensity at finite distances from a radiating dipole, until that error was corrected by K.A. Norton. He developed a model which resolved a hundredfold discrepancy between the observed values of the Seebeck thermopower in metals and the predicted classical value. That semiclassical model replaces the Maxwell-Boltzmann distribution with the Fermi-Dirac distribution to determine the (*)** conductivity of metals. He added quantum effects to the Drude model to develop the free electron model, and was the doctoral advisor for Pauli and Heisenberg. He also extended the work of a Dane by postulating the existence of elliptical electron orbits, and introduced the magnetic quantum number. For 10 points, name this German physicist who co-names an early approach to quantum physics along with Niels Bohr.
ANSWER: Arnold **Sommerfeld**

4. **The premise that equality removes constraints on accumulating this entity led Galor and Moav to argue that equality stimulated growth during the late Industrial Revolution. In one extension of a two-sector AK model, the growth rate of this stock is equal to its own constant marginal productivity. A 1985 paper posited that increasing returns to scale on specific forms of this stock could explain the sexual division of labor. Long-term growth in the Uzawa-Lucas model arises from accumulation of this factor. Jacob (*)** Mincer developed his namesake regression equation to determine rates of return of investment in this factor. Blau and Kahn found that the gender wage gap is not explained by variation in this factor. Models of this factor's accumulation often include trade-offs with work and leisure. Gary Becker wrote a 1964 book on, for 10 points, what kind of capital that can be improved through on-the-job training or schooling, which includes the skill and knowledge of workers?
ANSWER: **human capital** [accept just **human** after "capital" is mentioned; prompt on capital; prompt on education, schooling, or close synonyms]

5. **This director made an experimental film using a tin plate in each of its 4,444 frames to reflect different** *Kinds of Light* **for one frame apiece. In a memoir, he recalled being inspired by a doorknob spinning around on the floor on the day his Brando-obsessed father died fixing a squeaky mattress. He partly named one film for a figure in French Canadian lore who is so beautiful that her onlookers turn into gems; in another of his films, the viewers of a grotesque carnival show slowly turn into eyeballs. This director of** *The (*) Medusa v. The Odalisque* **and** *Cage (III) - Free Show* **was buried with the master tape of his last film in his skull after he stuck his head in a microwave oven; that film features his lover Joelle van Dyne, who assumed the veiled identity of Madame Psychosis after this man's death. For 10 points, name this fictional director of a film sought by Quebecois terrorists whose viewers lose interest in anything else,** *Infinite Jest (V).*
ANSWER: **J**ames Orin **Incandenza**, Jr. [or **James** Jr.; prompt on Incandenza; prompt on Himself]

6. **Monte Carlo simulations using the log of this quantity as a trial step give an N+1 term in the acceptance rule. The log of this quantity appears in the pseudo-Boltzmann factor for the Gibbs ensemble. For large N, the pair distribution function equals the probability density times this quantity squared. The grand canonical partition function equals the exponential of dimensionless fugacity times this dimensional quantity over a quantum version of it. The ideal gas entropy depends on the log of this quantity to the first power and the log of internal energy to the three-halves. It is the only (*) variable held fixed in the microcanonical, canonical, and grand canonical ensembles. This extensive quantity is the numerator of the translational partition function. This quantity, a natural variable for internal energy and Helmholtz free energy, is the one that gets exponentiated by the polytropic index. For 10 points, name this conjugate of pressure and inverse of density.**
ANSWER: **volume** [or **V**; or specific **volume**; or molar **volume**]

7. **A bill responding to this event co-sponsored by Wesley Jones and Frank Reid allocated three hundred twenty five million dollars in relief. Robert Russa Moton of the Tuskegee Institute was pressured into not releasing a scathing report on the racism in the response to this event until the man who led that response had become President. Major General Edgar Jadwin's namesake plan written in the aftermath of this event called for protecting the city of (*) Cairo** ["CARE"-oh]. Richard M. Mizelle Jr.'s history of this event "in the African American imagination" is titled for Bessie Smith's song, "Backwater Blues". Secretary of Commerce Herbert Hoover supervised the response to this event, in which 145 levees broke. For 10 points, name this natural disaster during Calvin Coolidge's presidency which inundated many Southern states.
ANSWER: **1927 Mississippi** River **Flood** [or **Great Mississippi Flood**]

8. **In one portrait, this artist painted his frequent patron Conte Francesco Teodoro Arese in chains. A woman modeled on the dancer Carlotta Chabert stands in a shallow pool and holds one of the title animals in her left hand in this artist's** *Venus Playing with Two Doves***. Maria, wearing a black mask, whispers to Rachele that her lover has betrayed her in this artist's** *Vengeance is Sworn***, painted as a triptych along with** *The Secret Accusation* **and** *A Rival's Revenge***. The Countess Teresa Borri Stampa commissioned a painting by this artist where three men have just stabbed the tyrant (*) Galeazzo Maria Sforza; that painting, located in the church of Santo Stefano, is his pro-Carbonari painting, *The Conspiracy of Lampugnani*. The man in his best known painting places his left leg on a staircase and embraces a woman in blue, perhaps symbolizing France. For 10 points, name this Italian Romantic painter of *The Kiss*.
ANSWER: Francesco **Hayez**

9. **One thinker divided this concept into that of "authority" and that of "overhastiness." In a 1967 debate, Habermas attacked that thinker's defense of this concept, for implicitly claiming that this concept's inevitability means that a "legitimate" form exists. One thinker declared that this concept is what "renders a man's virtue his habit" and makes duty "part of his nature." A 1960 work argues that this concept acquired its negative connotations in the Enlightenment, whose primary (*) bias was against this concept. That work-- which argues that this concept "constitute[s] the historical reality" of an interpreter's being and provides the "fore-meanings" that are the conditions of understanding--is Gadamer's *Truth and Method*. It is not "tradition," but Edmund Burke claimed that this concept's "latent wisdom" keeps the social order, because individual reason alone cannot. For 10 points, give this term for judgments made prior to knowledge.**
ANSWER: **prejudice**s [or **pre-judgment**s; or ***Vorurteil***; prompt on "fore-knowledge" or "fore-structures"]

10. **This city is unflatteringly compared to Saint-Denis in the most detailed European description of it, a report written by William of Rubruck. A captured French goldsmith, Guillaume Bouchier, sculpted a structure at this city's center containing a angel holding a trumpet at its top, which could blow its horn, causing attached serpent sculptures to gush out alcohol for guests. The modern day city near this one is close to the ancient Erdene Zuu Buddhist monastery, which features a statue of a penis on a platform on a steppe as a reminder for monks to remain celibate. The Palace of Myriad Peace was built in this city a few years after successful sieges at (*)** Caizhou and Kaifeng. At its center was a massive Silver Tree commissioned by Mongke. This city was replaced as capital by Shangdu and then modern-day Beijing, a relocation ordered by Kublai Khan. For 10 points, name this capital of the Mongol Empire from 1235 to 1260.
ANSWER: **Karakorum** [or **Kharkorin**; or **Kharkhorum**]

11. **Ritual recognitions of this event from the Fatimid dynasty on generated an "economy of merit" according to a 2007 book by Marian Holmes Katz titled for it. Tunisians associate this event with a hot pudding called _assidat zgougou_, and it is commemorated yearly among the Wolof people during Gamou. This occurrence is likened to a "necklace of pearls" by the devotional poem _Simthud Durar_. It is alleged that before or during this event, a light came forth which made the castles of Busra visible. This event took place on the (*)** twelfth day of Rabi al 'awwal. According to Ibn Ishaq's _Sirat Rasul Allah_, it took place in a town that Abraha [ah-BRAH-hah] failed to conquer during the Year of the Elephant. Sects differ on whether it is _bid'ah_, or improperly innovative, to celebrate this event on Mawlid. For 10 points, name this accomplishment of a woman named Amina in about 570 CE in Mecca.
ANSWER: **birth** of **Muhammad** [accept _**mawlid**u an-nabiyi_ before "Mawlid," which literally means 'birth']

12. **Bill Evans and Jim Hall's album _Undercurrent_ opens with a song by this composer, which also opens the album _Cookin' with the Miles Davis Quintet_ and names an album Miles Davis recorded live at Lincoln Center in 1964. This composer wrote a song that declares: "It seems we stood and talked this before" titled "Where or When." A "hoofer" gets shot in a 1936 ballet by him that was choreographed by George Balanchine. One of his songs was basically reduced to E minor and E major chords in a 14-minute (*)** modal-jazz version. This composer of "Slaughter on Tenth Avenue" wrote a song that declares: "Your looks are laughable / Un-photographable / Yet, you're my favorite work of art." One song by him was the first of four tracks on an album titled for that song by John Coltrane. He wrote "My Funny Valentine" with lyricist Lorenz Hart. For 10 points, the song "My Favorite Things" was written by what composer?
ANSWER: Richard (Charles) **Rodgers**

13. **A character created by this author makes fun of her husband for calling a grenade launcher a "thump gun," like they do in the Congo. Another of this author's characters blames his lateness on the fact that "both stepmothers want their name on the wedding invitation." In a play by this author, a man is chastised for releasing his daughter's pet hamster into the street. That man later uses a hairdryer on a clafoutis-covered Kokoschka catalogue. In a play by this author, a man who repeatedly tells his friends to read Seneca notes that the Pompidou Centre already houses three works by (*)** Antrios. Phone calls about the harmful side effects of the drug Antril frequently distract the lawyer Alain in a play by this author, in which Alain's wife Annette throws up during a meeting to discuss their son attacking another boy with a stick. In another play by her, Marc ridicules Serge for buying a completely white painting. For 10 points, name this contemporary French playwright of _Art_ and _God of Carnage_.
ANSWER: Yasmina **Reza**

14. **SunTags were developed as fusions to this protein. The herpes simplex activation domain VP64, which is also the omega subunit of prokaryotic RNA polymerase, is most commonly used fused to this protein. A conserved arginine cluster on this protein's bridge helix interacts with the "seed" region on its substrate. A KRAB domain is fused to this protein in an interference technique developed by Lei Qi. The D10A mutation applied to this enzyme makes it a (*)** nickase, and another point mutation eliminates this protein's RuvC activity, forming its dead or "d" variant. Emmanuelle Charpentier engineered RGENs for this protein. This protein, extracted from *Streptococcus pyogenes*, binds specifically to PAM sequences. Jennifer Doudna [DOWD-nuh] observed that this protein, helped by guide RNAs, induces double-strand breaks with more efficiency than zinc-finger nucleases. For 10 points, name this endonuclease central to gene editing by CRISPR.
ANSWER: **Cas9** [or **CRISPR-associated endonuclease**-**9**; or **CRISPR/Cas9**; do not accept or prompt on "CRISPR" alone though]

15. *Note: The business this man founded is also an acceptable answer.* **This man fled to Paris after a business he co-founded with Joseph Stargardt got in trouble for publishing pro-democratic pamphlets. A meeting with Carl Friedrich Gauss at Goettingen University led him to finance a project which extended from Brest to Duxbury. This partner of the PA firm signed a secret agreement with Bernhard Wolff's WTB and the Paris-based (*)** Agence Havas giving his business monopoly control over the British Empire. He secured permission to all minerals, factories and a railroad route to the Caspian in an egregiously generous concession from Persia's Nasir al-Din Shah. He once used carrier pigeons to bridge an infrastructure gap between Brussels and Aachen. He moved to London after the laying of the Dover-Calais cable and founded Continental Telegraph. For 10 points, identify this namesake of a news agency that competes with the AP.
ANSWER: Paul **Reuter** [or Baron de **Reuter**; or Paul Julius Freiherr von **Reuter**; or Israel Beer **Josaphat**; or Israel Beer **Josephsthal**; accept **Reuters**]

16. **In a novel, two of these things describe humans as "stupid hunks of cement" and lament that another one has been tattooed without its consent, in a story told in the blue room to the protagonist's stepdaughter. In a novel titled for these things, the protagonist watches a rerun of an Inter-Reggina match and frets over whether his wife, a pastry chef, will ever return from her drawing lesson. In that same novel, Julian, like Scheherazade, relates cliff-hanger stories of these things to Daniela. In a novel titled for these non-human things, the protagonist works with the beekeeper** (*) Carrega on an ill-fated irrigation scheme. Chilean author Alejandro Zambra wrote a novel about the "Private Lives" of these things. A character takes to living in these things after refusing to eat some snail soup offered to him by his sister Battista. For 10 points, name these objects in which Cosimo Piovasco di Rondo, the title Baron, lives in an Italo Calvino novel.
ANSWER: **tree**s

17. **In one essay, this man complained about contemporary artist who lacked skills by using his own experience as a carpenter to distinguish between good tables and bad tables. He opened a biography of Goya by recounting a nightmare where he was tormented by Goya's monsters following a car crash. This critic addressed the "all-pervasive claim to victimhood" present in Americans in a screed against both politically correct language and the "cult of the abused Inner Child" rising from the Reagan years. For his home country's bicentennial, this host of the (*)** docuseries *The Shock of the New* wrote a history which rejected the "competing with the French" narrative in favor of a narrative that presents the First Settlement as a type of British Gulag. For 10 points, name this Australian art critic for *Time* magazine who wrote *Culture of Complaint* and *The Fatal Shore*.
ANSWER: Robert **Hughes** [or Robert Studley Forrest **Hughes**]

18. **The RFECV algorithm recursively takes the best and worst of these things in order to produce a ranking of them at the end of execution. An algorithm named for transforming these things was developed by David Lowe and is invariant to rotation and scale. The relative usefulness of these things is printed in the output of the CfsSubsetEval function in (*)** weka. The sklearn ["S-K-learn"] toolkit uses a randomized LASSO algorithm in order to implement the stability selection technique for reducing the number of them. Weak examples of these things get assigned coefficients near zero in L1 regularization. These things might be generated through a blob or edge detection algorithm while "extracting" them in an image processing task. These things might include n-grams of words in a document classification problem. For 10 points, name these individual properties which are plugged into machine learning algorithms.
ANSWER: model **feature**s [or **attribute**s or **dimension**s or **parameter**s]

19. **These people believe that death occurs when a spirit called Bope takes away life. A trope in many of their myths is a voluntary recluse or "secluded man," the** *baitogogo*. **These people believe that illnesses originated from the toxic exhalations of a woman who ate far too many dead fish. One academic work contrasts two of their stories, M_1 and M_5, with several origin-of-fire stories from the nearby Ge people, denoted M_7 through M_{12}. A myth from these people concerns a boy not yet old enough to wear a penis sheath, who rapes his mother and then noiselessly retrieves three musical instruments from the "nest of souls" to spite his father; that myth, "The (*)** Bird-Nester's Aria," includes a hunt for macaws and resembles myths from across the Americas. For 10 points, name this Brazilian indigenous people whose "key myth" is the starting point of the four-volume structuralist analysis in Claude Levi-Strauss's *Mythologiques*.
ANSWER: **Bororo** people

20. **In 1992, this country's National Library began collecting women's history materials in its Ariadne database. People who** *hoped for* **rule by this country set off a Night of Fire in June 1961 by blowing up dozens of electricity pylons. This country hosted the Mutual and Balanced Force Reductions talks. A 2008 car crash killed a right-wing politician from this country who often warned of "over-foreignization". For decades, this country's entire civil service was divvied up between its two parties based on their share of the vote via the** *Proporz* **system. The first recording on the Voyager probe's Golden Record is by a citizen of this country who succeeded (*)** U Thant as UN Secretary-General. This country's State Treaty of 1955 declared its "active neutrality," which lasted well into the leadership of Bruno Kreisky. In 1948, it lost South Tyrol. For 10 points, name this non-NATO country whose far-right Freedom Party has been led by Jorg Haider, the home of Kurt Waldheim.
ANSWER: **Austria** [or **Österreich**]

21. **A never-built plan for a new city hall for this city had a tetrahedron base and made use of differently sized hollow capital joints, some big enough to walk through. A two hundred million dollar glass vault was added by Rafael Vinoly to spice up a concert hall in this city. A series of buildings in this city have large concrete shafts, coated in bricks, to house air ducts and stairwells, and are connected to the Goddard Labs. Four serving and servant spaces alternate in the Margaret Esherick House in this city designed by (*)** Louis Kahn. A postmodern house in this city was built while its architect was writing *Complexity and Contradictions in Architecture* and has a pentagonal facade which breaks above the door and below the prominent chimney. The Richards Medical Research Labs are located in this city, as is the Vanna Venturi house. For 10 points, name this city whose city hall is topped with a statue of Ben Franklin.
ANSWER: **Philadelphia**, Pennsylvania

Bonuses

1. This thinker wrote that domestic harems are actually "rather dull, for they have a strong bourgeois dimension" in her quasi-memoir *Dreams of Trespass: Tales of a Harem Girlhood.* For 10 points each:
[10] Name this Islamic feminist sociologist who died in December 2015. In works such as *Beyond the Veil*, she argued that the seclusion of women in Muslim societies has little basis in Quranic doctrine.
ANSWER: Fatema **Mernissi**
[10] Fatema Mernissi is from this country whose very distinctive dialect of Arabic is called Darija. Its religious tradition was contrasted with Indonesia in Clifford Geertz's *Islam Observed.*
ANSWER: **Morocco**
[10] This CUNY social scientist wrote that there is no "determinate social blueprint" for all of Islam, only many "discursive traditions," in his 1986 essay "The Idea of an Anthropology of Islam." He also wrote *Formations of the Secular.*
ANSWER: Talal **Asad**

2. In one of its two known biological roles, this compound accepts a methyl group from methyl-THF to form tetrahydrofolate in the conversion of homocysteine to methionine. For 10 points each:
[10] Name this vitamin which forms the only known carbon-metal bond in biology. Its absence can lead to pernicious anemia.
ANSWER: vitamin **B12** [or **cobalamin**; prompt on vitamin **B**]
[10] The other biological role for B12 is as a coenzyme in the isomerization of this compound to succinyl-CoA during the oxidation of odd-chain fatty acids. This compound's namesake mutase forms a deoxyadenosyl radical in the first step.
ANSWER: **methyl-malonyl-CoA** [or **methyl-malonyl-Coenzyme A**; or **methyl-malonyl-CoA** mutase or **methyl-malonyl-Coenzyme A** mutase]
[10] Breakdown of fatty acids into succinyl-CoA is an example of one of these reactions, which supply TCA intermediates. Another example of these reactions is the deamination of aspartate to make oxaloacetate.
ANSWER: **anaplerotic** reactions

3. Lewis Gaylord Clark was the long-time editor of a literary magazine named for this character, which folded in 1865. And his creator took out missing-person ads looking for him to return his supposed manuscript. For 10 points each:
[10] Name this character who narrates a book mocking Samuel L. Mitchell, and whose portrayal of "William the Testy" is a satire on Thomas Jefferson.
ANSWER: **Diedrich** **Knickerbocker** [accept either name]
[10] Diedrich Knickerbocker narrates *A History of New York* by this early 19th-century American author, who also published under the pseudonym Geoffrey Crayon.
ANSWER: Washington **Irving**
[10] *The Knickerbocker* magazine serialized this travelogue by Francis Parkman. Its incidents include brain fever befalling a volunteer soldier nicknamed "Tete Rouge" and a buffalo hunt with the Ogala Sioux.
ANSWER: *The **Oregon Trail**: Sketches of Prairie and Rocky-Mountain Life* [or *The **California & Oregon Trail***]

4. This work's author has been alleged to be Peter, a general who held the rank of curopalates. For 10 points each:
[10] What 6th century Byzantine text, sometimes attributed to an emperor, bills itself as "a rather modest elementary handbook…for those devoting themselves to generalship"? A sample tip from it is to keep baggage trains in the middle of the caravan when enemies are present.
ANSWER: *Strategikon*
[10] The *Strategikon* is traditionally attributed to this emperor, who established the original Exarchate of Ravenna. He was assassinated by an officer who was sick of fighting the Avars in the Danube; that assassin took the throne and was himself slain by Heraclius.
ANSWER: **Maurice**
[10] Earlier in his reign, Maurice helped Khosrau II regain control of this empire by teaming with him at the Battle of Blarathon, a collaboration that led to a period of peace between the Byzantines and this empire.
ANSWER: **Sassanid** Empire [or **Sassanian** Empire; prompt on **Persian**s]

5. One of this author's speaker describes abandoning his home to the title avian in "The Weaver Bird." And he wrote about his imprisonment in Ussher Fort Prison in the collection *The House by the Sea*. For 10 points each:
[10] Name this poet, who retold the story of the westward migration Ewe in *Night of Blood*. He was killed in the Westgate Shopping Mall terrorist attack in 2013.
ANSWER: Kofi (Nyidevu) **Awoonor** [or George **Awoonor**-Williams]
[10] Awoonor was from this African country, which rose to international prominence with the novels of Ayi Kwei Armah. Another major literary work from this country is the Asase Ya Prayer-Poem of the Ashanti people.
ANSWER: Republic of **Ghana**
[10] This adjective is misspelled in the title of Armah's most famous novel, which concerns a railway traffic clerk known as "the man." This adjective also appears in the title of a novel in which Jan Fischer is sentenced to death according to the Immorality Act for having sex with a Zulu girl in a public park.
ANSWER: **beautiful** [accept *The **Beautyful** Ones Are Not Yet Born* or *Ah, But Your Land Is **Beautiful***]

6. A 2015 JACS paper used this molecule and fluorescin as fluorophores in the first example of a molecular keypad lock. For 10 points each:
[10] Name this polycyclic aromatic hydrocarbon which consists of four total benzene rings, each of which is fused to exactly two other rings. It is also a precursor to several dyes.
ANSWER: **pyrene**
[10] This natural dye was once prepared via the classic Baeyer-Drewson synthesis, but BASF first rose to prominence after it commercialized a more efficient synthesis for this valuable compound in 1897.
ANSWER: **indigo** dye
[10] The current synthesis of indigo starts from this compound, which was first isolated by extractive distillation of the plant that makes indigo. In the first step of the synthesis of azo dyes, this compound is treated with nitrous acid.
ANSWER: **aniline** [or **phenylamine**; or **aminobenzene**; aniline was named for the plant *Indigofera anil*]

7. This man's biographer, William Jesse, credits him with popularizing nail brushes and hair brushes. For 10 points each:
[10] Identify this fashion icon in early 19th century England, a close friend of the future George IV. He's the main reason why men stopped wearing brightly colored fabrics.
ANSWER: Beau **Brummell** [or George Bryan **Brummell** or Buck **Brummell**]
[10] Brummell met the Prince Regent while serving in the 10th Royal regiment of this name. The 8th Canadian regiment of this name were patronized by Victoria's daughter Princess Louise and Ireland has some "blue" ones.
ANSWER: **Hussar**s
[10] This author considered Beau Brummell, Napoleon, and himself as the three great men of his time. He was the father of Ada Lovelace and died shortly after reaching Missolonghi in 1824.
ANSWER: Lord **Byron** [or George Gordon **Byron**]

8. A ruler of this kingdom known as Ergamenes slaughtered various bothersome priests at Napata. For 10 points each:
[10] What kingdom had a capital at both the cities of Napata and Meroe? It enjoyed success under Taharqa, who eventually got his ass kicked by at least three different Assyrian leaders.
ANSWER: Kingdom of **Kush** [prompt on Nubia; prompt on Egypt]
[10] One of the aforementioned Assyrian leaders who beat up on Taharqa was this father of Esarhaddon. This man destroyed Babylon but failed to take Jerusalem as documented by the prophet Isaiah.
ANSWER: **Sennacherib**
[10] This Kushite king and son of Kashta successfully conquered Hermopolis and Memphis to bring Lower Egypt under Nubian control. He founded the 25th Dynasty, the largest Egyptian empire since the New Kingdom heyday that was finally supplanted by Assyrian vassals.
ANSWER: **Piye** [or **Piankhi**; or **Usimare**; or **Sneferre**]

9. News of this occurrence came in a mysterious voice heard by a sailor on the isle of Paxi; that sailor then caused great lament when he told it to the people of Pelodes. For 10 points each:
[10] Name this strange event reported by Plutarch as having occurred in the reign of the Roman emperor Tiberius. In *The Everlasting Man,* G.K. Chesterton wrote that this divine event happened "in a sense" because Christ was born.
ANSWER: **death** of **Pan** [accept any answer indicating news that the great god **Pan** is **dead**]
[10] The death of Pan was told of in Plutarch's work on the *Obsolescence of* these people, who had notable ancient-world temples at Dodoma and Delphi.
ANSWER: **oracle**s
[10] Robert Graves argues that the voice announcing Pan's death was mistranslated, and actually heralded the death of this Sumerian agriculture god.
ANSWER: **Tammuz** [or **Dumuzi**d] [The voice allegedly addressed a sailor named Thamus.]

10. This group formed after incidents like the Enoch Brown school massacre. For 10 points each:
[10] Name this group formed in colonial Pennsylvania under James Smith. Unlike a similar group formed in the Paxtang borough, this group of settlers mostly targeted supply wagons carrying goods meant for tribes, not American Indians themselves.
ANSWER: **Black Boys** [or **Brave Boys**; or **Loyal Volunteers**]
[10] Both the earlier Paxton Boys and the Black Boys were angry at tribal relations after this uprising of a confederation of tribes that began around the Great Lakes area.
ANSWER: **Pontiac**'s Rebellion
[10] The Paxton Boys murdered 6 members of this Pennsylvania tribe in December 1763 at a village whose name is sometimes also applied to this tribe. Not satisfied, the Boys killed 14 more members after breaking into a workhouse where the tribe had been placed into protective custody.
ANSWER: **Susquehannock** [or **Conestoga**]

11. Victor Veselago published the first theoretical treatment of materials with this property in 1968, decades before it was realized. For 10 points each:
[10] Name this optical property, a common goal of metamaterials. Snell's law predicts that this property will cause light to bend backwards as it enters the material.
ANSWER: **negative refractive index** or **negative refraction**
[10] Veselago claimed that a negative index would cause this type of radiation to propagate backwards. It is responsible for the blue glow around nuclear reactors.
ANSWER: **Cherenkov** radiation
[10] While many metals have negative permittivity, obtaining negative permeability is much harder. A common approach is a periodic array of these structures, which have the shape of concentric loops with a hole in each loop positioned opposite each other.
ANSWER: **split-ring resonator**s or **SRR**s

12. This artist's years in Paris were so destitute that, while painting three herons that he had stolen, two of them rotted and the other was taken by a rat. For 10 points each:
[10] Identify this Lithuanian-born artist whose fortunes turned after gonorrhea medicine tycoon Albert Barnes bought his paintings *Flayed Rabbit* and *Woman Seated in Armchair*.
ANSWER: Chaim **Soutine**
[10] While in Paris, Soutine had his portrait painted by this artist of *Gypsy Woman with Baby*. One of this artist's few double portraits depicts Jacques Lipchitz in a lavender suit resting his hand on the shoulder of his wife, Berthe.
ANSWER: Amedeo **Modigliani** [or Amedeo Clemente **Modigliani**]
[10] Soutine likely was inspired to paint *Flayed Rabbit* after studying this artist's *Flayed Ox*, on display at the Louvre. Two of this artist's self-portraits are also in the Louvre's collection, although the one with the enigmatic circles are in London.
ANSWER: **Rembrandt** van Rijn

13. In Meiji-era Japan, Amane Nishi coined the compound word *tetsugaku* to refer to this field of inquiry, whose Western form was popularized by and later turned against by Watsuji Tetsuro. For 10 points each:
[10] Name this field of study. In Japan, practitioners of its logic-heavy "analytic" subtype has largely moved past the theorizing of the Kyoto School.
ANSWER: **philosophy** [*Tetsugaku* literally means "wisdom learning."]
[10] This hyphenated concept from Japanese aesthetics refers to a respect for flaws, imperfections, or aging processes in art objects. It informs *kintsugi*, the art of repairing cracks in pottery with gold so they show.
ANSWER: **wabi-sabi** [prompt on wabi; prompt on sabi]
[10] According to philosopher Kitaro Nishida, this ultimately unanalyzable concept underlies all being *and* all non-being. The Kyoto School developed this concept, inspired in part by the Buddhist concept *śunyata*.
ANSWER: **absolute nothingness** [or **zettai-mu**; prompt on nothingness; prompt on mu]

14. One movement from this suite depicts lovers speaking through a window grille. For 10 points each:
[10] Name this suite for piano that includes a ballade called "Love and Death" and a movement called "Complaint, or The Maiden and the Nightingale," which inspired the melody for "Bésame Mucho."
ANSWER: *Goyescas*
[10] The composer of *Goyescas*, Enrique Granados, taught Frank Marshall, who in turn taught this diminutive Spanish pianist, who became the most famous interpreter of *Goyescas*.
ANSWER: Alicia **de Larrocha** (y de la Calle)
[10] De Larrocha also made a celebrated recording of *Nights in the Gardens of Spain* by this other Spanish composer of *El amor brujo* or *Love the Magician*.
ANSWER: Manuel da **Falla**

15. The schizophrenic protagonist of this novel becomes obsessed with murdering his lover, Netta Longdon, during episodes called "dumb moods." For 10 points each:
[10] Name this novel by Patrick Hamilton about George Harvey Bone's dark, drunken adventures in London on the verge of World War II.
ANSWER: *Hangover Square*
[10] Patrick Hamilton also wrote this play, based on the Leopold and Loeb case, in which students murder a colleague to demonstrate their intellectual superiority. It was the basis for a Hitchcock film of the same name.
ANSWER: *Rope*
[10] *West Pier,* the first novel in Hamilton's *Gorse Trilogy*, is set in this English city. This city is also the setting of a novel in which Fred Hale is pursued by the teenaged gangster Pinkie Brown for exposing a slot-machine racket.
ANSWER: **Brighton** and Hove

16. Michael Bessell published a set of recipes for making filters out of commercially available glass, which faithfully approximated these bands. For 10 points each:
[10] Name this set of wavelength bands, denoted by five letters, which are the most commonly used bands for observational astronomy in the visible and near-visible regime.
ANSWER: **UBVRI** bands
[10] The difference between the magnitudes in the B and V bands is the most commonly used formula for this quantity, which tends to be more positive for reddish stars.
ANSWER: **color index**
[10] While the UBVRI bands are wide by design, it is also sometimes useful to screen out light pollution with a narrowband filter. For solar observation, the most common such filters are those centered at this emission line at 656 nm, which is especially useful for observing prominences.
ANSWER: **H**ydrogen**-alpha** [or **Balmer-alpha**, prompt on "3 to 2" or variants thereof]

17. During this government, the former finance minister Louis-Lucien Klotz was arrested for cashing bad checks. For 10 points each:
[10] Identify this French government that ended during World War II.
ANSWER: **Third Republic**
[10] In the 1930s, France's Third Republic was rocked by the apparent suicide of this Jewish dentist with close ties to Prime Minister Camille Chautemps. The controversy over this man's death rivaled the Dreyfus affair.
ANSWER: Serge **Stavisky** [or Alexandre **Stavisky**]
[10] Camille Chautemps was a leader of this oldest active political party in France, which split from the Republicans under Georges Clemenceau in the 1870s. They held power in 1932 despite finishing behind the Socialists in the popular vote, and became part of the Popular Front in 1936.
ANSWER: **Radical**-Socialist Party [or **Rad** or Parti **Radical** or **Radical** Republican and **Radical**-Socialist Party or Parti Républicain **Radical** et Radical-Socialiste]

18. This region's poet Gonzalo de Berceo wrote an epic about Apollonius of Tyre, and a historical figure from this region was the subject of the epic *The Lay of Fernán González*. For 10 points each:
[10] Name this region whose countryside was celebrated in namesake collection by Antonio Machado.
ANSWER: **Castile** [or **Castilla**; prompt on "Castile and Léon" or "Castilla y Leon"]
[10] Antonio Machado was a member of this group of Spanish authors whose nationalism was catalyzed by the Spanish-American War. They formed 29 years before a group inspired by Luis de Góngora.
ANSWER: **Generation of** 18**98** [or *Generación de(l) 18**98***]
[10] *The Lay of Fernán González* belongs to this medieval Castilian literary genre. It was composed in regular meter and written down, unlike its orally-transmitted, metrically irregular predecessor, which is named for the *juglaría*.
ANSWER: *Mester de Clerecía* [or **Ministry of** the **Clergy**]

19. A so-called style named for these architectural elements was exemplified by buildings such as the William G. Low House, constructed by McKim, Mead & White. For 10 points each:
[10] Identify these things, which uniformly covered walls in buildings that were reacting against the more ornate American Queen Anne Revival.
ANSWER: **shingle**s
[10] Some of the earliest examples of Shingle Style buildings were built in this coastal Rhode Island city. H. H. Richardson's William Watts Sherman House is a Shingle Style building in this city, which is also home to the Vanderbilt's Breakers mansion.
ANSWER: **Newport**, Rhode Island
[10] The term Shingle Style was coined by this man, the Sterling Professor Emeritus of Art History at Yale. He defended modern architecture from a charge that it was totalitarian from Norman Mailer, and wrote *The Earth, the Temple, and the Gods: Greek Sacred Architecture*.
ANSWER: Vincent **Scully** [or Vincent Joseph **Scully**, Jr.]

20. In *Same-Sex Unions in Pre-Modern Europe*, John Boswell controversially translated this term as "same-sex union" as part of an argument that early Christians were broadly tolerant of male homosexuality. For 10 points each:
[10] Name this kind of church-recognized spiritual friendship between men practiced in some Eastern Christian traditions, particularly during the late Byzantine period. It's the subject of a 2016 book by Claudia Rapp.
ANSWER: **adelphopoiesis** [or **adelphopoiia**; prompt on brother-making]
[10] A strong apparent condemnation of homosexuality appears in this Pauline epistle which, like First Timothy, uses the unusual word *arsenokoitai*. This book, addressed to a Greek city, claims we see "through a glass darkly."
ANSWER: **First Corinthians** [or **1 Corinthians**; prompt on "Corinthians"]
[10] Boswell noted that this fourth century Church Father never used the word *arsenokoitai*, but his homilies on Romans condemned homosexuality. Like St. Basil, this Archbishop of Constantinople wrote a *Divine Liturgy* commonly used in the Byzantine Rite.
ANSWER: St. **John Chrysostom** [prompt on "John"]

21. The gene mutated in this disease is abbreviated IT15, for "interesting transcript 15." For 10 points each:

[10] Name this autosomal dominant genetic disease which is somehow caused by CAG repeats in a namesake protein, which causes a chorea.

ANSWER: **Huntington**'s disease [or **HD**; or **huntingtin**]

[10] CAG repeats in huntingtin are examples of these short, repetitive sequences of DNA that are omnipresent in the genome. They were named by how they separate from normal DNA sequences after density gradient centrifugation.

ANSWER: **microsatellite**s [or **microsat**s; or **short tandem repeat**s; or **STR**s; prompt on satellites]

[10] The two common models of microsatellite formation are the stepwise mutation model and this other one, which was developed by a Japanese and an American geneticist. It proposes that every mutation is heterotic, neutral, or harmful, and also creates a new allele.

ANSWER: **infinite alleles** model [or **IAM**; or **Kimura-Crow** model]