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Collaboration vIa Network (MRNA VACCINE)**

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**Packet 14: "For 10 points, who is Joe?"**

1. A challenging 20th century violin concerto from this country includes six studies and an "Adagio for 22 Soloists." Plácido Domingo's breakthrough role was singing the title medieval Spanish king in the premiere of an opera from this country. One composer from this country wrote the haunting piece "Oblivion" for the Italian film *Enrico IV*. A musician who founded the East-West Divan Orchestra and was the husband of (\*) Jacqueline du Pré, Daniel Barenboim, is from this country. The Teatro Colón is a major opera house in this country's capital city, whose *Four Seasons* are depicted in a set of pieces prominently featuring the bandoneón. For 10 points, Alberto Ginastera hails from what South American country, where Astor Piazzolla developed "new tango"?

ANSWER: Argentina [or Argentine Republic or República Argentina]

<Chris Sims, Classical Music>

2. In one phenomenon, the ratio of two instances of this quantity is approximated by the square root of one minus the Schwarzschild radius over the radial coordinate. Because they can exist both above and below the plane of a light cone, naked singularities are sometimes named for this quantity. When the Klein-Gordon equation does not depend on this quantity, it becomes a homogeneous screened Poisson equation. The (\*) vertical axis of a Penrose diagram represents this quantity. Intervals with negative proper distance are "like" this quantity. The Lorentz transformation of this quantity is itself minus  $v$  times  $x$  over  $c$ -squared, all times gamma. A beam of light bouncing between the floor and ceiling of a train is used to demonstrate this quantity's dilation. For 10 points, events on Minkowski diagrams are separated by position and what quantity, which is contrasted with space?

ANSWER: time

<David Bass, Physics>

3. In *A Portrait of the Artist as a Young Man*, Stephen Dedalus re-enacts this novel with Aubrey Mills. Alonso Menéndez named his company after this novel for its frequent use as reading material by lectors in Cuban cigar factories. The end of this book claims that "all human wisdom is contained in these two words: wait and hope." This novel's title character convinces a young man named Benedetto to take the identity of Viscount Andrea Cavalcanti before being introduced to society by "Lord Wilmore." This novel's protagonist signs gifts to Max Morrel from (\*) "Sinbad the Sailor," and compares himself to Ali Baba saying "Sesame" when discovering a treasure revealed to him by Abbé Faria. For 10 points, name this novel about Edmond Dantes' search for revenge by Alexandre Dumas.

ANSWER: The Count of Monte Cristo [or Le Comte de Monte-Cristo]

<Ganon Evans, European Literature>

4. Many of the best-preserved historical examples of these objects come from Transylvania, where they were used to decorate Lutheran churches. One style of these objects depicts one or more hanging lamps above a keyhole and is named for their frequent depiction by Bellini. These objects often depict a pair of columns on opposite sides of their central arched feature. Less-common rotationally-symmetric forms of these objects depict a mirrored double niche, though they more typically depict a single niche representing a (\*) mihrab. When in use, these objects are oriented to face the qibla, and large numbers of them cover the floors of mosques. For 10 points, name these woven objects on which Muslims prostrate during salah.

ANSWER: prayer rugs [or prayer mats; or sajjāda; or seccade; or namazlık; or jānamāz; prompt on rugs, carpets, or mats]

<Gerhardt Hinkle, Other Fine Arts>

5. A revolt against this empire's rule printed a poem called the "Nemzeti dal" along with a list of demands called the 12 Points. An 80-year old general serving this empire put down the Five Days revolt after withdrawing to a series of fortresses called the Quadrilateral. A newly crowned ruler of this empire abruptly repealed the April Laws, leading to a revolt which was only defeated with help from another member in the Holy Alliance, (\*) Russia. A national parliament seeking independence from this empire was led by Kossuth Lajos. The revolutions of 1848 challenged the "Concert of Europe" that was established at a Congress in this empire's capital by its Prince Metternich. For 10 points, name this empire that formed a dual monarchy with Hungary.

ANSWER: Austria [or Austrian Empire; or Österreich, do NOT accept or prompt on "Austria-Hungary"]

<Erik Christensen, European History>

6. In a short story by this author, the protagonist lies to his Japanese boss about being Buddhist, only to later learn that his bosses are Presbyterian. A story by this author ends with a character asking a woman she went to college with "I was a nice girl, wasn't I?" The title character of that story by this author is revealed to be Eloise's twisted ankle. The protagonist of a story by this author kisses the arch of the foot of a girl who insists her (\*) swimsuit is yellow and not blue. The protagonist of a story by this author accuses a woman in an elevator of staring at his feet and then commits suicide in a hotel room. That character tells the young girl Sybil Carpenter about the title fictional fish. For 10 points, name this author of "Uncle Wiggily in Connecticut" who wrote about Seymour Glass in "A Perfect Day for Bananafish."

ANSWER: J. D. Salinger [or Jerome David Salinger] (The story in the first sentence is "De Daumier-Smith's Blue Period.")

<Chandler West, American Literature>

7. One riot in this city broke out after an argument over seats on a merry-go-round. While casting a vote in this city, activist Octavius Catto was killed. A sailmaker working in this city, James Forten, financially supported William Lloyd Garrison's *The Liberator* and funded this city's Vigilant Association, which assisted Harriet Jacobs and Henry Box Brown. The Underground Railroad conductors Richard and Sarah Allen founded the Bethel African (\*) Methodist Episcopal Church in this city. Black people were erroneously believed to be immune to an epidemic in this city, leading to them being employed as nurses by Benjamin Rush. A document signed in this city included the three-fifths compromise. For 10 points, name this city, the site of a 1793 Yellow Fever outbreak and the 1787 Constitutional Convention.

ANSWER: Philadelphia, PA [or Philly]

<Eric Mukherjee, American History>

8. **Puc1 functions as one of these proteins in *S. pombe*. AMBRA1 ubiquitinates one of these proteins, which has a viral analogue expressed by H·H·V·8. One of these proteins is phosphorylated at T286 by G·S·K-3, and is overexpressed in an 11-to-14 translocation that drives mantle cell lymphoma. One of these proteins is transcribed after the inhibitory protein C·C·R·E is displaced by E·2·F; that one of these proteins has an N-terminal destruction box. They were discovered using pulse-chase labeling of sea urchin embryos in the lab of Tim Hunt, noting that bands (\*) appeared and disappeared during division. They form the regulatory portion of the maturation-promoting factor. These proteins bind their namesake dependent kinases to regulate the G1-to-S and G2-to-M transitions. For 10 points, name these proteins whose levels rise and fall during the cell cycle.**

ANSWER: cyclin

<Eric Mukherjee, Biology>

9. **A study by Ahmadi et al found that this practice affected people's skill in go/no go tasks like pressing a button when seeing an "x" and not pressing when seeing a "k." A study in Finland about this practice found that giving people nalmefene to take whenever they felt the need to eliminate the desire to partake in it. The effects of this practice are documented using either AUDIT-C or the CAGE questionnaire. Therapy for this practice introduced by Bill W and Dr. Bob has been criticized for applying the disease (\*) model to all people who participate heavily. A controversial faith-based method for eliminating this practice is the "12 Steps" that uses sponsors and begins with admitting that the person has a problem. For 10 points, name this practice whose addiction is addressed in candid discussions in Anonymous meetings.**

ANSWER: drinking alcohol [accept alcoholism, prompt on drinking or addiction]

<Erik Christensen, Social Science>

10. **One religion conducts a ritual in which the haoma plant is offered to this substance and reveres a creator god also known as the "child" of this substance. A Scandinavian kenning called fire the "grandson of" this substance. Proto-Indo-European religion believed fire and this substance to have animate and inanimate forms. In the Vedas, Agni is said to be born from or live in this substance. The (\*) yasna ritual is dedicated to this substance in Zoroastrianism, which considers fire and this substance the most sacred. Though originally a sky god, Varuna later became a god of this substance. At the end of Durga Puja, statues of Durga are sacrificed to this substance. The Kumbha Mela sees pilgrimages to four sources of this substance. For 10 points, name this substance that makes up the Ganges.**

ANSWER: water [or ocean, sea, lake, river, etc.]

<Gerhardt Hinkle, Religion>

11. **One of this author's characters locks a stolen diamond brooch on another character's wrist to get back an incriminating letter. In a play by this author, a government minister who made his fortune from insider trading is blackmailed into supporting a fraudulent canal scheme in Argentina. Aubrey Beardsley drawings accompanied the English version of a play this author wrote in (\*) French for Sarah Bernhardt. One of this author's characters exclaims "a handbag?!" when questioning her prospective son-in-law about his upbringing. In a play by this author of *An Ideal Husband* and *Salome* ["sal-oh-may"], Jack proves that he was abandoned as a baby at Victoria station, and therefore has the necessary name to marry Gwendolyn Fairfax. For 10 points, name this author of *The Importance of Being Earnest*.**

ANSWER: Oscar Wilde [or Oscar Fingal O'Flahertie Wills Wilde]

<Henry Atkins, British Literature>

12. A ruler of this region sent a bundle of golden arrows to Rome, saying “if you want war, keep the arrows, because you are going to need them.” During the 3rd century CE, the Wayekiye [“way-ya-kee-yah”] priests ruled the northern part of this region, a mining center called the Land of Thirty Schoinoi [“sco-in-oi”]. Strabo describes a “fierce one-eyed queen” of this region named Amanirenas [“a-man-nee-ray-nass”], who defeated the Romans at Syene [sigh-een]. Gaius Petronius sacked this region’s traditional northern capital of (\*) Napata. A kingdom of this region, ruled by queens called *Kandake*, was centered at the capital of Meroë, the site of numerous small pyramids. For 10 points, name this region in modern-day Sudan south of Egypt that was home to the pyramid-building Kingdom of Kush.

ANSWER: Nubia [or Lower or Higher Nubia; or Kush until mentioned]  
<Owen Riley + Erik Christensen, Other History>

13. William E. Connolly and Chantal Mouffe have advocated for an “agonistic” form of these systems which incorporates conflict instead of avoiding it. Beginning with a slow first wave, Samuel P. Huntington analyzed the growth of these systems in a three wave model. The deterioration of these systems called backsliding can lead to its illiberal form. Jürgen Habermas advocated for a (\*) deliberative form of these systems, which he argues must function in the public sphere. The Jacksonian form of these systems removed the previous requirement of property ownership while its “direct” form is practiced in Switzerland. For 10 points, name these systems of government, one of which was described by Alexis de Tocqueville *In America*.

ANSWER: democracies [or liberal democracy, or democratization, or Jacksonian, agonistic, or deliberative democracy, prompt on governments or states by asking “what form of government?” or state]  
<Erik Christensen, Philosophy>

14. In 2007 and 2020, Philip F. Hopkins co-authored papers first introducing a bolometric luminosity function describing these objects and then extending it for redshifts of up to seven. The theory of these objects was first developed after it was calculated that one of them would have been moving at 47,000 kilometers per second if it were a star. A 1983 paper by Schmidt and Green distinguishes these objects from another type of object named for (\*) Seyfert by the presence of a detectable host galaxy. The Gunn–Peterson trough results from neutral hydrogen suppressing portions of the emission spectra of these objects. If the relativistic jet of one of these objects, which can be classified as “radio-quiet” or “radio-loud,” is directed towards Earth, then it is a blazar. For 10 points, name these active galactic nuclei whose name is a shortening of “quasi-stellar radio source.”

ANSWER: quasars [ accept bolometric quasar luminosity function, radio-loud quasars, or radio-quiet quasars; prompt on active galactic nucleus, active galactic nuclei, or AGNs; anti-prompt on blazars]  
<David Bass, Other Science>

15. A group of artists from this movement stated “He who does not forget his first love will not recognize his last” and proclaimed “through us the horn of time blows in the art of the world.” A painting from this movement depicts the funeral of a man killed by police whose mourners were not allowed to enter the cemetery. A Manifesto from this movement claims to fight “against the nude in painting,” which it calls “as nauseous and tedious as adultery in literature.” A bronze sculpture of a twisting man with (\*) blocks for feet is from this movement. A painting of a dog on a leash from this movement by Giacomo Balla exemplifies its desire for dynamism. This movement’s manifesto was written by Filippo Marinetti. For 10 points, name this Russian and Italian art movement that embraced technology.

ANSWER: Futurism [or Italian Futurism; or Russian Futurism; or Futurismo; or Ego-Futurism; prompt on Hylea; prompt on Gylea; prompt on Guilée; accept Cubo-Futurism, but do NOT accept or prompt on “Cubism”] (The first sentence is from *A Slap in the Face of Public Taste*. The second sentence refers to Carlo Carrà’s painting *The Funeral of the Anarchist Galli*.)  
<Chandler West, Painting/Sculpture>

16. An airport in this city was originally named for Howard Hughes, but was renamed because federal funds could not be put towards airports named for living people. Atlas Air, a primarily freight airline, operated nonstop passenger service to Luanda, Angola from this city until 2018. The longest-ever commercial flight on a Boeing 737 connected this city to Stavanger, Norway and was marketed towards executives in the (\*) oil industry. Dallas was linked with this city by Southwest Airlines's first ever route, and that airline is still the largest tenant at its Hobby Airport. For 10 points, an "Intercontinental Airport" named for George Bush is the largest airport in what southwest Texas city?

ANSWER: Houston, Texas

<Conor Thompson, Other>

17. This author wrote "verandahs, where the pages of the sea / are a book left open by an absent master" to begin an autobiographical long poem. This poet collaborated with Paul Simon on the widely-panned musical *The Capeman*. This poet of *Another Life* evokes an actual propaganda photograph in a line mentioning a "white child hacked in bed," whom the speaker ironically contrasts with "savages, expendable as Jews." The speaker of a poem by this author considers betraying "the (\*) English tongue I love" after calling themselves "divided to the vein." In another poem by this author, the fishermen Achille and Hector vie for the hand of Helen. For 10 points, name this poet of "A Far Cry from Africa" and *Omeros*, a St. Lucian Nobel laureate.

ANSWER: Derek Walcott

<Henry Atkins, World Literature>

18. A sect based around a series of triads called trikas is chiefly devoted to this figure. Shoukou Asahara claimed that visions of this figure inspired his pilgrimage to India; he later claimed to be a manifestation of this figure. The banks of the Kaveri River have many temples dedicated to this figure that were built by the Chola dynasty, including Brihadishwara ["bree-huh-DEESH-vah-ruh"] Temple. This god is often worshiped in a composite form with his (\*) wife that's divided down the middle, called Ardhanarishvara ["ARR-dan-arr-EESH-vah-ruh"]. This god originated as an epithet of the Vedic god Rudra. This god is said to have created yoga and lives on Mount Kailash ["kay-lash"]. Devotees of this god mark their foreheads with three horizontal lines of ash and make offerings to sculptures of this god's phallus called lingams. This god rides the white bull Nandi, and his dance will cause the end of the world. For 10 points, name this Hindu god of destruction.

ANSWER: Shiva [or Mahadeva; or Nataraja; or Rudra before mentioned]

<Gerhardt Hinkle, Mythology>

19. On this island, millenia-old rock art created by the prehistoric Igneri group has been found in the extensive Pomier Caves. To limit smuggling on this island, bishop Agustín Dávila Padilla oversaw the violent Devastations of Osorio. Before colonization, this island was divided between five chiefdoms, or *cacicazgos* [KAH-see-KAH-zagos], including Marién and Maguana. A pirate cove on Tortuga evolved into a colony on this island. This island was the birthplace of a (\*) *cacique* [kah-SEE-kay] that resisted Spanish rule named Hatuey, a leader of its indigenous Taíno people. Christopher Columbus founded the short-lived settlement of La Navidad on this island, the first European settlement in the Americas. For 10 points, name this island in the Caribbean split between French and Spanish settlements.

ANSWER: Hispaniola [or Ispayaola; or Ayiti]

<Erik Christensen, World History>

20. The question of whether triplet states have this property is the subject of Baird's rule. An unusual form of this property is displayed by a complex of an osmium atom and two cyclopentenes as well as by *trans*-C-9-H-9-plus. A type of noncovalent attraction between two molecules that both have this property has forms called parallel-displaced, T-shaped, and sandwich. A form of this property that is extremely rare in stable molecules but common in transition states is named for (\*) Möbius. In NMR, this property causes the deshielding of nearby protons by enabling the formation of a namesake ring current. This property is possessed by molecules with  $4n + 2$  pi electrons according to Hückel's rule. For 10 points, name this property in which delocalized pi electrons stabilize a ring, such as in benzene.

ANSWER: aromaticity [do not accept or prompt on "antiaromaticity"]

<Gerhardt Hinkle, Chemistry>

1. Like teleost fish, many members of this class of vertebrates exhibit temperature-dependent sex determination. For 10 points each:

[10e] Name this paraphyletic class of vertebrates which includes turtles, snakes and crocodiles.

ANSWER: **reptiles**

[10m] This reptile native to New Zealand is a “living fossil” and sole extant member of the order Rhynchocephalia [“RINCH-oh-SEFF-aa-lee-uh”]. These reptiles get their name for a Maori word for the spines on their back.

ANSWER: **tuatara** [or ***Sphenodon punctatus*** or ***S. punctatus***]

[10h] Unlike mammals, reptiles, birds, and amphibians have a quadrate bone making up part of this structure. Agnathans [“ag-NATH-uns”] notably lack this structure.

ANSWER: **jaw**

<Vikshar Athreya, Biology>

2. While discussing these two concepts, one thinker notes that one requires “external sanctions” and “an audience or at least a man’s fantasy of an audience”, while the other does not. For 10 points each:

[10m] Name these two concepts. A book based on written works and interviews with captured soldiers argued they loosely described the cultures of two warring nations.

ANSWER: **shame** and **guilt**

[10e] *The Chrysanthemum and the Sword* is a book about Japanese culture by this American anthropologist who also wrote *Patterns of Culture*. This anthropologist was snubbed in replacing her mentor, Franz Boas, at Columbia.

ANSWER: Ruth **Benedict**

[10h] Building on the work of Ruth Benedict, anthropologist Eugene Nida identified this feeling to the shame and guilt framework. Missionary Jayson George’s heavily criticized “Culture Test” also adds this third feeling.

ANSWER: **fear**

<Erik Christensen, Social Science>

3. This author attacks academic jargon and “poor theory” in an essay collection advocating a post-national study of literature, what this author terms “Globalectics.” For 10 points each:

[10m] Name this critic and author who, in another essay, defends his decision to stop writing in English.

ANSWER: **Ngũgĩ** wa Thiong’o [or James **Ngugi**] (That essay is *Decolonizing the Mind*.)

[10e] After abandoning English, Ngugi used prison-issued toilet paper to write a Gikuyu novel titled for *[this figure] on the Cross*. Daniel Webster defends a farmer against this figure in a Stephen Vincent Benét story.

ANSWER: the **devil** [or **Satan**; or **Lucifer**]

[10h] This author and professor has often written on Ngugi’s work, including in a 1991 monograph on *Matigari*. In a novel by this author, Yusuf’s father sells him into service in a caravan before the outbreak of World War I.

ANSWER: Abdulrazak **Gurnah** (That novel is *Paradise*.)

<Henry Atkins, World Literature>

4. A donkey is depicted reading his family tree in this series' entry *And so was his grandfather*. For 10 points each:  
[10h] Name this series of eighty prints created using aquatint. Owls and bats fly over a man sitting at a desk in the forty third entry in this series.

ANSWER: *Los **Caprichos*** [or *The **Caprices***; do NOT accept or prompt on “caprichos enfáticos” or “emphatic caprices”] (The unnamed print is *The Sleep of Reason Produces Monsters*.)

[10m] This other series by the artist of *Los Caprichos* was painted in the Quinta del Sordo. This series includes *La Leocadia* and *Saturn Devouring his Son*.

ANSWER: *The **Black Paintings*** [or ***Pinturas negras***]

[10e] *Los Caprichos* and *The Black Paintings* are series created by this Spanish artist, who also painted *The Third of May, 1808*.

ANSWER: Francisco (de) **Goya** [or Francisco José de **Goya** y Lucientes]

<Beni Keown, Painting/Sculpture>

5. Jade pendants of these animals were popular during the Han dynasty, and northern-facing gates of Chinese palaces were often named for this animal. For 10 points each:

[10m] Name these animals, whose plastrons were commonly used along with ox scapula in the earliest evidence of written Chinese script. This animal was often depicted in black statues along with snakes.

ANSWER: **tortoise** [or **turtle**]

[10e] Tortoise shells were used as bones used for pyromancy, a form of this practice. The *I-Ching* is a manual dedicated to cleromancy, a form of this practice using random numbers.

ANSWER: **divination** [or answers like **telling the future**, **predicting the future**; or **prophesy**; accept other equivalents]

[10h] Following the oracle bone script, writing in Old Chinese was done using this material, also used for pictograms during the Shang. Ritual objects made of this material like the *you* are commonly found in burials.

ANSWER: **bronze**

<Erik Christensen, Other History>

6. The footpads are torn off this animal's foot in order to provide another character with “shoes” for his pilgrimage. For 10 points each:

[10h] Name this wolf, who comes to court to accuse a fox of raping his wife while she was stuck in ice.

ANSWER: **Isengrim** [or **Ysengrin**; or **Ysengrimus**]

[10m] This character defeats Isengrim in a fight by urinating on his own tail and slapping him in the face with it. This wily fox often tricks the lion King Nobel.

ANSWER: **Reynard** [or **Renart**; or **Reinardus**]

[10e] Folklore about Reynard the Fox was so influential in this country that *renard* became its word for fox. Fairy tales from this country were passed down by troubadours and collected by Charles Perrault.

ANSWER: **France**

<Jaimie Carlson, Mythology>



7. Outputs of this process are rendered using a geometric modeling kernel. For 10 points each:

[10m] Name this process that allows engineers to create virtual 3D solids or technical drawings. Solidworks and Autodesk create popular software packages for this process.

ANSWER: **computer-aided design** or **CAD** [or **computer-aided engineering**; or **computer-aided manufacturing**; or **CAE**; or **CAM**; prompt on **design**]

[10e] CAD ["kaad"] models can be saved as STL ["S-T-L"] files and sent to these additive manufacturing devices, which extrude a thermoplastic filament. The two-dimensional analog of these devices typically uses an inkjet.

ANSWER: **3D printers** [prompt on **printers**]

[10h] Simulations with irregular CAD geometry often use this technique for solving partial differential equations. This method uses a mesh to divide a model into discrete parts and finds an approximate solution in each domain.

ANSWER: **finite element** analysis [accept **finite element** method or **FEA** or **FEM**]

<Jacob Augelli, Other Science>

8. David Lewis has argued that these places are not just imaginary entities used for counterfactuals, but concrete and real places. For 10 points each:

[10m] Name this kind of place, where something must be true in every example in order to be a necessary truth in modal logic.

ANSWER: **possible worlds**

[10e] The first use of possible worlds in logic is often credited to this thinker, who argued we lived in the best of all possible worlds. This German thinker also invented calculus independently of Newton.

ANSWER: Gottfried **Liebiniz**

[10h] Proofs in modal logic often take the form of these structures, a series of linked nodes that each have a form of the original formula that can be refuted or proven. First-order logic proofs can use these structures with or without unification.

ANSWER: analytic **tableaux** [accept **truth tree**]

<Erik Christensen, Philosophy>

9. Under Said bin Sultan, plantations for this good were expanded on Pemba and Zanzibar. For 10 points each:

[10m] Name this spice native to the Moluccas. Along with nutmeg and mace, the House of Wisdom scholar Isaac ibn Amran wrote medical texts around this spice.

ANSWER: **cloves**

[10h] Members of this profession nicknamed cloves "birds tongue" and used it as a mouth freshener. This profession was divided into groups like jinshi ["JEEN-shurr"] and shengyuan ["SHUNG-y'wen"] based on measures like an "eight-legged essay."

ANSWER: members of the **Chinese Civil Service** [accept any answers indicating someone who is part of the **Chinese Civil Service** or has **passed the Chinese Civil Service exams**; accept scholar-**bureaucrats**; accept **gentry**; accept **scholar**-officials or **scholar**-gentlemen; accept **literati**; accept **mandarin**; accept **guān**; accept **shì dàfū**; accept **shēnshì**]

[10e] The Bandanese dominated clove trade in the Moluccas by shipping it on kora-kora canoes made of this plant. During the Song Dynasty, this rapid-growing, hollow plant common to Southeast Asia was made into early rocket launchers using gunpowder.

ANSWER: **bamboo**

<Ganon Evans, World History>

10. In a novella by this man, the photographer Jansen is deeply affected by the death of Robert Capa. For 10 points each:

[10h] Name this French author of the collection *Suspended Sentences*. In this author's novel *Missing Person*, a man who goes by the name Pedro tries to discover more about his past escape into Vichy ["vee-shey"] France and Switzerland.

ANSWER: Patrick **Modiano**

[10m] This author recounted collaborating with Robert Capa in his work *A Russian Journal*. In another of his travel accounts, he recounts traveling around America in his van, Rocinante.

ANSWER: John **Steinbeck** [or John Ernst **Steinbeck**]

[10e] Early in his career, Capa took the photograph "Falling Soldier" during this war. George Orwell recounted his experiences fighting in this war in *Homage to Catalonia*.

ANSWER: **Spanish Civil** War [or **Guerra** Civil **Espanola**]

<Andrew Hanna, European Literature>

11. Three Jimenez kings of this name fought a civil war for control of the Kingdom of Pamplona ruled by their grandfather, a "Great" king of this name. For 10 points each:

[10h] Identify this name of several kings of Navarre and Castille. Another king with this name turned a 1212 battle with an uphill charge that forced Muhammad al-Nasir to retreat.

ANSWER: **Sancho**

[10m] Sancho Navarre made a decisive charge at this 1212 battle, which began a series of victories that expanded Castille at the expense of the Almohads. Before this battle, Castille withdrew to Toledo after the Disaster of Alarcos.

ANSWER: Battle of **Las Navas de Tolosa** [or Battle of **Al-Uqab**]

[10e] Las Navas de Tolosa was the turning point in this long period of conflict over the Iberian peninsula. This period of conflict ended with the conquest of the last Muslim state on the peninsula, Granada, in 1492.

ANSWER: **Reconquista**

<Owen Riley + Erik Christensen, European History>

12. A fanfare from the horns and woodwinds on the note A-flat is often characterized as a motif of this concept in one symphony. For 10 points each,

[10e] Identify this concept, which is often associated with the hammer blows of Mahler's 6th Symphony and is characterized as "knocking at the door" in a short-short-short-long motif.

ANSWER: **fate** [or **fatum** or **Schicksal**]

[10m] The first fate motif mentioned opens the "Andante Sostenuto" first movement of this composer's fourth symphony, which was dedicated to a patroness who refused to ever meet him after his failed marriage.

ANSWER: Pyotr Ilyich **Tchaikovsky**

[10h] Tchaikovsky was influenced by this Mikhail Glinka piece, which he said laid the groundwork for Russian symphonies "just as the whole oak is in the acorn." This was the first orchestral work based entirely on Russian folk song.

ANSWER: **Kamarinskaya**

<Aidan Fein, Classical Music>

13. In Joseph O'Neill's novel *Netherland*, a Dutch Wall Street analyst takes up this sport. For 10 points each:  
[10h] Students of the Albert Mission School form a club for what sport in a novel followed by *The Bachelor of Arts* and *The English Teacher*?

ANSWER: **cricket** (that novel is *Swami and Friends* by R. K. Narayan)

[10e] *Netherland* takes place in Manhattan in the aftermath of this tragedy. In *Extremely Loud & Incredibly Close*, Oskar's father dies in this tragedy.

ANSWER: **9/11** [or the **September 11th** attacks; or the **World Trade Center** attacks]

[10m] A neurosurgeon sees a burning airplane just before the invasion of Iraq in this author's novel *Saturday*. In another of this author's novels, Briony reveals that she invented a happy ending for Robbie and Cecilia.

ANSWER: Ian **McEwan** (that novel is *Atonement*)

<Andrew Hanna, British Literature>

14. Complexes of these elements are described by Tanabe-Sugano diagrams. For 10 points each:

[10e] Name these elements which often bind to a variety of ligands using their outermost d-subshells. The d-block of the periodic table primarily consists of these elements.

ANSWER: **transition metals** [prompt on metals]

[10h] The axes of a Tanabe-Sugano diagram are normalized by these values, which describe electron-electron repulsion within transition metal complexes. They're written A, B, and C.

ANSWER: **Racah** parameter

[10m] One can determine if a transition metal complex is high spin or low spin by using one of these lists. Ligands and transition metals are ordered on these lists by their ligand-field splitting parameter.

ANSWER: **spectrochemical** series

<Vikshar Athreya, Chemistry>

15. These beings are believed to live in the villages for six months of each year; the end of that period sees the Going Home Dance to send these beings back to their homes in the San Francisco Mountains. For 10 points each:

[10m] Name these spirits venerated by Puebloan tribes such as the Hopi and Zuni. Members of those tribes dress as these spirits during dances, and these spirits are often represented by dolls.

ANSWER: **kachinas** [or **katsinim** (singular **katsina**)]

[10h] Though many rituals dedicated to kachinas occur in public, others open only to tribe members are held in these subterranean circular rooms. Larger "great" ones extend partially above ground and include one at the inaccurately-named Aztec Ruins National Monument.

ANSWER: **kivas** [accept **great kivas**]

[10e] Several kachinas are believed to bring this natural phenomenon that is responsible for good harvests. Many peoples from the American Southwest perform ritual dances meant to cause this natural phenomenon.

ANSWER: **rain**

<Gerhardt Hinkle, Religion>

16. In a film set in Cairo, a jealous man who works at one of these places smashes a coke bottle after observing a union advocate kissing a woman named Hannuma. For 10 points each:

[10h] Name this type of location, the setting of the ending of a romantic film often abbreviated as DDLJ. In *Dil Se*, a radio executive imagines an elaborate dance sequence after meeting a woman in one of these places in a rainstorm.

ANSWER: **train station** [or **railway station** or **railroad station** or **train depot**; prompt on just **station**]

[10e] DDLJ and *Dil Se*, starring Shah Rukh Khan, are films in this language. Amir Khan has starred in movies like *Lagaan* and *Dangal* in this language.

ANSWER: **Hindi** [or **Hindustani**; also accept **Urdu**]

[10m] In a notable scene, this Bengali character and his sister Dirga watch a train pass through a field near their village. Satyajit Ray directed a trilogy of films about this character, beginning with *Pather Panchali*.

ANSWER: **Apu** [or **Apurba** Kumar Roy]

<Erik Christensen, Other Fine Arts>

17. George Spalding legalized and regulated sex work in this state's capital in a successful attempt to prevent the spread of infection among Union Troops visiting "Smoky Row." For 10 points each:

[10h] Name this state. In 1878, William Warren escaped a quarantined steamboat in this state, resulting in a yellow fever epidemic in which the infected wore yellow jackets.

ANSWER: **Tennessee** [or **TN**]

[10e] Along this river, Marble Alley was a center of sex work. That area was south of Pennsylvania Avenue in Washington, D.C. and was frequented by an "Army" named for this river which was the main arm of the Union.

ANSWER: **Potomac** River [accept the Army of the **Potomac**]

[10m] After the war, U.S. Grant passed the Page Act, which limited immigration of women from this country. In the late 19th century, sailor kidnappings in the Pacific Northwest were named for a city in this country.

ANSWER: **China** [or the People's Republic of **China**; or **Zhōngguó** or **Zhōnghuá Rénmín Gònghéguó** or **PRC**; do NOT accept or prompt on "Republic of China" or "*Zhōnghuá Mínguó*"]

<Erik Christensen, American History>

18. A 2004 article by Kelefa Sanneh and Carl Wilson's book on Celine Dion's *Let's Talk About Love* are considered the two major texts that started this movement in music criticism. For 10 points each:

[10h] Name this movement, whose advocates argue for seriously evaluating the merits of mainstream music. One critique of this movement is that it politicizes personal taste and reflects the anxiety of a judgmental online world.

Answer: **Poptimism** [or **Popism**]

[10e] Poptimism emerged as a response to an ideology titled for this genre. This genre has its own Hall of Fame in Cleveland.

Answer: **Rock** and Roll

[10m] A 2020 song by this artist made with Aaron Dessner of *The National* was used to highlight how poptimist/rockist debates of the early 2010s are becoming obsolete. In 2014 *Pitchfork* reviewed Ryan Adam's full-album cover of one of this artist's albums, but not the original album itself.

Answer: Taylor **Swift**

<Liam Thompson, Other>

19. Answer some questions about the perovskite material YBCO, for 10 points each:

[10e] YBCO is a Type II example of one of these materials, which have zero electrical resistance when they are cooled beyond a certain temperature.

ANSWER: **superconductor**

[10m] Type II superconductors like YBCO have two critical values of this quantity, symbolized  $H_{c1}$  and  $H_{c2}$ . Type I superconductors completely expel this quantity in the Meissner effect.

ANSWER: **magnetic field**

[10h] High-temperature superconductors, like YBCO, are defined as having their transition temperature above this value, the boiling point of liquid N<sub>2</sub>. Express your answer to the nearest whole degree in the units of your choice.

ANSWER: **77 Kelvin** [or **196 Celsius**; or **321 Fahrenheit**]

<Eric Mukherjee, Physics>

20. In a short essay titled “Why I Wrote [this story],” its author explains that it was based on her real experience with a physician. For 10 points each:

[10m] Name this story whose narrator is convinced that she can smell the title object all over the house and becomes obsessed with it while being ordered to rest for several months to cure her “nervous depression.”

ANSWER: “The **Yellow Wallpaper**” (by Charlotte Perkins Gilman)

[10e] “The Yellow Wallpaper” is often read as one of the earliest American works in this movement. Betty Friedan’s *The Feminine Mystique* is often credited with beginning the second wave of this movement in the United States.

ANSWER: **feminism** [or word forms like **feminist**; or second-wave **feminism**; or first-wave **feminism**]

[10h] This early American feminist discussed her issues with George Sand’s writings in her book *Woman in the Nineteenth Century*, which begins by discussing the frailty of both men and women.

ANSWER: Margaret **Fuller** [or Sarah Margaret Fuller **Ossoli**]

<Chandler West, American Literature>