# Saturnalia: Packet 8

THESE TOSSUPS ARE PAIRED WITH BONUSES. IF A TOSSUP IS NOT CONVERTED, SKIP THE PAIRED BONUS AND MOVE ON TO THE NEXT TOSSUP. DO **NOT** COME BACK TO THE SKIPPED BONUS.

1. **A set of these pieces prints the titles at the end of the sheet music so that the sounds can be appreciated without context. The parallel fifths that open a piece of this type represent bells ringing off the coast of the Island of Ys ("eess"). "Footsteps in the Snow," "The Sunken Cathedral," and "The Girl with the Flaxen Hair" are part of a volume of these pieces by (\*)** Claude Debussy. A flute chromatically descends a tritone from C-sharp to G, then back up to C-sharp to begin one of these pieces based on the Stéphane Mallarmé poem "The Afternoon of a Faun." For 10 points, name these pieces that normally act as an introduction to a larger work.
ANSWER: **prelude**s
<Classical Music — Bowman> [Edited]

1. This scientist coined the term "wobble base pairing" to describe the ability of tRNA ("T-R-N-A") molecules to recognize multiple mRNA ("M-R-N-A") codons. For 10 points each:
[E] Name this molecular biologist who worked with James Watson to develop the double-helix model of DNA.
ANSWER: Francis **Crick** [or Francis Harry Compton **Crick**]
[M] Watson and Crick based their model on data stolen from Rosalind Franklin, who used this technique to study DNA. Bragg's law is used to analyze the results of this technique to determine a molecule's structure.
ANSWER: **X-ray crystallography** [or **X-ray diffraction**; prompt on crystallography]
[H] This recently-developed alternative to X-ray crystallography eliminates the need for potentially-damaging crystallization. This technique uses charged particles to image molecules that are vitrified in an amorphous solid.
ANSWER: **cryogenic electron microscopy** [or **cryo-EM** or **cryo-electron microscopy**; accept **CryoTEM** or transmission **electron cryomicroscopy**; prompt on electron microscopy or EM or transmission electron microscopy or TEM]
<Biology — Yin> [Edited]

2. **The impossibility of this phenomenon in two dimensions is a consequence of the Poincaré-Bendixson ("pwann-cah-RAY ben-DICK-sun") theorem. In one discrete system, this phenomenon occurs after a cascade of period-doubling bifurcations as a parameter approaches four. The trajectories of many systems exhibiting this phenomenon tend toward a fractal region called a (\*)** strange attractor. The occurrence of this phenomenon in nonlinear systems like the Lorenz equations prevents the long-term prediction of weather. For 10 points, name this phenomenon in which a dynamical system has extreme sensitivity to initial conditions, popularly exemplified by the "butterfly effect."
ANSWER: **chaos** (The system in the second clue is the discrete logistic map.)
<Physics — French> [Edited]

2. This government was suppressed during the Bloody Week, and it included Proudhonists ("proo-DHONE-ists") and Blanquists ("blan-kee-ists"). For 10 points each:
[M] Name this radical socialist government that took control of a capital city after the fall of the Second Empire. The National Guard tried to defend this government, but failed.
ANSWER: **Paris Commune** [or ***Commune de Paris***]
[E] The government of the Paris commune provided this political theorist with an example of a "dictatorship of the proletariat," an idea he elaborated on in *The Communist Manifesto*, which he wrote with Frederick Engels.
ANSWER: Karl **Marx**
[H] This first president of the Third Republic ordered the army to suppress the Paris Commune. Earlier, this man founded the newspaper *The National*, which was raided by government authorities during the July Revolution.
ANSWER: Adolphe **Thiers** ("THEE-air") [or Marie Joseph Louis Adolphe **Thiers**]
<European History — Athreya> [Ed. Laurence Li]

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3. **In a Middle English tale, one of these creatures is tricked into descending into a well where he is attacked by a group of monks. That tale features the fox Reynard and one of these creatures named Isengrim. A god kills one of these creatures by stepping on its lower jaw with a boot. In Norse mythology, the sun and the moon are (\*)** chased through the sky by two of these creatures named Skoll and Hati ("HAW-tee"). At Ragnarök, Vidar kills one of these creatures after it breaks free of the chain Gleipnir ("GLAYP-near") and devours Odin. For 10 points, Fenrir ("FEN-rear") is what type of animal who, in another folktale, tries to destroy the homes of three little pigs?
ANSWER: **wolf** [or **wolves**; accept big bad **wolf** or Fenrir **wolf**; do NOT accept or prompt on "werewolf"]
<Mythology — Condron> [Edited]

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3. According to the Born interpretation, the squared modulus of this quantity equals the probability density of finding a particle at a given point. For 10 points each:
[M] Name this quantity, which describes the quantum state of a system. It is symbolized $\Psi$ ("sigh").
ANSWER: **wavefunction**
[E] The Hamiltonian of the wavefunction equals "i h-bar" times its time derivative, according to an equation named for this physicist. This physicist also names a thought experiment in which a cat may be both dead and alive.
ANSWER: Erwin **Schrödinger** [accept time-dependent **Schrödinger** equation or **Schrödinger**'s cat]
[H] When the Hamiltonian does not depend on time, the Schrödinger equation reduces to finding these quantities of the Hamiltonian. Since the Hamiltonian is Hermitian, all of these quantities must be real.
ANSWER: **eigenvalue**s [prompt on energy levels by asking "what mathematical relationship do the energy levels have to the Hamiltonian?"; do NOT accept or prompt on "eigenvectors" or "eigenstates" or "eigenfunctions" or "eigenkets"]
<Physics — Ye> [Ed. French]

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4. **Prior to this conflict, the different spellings of one word led to Operation Hamilcar being renamed. Countries secretly agreed to participate in this conflict in the Protocol of Sèvres. Prior to this event, a leader inserted the words "de Lesseps" in a speech to signal his forces to begin a raid. Operation Kadesh and (\*)** Operation Musketeer were both launched during this conflict. Prime Minister Anthony Eden resigned after this conflict, which followed the defunding of the Aswan High Dam. For 10 points, name this invasion that France, Britain, and Israel initiated in response to Gamel Abdel Nasser's nationalization of a namesake canal.
ANSWER: **Suez** Canal Crisis [accept **Second Arab-Israeli War** or **Tripartite Aggression** or **Sinai War**; prompt on Arab-Israeli war; do NOT accept or prompt on "First Arab-Israeli War"]
<World History — Louis Li> [Ed. Laurence Li]

4. This operating system's "flavors" come with different desktop environments, such as KDE ("K-D-E") Plasma or Xfce ("x-f-c-e"). For 10 points each:

[H] Name this operating system produced by Canonical. This operating system switched default desktop environments from Unity to GNOME ("nome") at version 18, and it uses Debian's `apt` ("apt") package manager.

ANSWER: **Ubuntu** ("oo-bun-too") [accept **Kubuntu** or **Xubuntu**; prompt on BUT DO NOT REVEAL <u>Linux</u> or <u>GNU/Linux</u>]

[E] Ubuntu is an individual distribution of this larger class of operating systems, all of which use a namesake kernel developed by Linus Torvalds.

ANSWER: **Linux** [or GNU/**Linux**]

[M] A version of Ubuntu designed for these systems does not come with a GUI ("GOO-ee"). Red Hat Enterprise Linux is commonly used for these systems, which respond to client requests.

ANSWER: **servers**

<Computer Science — Gurazada> [Edited]

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5. **A montage in this film set to a song that states "I used to live alone before I knew you" shows the reflection of one character in eight chandelier bulbs. This film's antagonist proclaims, "Some of you may die, but that is a sacrifice that I am willing to make." During an interrogation in this film, two characters inadvertently recite lines from the (\*)** nursery rhyme "The Muffin Man." One analogy in this film is met with the response "You leave them in the sun, they get all brown, start sproutin' little white hairs" and involves an onion. For 10 points, Lord Farquad is the antagonist of what animated film in which Donkey helps rescue Fiona along with the title ogre?

ANSWER: ***Shrek***

<Tagtmeier> [Edited]

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5. If they are simple, the optimal method for testing these statements is the likelihood ratio test, according to the Neyman-Pearson lemma. For 10 points each:

[E] Name these statements. Statistical testing decides whether to retain or reject the "null" type of these statements.

ANSWER: **hypotheses** [or **hypothesis**; accept null **hypothesis** or alternative **hypothesis** or **hypothesis** testing]

[M] In a hypothesis test, the null hypothesis is rejected if this value is less than the level of significance. This value is the probability of obtaining the sample outcome assuming that the null hypothesis is true.

ANSWER: $p$ value ("p value")

[H] This quantity is the probability of rejecting the null hypothesis when the null hypothesis is indeed false. This quantity is greater for tests with greater sample size, effect size, or significance level.

ANSWER: statistical **power**

<Math — Condron> [Ed. French]

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6. **The Solow ("SOH-loh") growth model predicts that an increase in the rate of this action leads to an increase in the steady state. Soviet authorities feared that the involuntary prevalence of this action was creating a namesake overhang. In the loanable funds market, agents doing this action supply the loanable funds. In a closed economy, the amount of this action equals (\*)** investment spending. The marginal propensity to consume plus the marginal propensity to do this action always equals one. A value quantifying the private form of this action equals the difference between disposable income and consumption. For 10 points, name this practice of not spending money.

ANSWER: **saving**

<Economics — Condron> [Edited]

6. One of the earliest widely-successful African dramas is Duro Ladipọ's opera *Ọba Kò So*, whose title tells of a person with this position who "Did Not Hang." For 10 points each:
[M] Name this position. The death of a man with this position necessitates the suicide of Elesin in a Wole Soyinka play.
ANSWER: **king** [prompt on Oba; do NOT accept or prompt on "king's horseman"]
[E] Wole Soyinka is a Yoruban playwright from this African country.
ANSWER: **Nigeria** [or Federal Republic of **Nigeria**]
[H] This other play by Soyinka focuses on Dr. Bero, who tortures his own father. This play was written as an absurdist response to the Nigerian Civil War while Soyinka was imprisoned.
ANSWER: *Madmen and Specialists*
<Drama — Modali> [Ed. Mayers, Condron]

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7. **This physical quantity remains roughly constant for T Tauri** ("T tau-rye") **stars as they evolve along the Hayashi track. The kappa mechanism is driven by the direct variation of opacity with this quantity, causing the pulsation of variable stars. A constant *b* divided by this quantity approximates a star's peak emission wavelength. In the Morgan-Keenan system, this quantity determines a star's (\*)** spectral type. Either color index or this quantity is plotted on the x-axis of a Hertzsprung-Russell diagram. Stars with high values for this quantity appear blue in color, while stars with low values for it appear red. For 10 points, name this quantity equal to about 5,800 kelvin on the Sun's surface.
ANSWER: surface **temperature** [or effective **temperature** or color **temperature** or photospheric **temperature**; prompt on spectral type or spectral classification until "spectral" is read; prompt on color or color index until "color" is read by asking "what physical quantity is that based on?"; do NOT accept or prompt on "core temperature" or "central temperature"]
<Astronomy — Yin> [Edited]

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7. This musician sings about "blues fallin' down like hail" on a song in which he is pursued by a hellhound. For 10 points each:
[H] Name this master of the Delta Blues style who asked to be buried "Down by the highway side / So my old evil spirit / Can get a Greyhound bus and ride" on the song "Me and the Devil Blues."
ANSWER: Robert **Johnson**
[M] A character in this Langston Hughes Blues poem sings, "I's gwine to quit ma frownin' / And put ma troubles on the shelf," while "droning a drowsy syncopated tune."
ANSWER: "The **Weary Blues**"
[E] This New York City neighborhood was home to a literary and artistic Renaissance that celebrated Black musical traditions like the Blues. A Hughes poem titled for this neighborhood begins, "What happens to a dream deferred?"
ANSWER: **Harlem**
<Poetry — Faeder> [Edited]

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8. **A character in this novel is introduced as eating "with relish the inner organs of beasts and fowls" and imagines being auctioned off by "Mr. Bello" while at a brothel in Nighttown. That character in this novel is haunted by hallucinations of his deceased son Rudy. Another character in this novel claims God is "a shout in the street" after being kicked out of Martello Tower by (\*)** Buck Mulligan. In this novel's closing monologue, a woman describes her affair with Blazes Boylan and recalls accepting a proposal by saying, "yes I said yes I will Yes." For 10 points, name this novel which follows Stephen Dedalus and Leopold Bloom's journeys in Dublin, a novel by James Joyce.
ANSWER: *Ulysses*
<Long Fiction — Orr> [Edited]

8. After seeing Muslims with "blonde hair and blue eyes" during a pilgrimage to Mecca, this man abandoned his earlier calls for a separate state for African-Americans. For 10 points each:
[E] Name this civil rights activist who was assassinated in 1965 at the Audubon theater after his break with Elijah Muhammad and the Nation of Islam.
ANSWER: Malcolm **X** [or El-Hajj Malik El-**Shabazz**; accept Malcolm **Little**]
[H] Malcolm X called himself this person's "most fanatic fan" in his *Autobiography* after listening to one of his achievements on the radio. This person later criticized X in *The Chicago Defender* for not attending the funeral of Medgar Evers.
ANSWER: Jackie **Robinson**
[M] This author used his interviews with Malcolm X as the basis for his *The Autobiography of Malcolm X.* He described his ancestor Kunta Kinte coming to the Americas in the book *Roots*.
ANSWER: Alex **Haley** [or Alexander **Haley**]
<U.S. History — Condron> [Ed. Iyer]

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9. **In one painting by this artist, a fat prince armed with a spit and riding a barrel jousts with a woman carrying a paddle with fish on it. That work, one of this artist's wimmelbilder, is *The Fight Between Carnival and Lent*. A painting by this artist that shows a line of blind men using each other for guidance was based on another of his paintings that literally interprets over one hundred (\*)** proverbs. In a painting originally created by this artist, nobody notices the title figure's legs sticking out of the sea as he drowns after flying too close to the Sun. For 10 points, name this Flemish artist of *Landscape with the Fall of Icarus*.
ANSWER: Pieter **Brueghel** the Elder
<Painting and Sculpture — Lewis> [Ed. Bowman]

9. The narrator of this novel removes "fancy adjectives" from Pascual's plagiarized news bulletins for Radio Panamericana. For 10 points each:
[M] Name this Mario Vargas Llosa ("YOH-sah") novel about Pedro Camacho's radio serials and the narrator's romance with the title divorced relative.
ANSWER: ***Aunt Julia and the Scriptwriter*** [or *La **tía Julia y el escribidor***]
[E] Mario Vargas Llosa feuded with this author after a fight in 1976. This author wrote about the fictional town of Macondo in his novel *One Hundred Years of Solitude*.
ANSWER: Gabriel **García Márquez** [prompt on García or Márquez]
[H] Vargas Llosa's novel *The Feast of the Goat* is partially narrated by a dictator from this country. That dictator also appears in *How the Garcia Girls Lost Their Accents*, in which the title characters grow up in this country.
ANSWER: **Dominican Republic** [or **República Dominicana**; accept the **D.R.**] (The dictator is Rafael Trujillo.)
<Long Fiction — Orr> [Ed. Condron]

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10. **Brokeoff Volcano is one remnant of this range's former Mount Tehama. The Osceola lahar in this range travelled by the White and Puyallup Rivers to the sea. From this range's terminus at Lytton Mountain, the Fraser River flows between it and the Coast Range. The collapse of Mount Mazama in this range created the deepest (\*)** lake in the United States. Mount Lassen and Mount Hood are located in this range, as is a stratovolcano whose eruption in 1980 was the deadliest in US history. For 10 points, the Columbia River Gorge passes through what mountain range that includes Crater Lake, Mount Rainier, and Mount Saint Helens in the Pacific Northwest?
ANSWER: **Cascade** Range [or **Cascades**]
<Geography — McAvoy-Bickford> [Ed. Daniel Ma]

10. For 10 points each, answer some questions about billionaires who have invested in space.
[E] This billionaire, who is also the CEO of Tesla, founded SpaceX, which recently became the first private company to take astronauts to the International Space Station.
ANSWER: Elon **Musk**
[M] This other billionaire, who owns Nash Holdings, has also founded the space company Blue Origin, which is designing the New Shepard rocket.
ANSWER: Jeff **Bezos**
[H] This Russian-Israeli billionaire helped to found Breakthrough Starshot, a project that aims to send spacecraft powered by solar sails to a nearby exoplanet. He also co-created the Breakthrough Prizes for scientific advancements.
ANSWER: Yuri **Milner**
<Current Events — McAvoy-Bickford> [Edited]

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11. **Salmon P. Chase signed a manifesto opposing this piece of legislation called the "Appeal of the Independent Democrats." The proposed Lecompton Constitution had many fraudulent votes and therefore did not conform to a standard set in this act. The authors of this act were attacked in a speech by (*)** Charles Sumner, who was later beaten with a cane by Preston Brooks. Many Border Ruffians opposed this act, which repealed the Missouri Compromise and declared that "popular sovereignty" would decide the issue of slavery. For 10 points, name this 1854 act that created two namesake territories, one of which was "Bleeding" in a subsequent conflict.
ANSWER: **Kansas-Nebraska** Act [accept An Act to Organize the Territories of **Nebraska** and **Kansas**, prompt on Nebraska or Kansas alone]
<U.S. History — Athreya> [Edited]

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11. People who live in this location are nourished off of the tree *Zaqqoum*. For 10 points each:
[H] Name this location where people can enter by falling off the narrow Bridge of Sirat.
ANSWER: **Jahannam** [or **Islamic underworld** or **Muslim underworld** or **Islamic Hell** or **Muslim Hell**; prompt on underworld or Hell by asking "in what religion"]
[E] Jahannam is guarded by nineteen of these beings, led by Malik. Other examples of these beings include Israfil and Jibril ("jib-REEL"), the respective equivalents of Raphael and Gabriel.
ANSWER: **angels** [or **malak** or **mala'ikah;** accept **archangels**]
[M] Most of the information regarding Jahannam comes from these compilations of sayings and actions of Muhammad and his followers.
ANSWER: **hadith** [or **ahaditha**]
<Religion — Dai> [Edited]

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12. **An infection of this organ can be identified by testing for the presence of urease ("YER-ee-ase"). Ménétrier's ("men-eh-TREE-ay's") disease occurs due to overgrowth of this organ's foveolar ("foh-VEE-ler") cells. An aspartic protease ("PRO-tee-ase") active in this organ is secreted in an inactive form by this organ's chief cells. Pernicious anemia occurs when this organ contains low levels of a (*)** glycoprotein that binds to vitamin $B_{12}$ ("B-twelve") called intrinsic factor. The pyloric sphincter regulates transport out of this organ into the duodenum. Gastrin signals this organ's parietal cells to secrete hydrochloric acid. For 10 points, name this digestive organ which the esophagus empties into.
ANSWER: **stomach** (The infection in the first clue is of *Helicobacter pylori*; the aspartic protease is pepsin.)
<Biology — Yin> [Edited]

12. Erwin Madelung names an empirical rule used in the application of this principle. For 10 points each:
[M] Name this principle which states that, in an atom's ground state, electrons fill orbitals in order of increasing energy level.
ANSWER: **Aufbau** ("OWFF-bow") principle [accept **Aufbau** rule; accept **building-up** principle or rule]
[H] Another way of stating the Aufbau principle is that this quantity plus the principal quantum number must not decrease as you fill orbitals.
ANSWER: **azimuthal** quantum number [accept **angular momentum** quantum number or **L**]
[E] On this chart, elements with the same energy level are placed in the same row. Dmitri Mendeleev ("men-duh-LAY-yev") created this chart by placing elements with similar chemical properties in the same column.
ANSWER: **periodic table** of elements
<Chemistry — Daniel Ma> [Edited]

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13. **A poem by this author ends with the speaker being told, "let us sleep now," by a man he killed whose "dead smile" showed that they were in Hell. This author described a "drawing-down of blinds" at dusk in a poem dedicated to a group for whom there are "no mockeries… no prayers nor bells." That poem asks, "what passing-bells for those who (\*)** die as cattle?" The speaker of a poem by this author describes the "froth-corrupted lungs" of a man who drowned under a "green sea" of gas. That poem refers to its title Latin phrase as "the old Lie." For 10 points name this British poet of "Anthem for Doomed Youth" and "Dulce et Decorum Est."
ANSWER: Wilfred **Owen**
<Poetry — Lewis> [Ed. Condron]

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13. This performance artist developed a series of stamina and concentration exercises called her namesake "method." For 10 points each.
[H] Name this Serbian "grandmother of performance art" who spent 12 days in the Sean Kelly Gallery without food in her piece *House with the Ocean View*. She also performed *The Artist is Present*.
ANSWER: Marina **Abramovic** ("ah-BRAH-moh-vitch")
[M] In one of this performance artist's "instruction pieces," the viewer is encouraged to scream into a microphone in the middle of the MoMA. This artist is embraced by her nude husband in a photograph by Annie Leibowitz.
ANSWER: Yoko **Ono**
[E] Performance artists like Xiao ("shao") Lu have used the medium to critique this country's government. Xiao Lu's piece *Dialogue*, in which she fired bullets at two telephone booths, is referred to as the "first gunshots" of this country's Tiananmen Square Massacre.
ANSWER: **China** [or **People's Republic of China** or **PRC** or *Zhōngguó* or *Zhōng*huá Rénmín Gònghé*guó*; accept **Hundred Acre Wood**; do NOT accept or prompt on "Republic of China"]
<Misc. Art — Bowman> [Edited]

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14. **The execution of the Nahrí brothers was addressed in this religion's founder's last work, the *Epistle to the Son of the Wolf*. This religion's founder also authored the allegorical poetic text *The Seven Valleys*. A text from this religion called *God Passes By* details its founder's declaration that he was a manifestation of God in the Garden of (\*)** Ridvan. This religion's *Book of Certitude* details the progressive divine revelation and the unity of all faiths. That book was translated by this religion's first and only guardian, Shoghi Effendi ("SHOH-ghee uh-FEN-dee"). This religion's main text, the *Kitáb-i-Aqdas*, was translated at its Universal House of Justice in Haifa, Israel. For 10 points, name this religion founded by the Bahá'u'lláh ("buh-HA-oo-lah").
ANSWER: **Bahá'í** Faith [or **Baha'ism**; do NOT accept or prompt on "Babism"]
<Religion — McAvoy-Bickford, Dai> [Ed. Dai]

14. The Thirtieth of September Movement was an attempted coup against this leader. For 10 points each:
[M] Name this leader who established a system of "Guided Democracy." This first president of Indonesia hosted the Bandung conference, which eventually led to the development of the Non-Aligned Movement.
ANSWER: **Sukarno**
[E] Sukarno led the struggle for Indonesian independence against this colonial power. This country's East India Company conquered large swathes of Indonesian territory while headquartered in Amsterdam.
ANSWER: **Netherlands** [or Kingdom of the **Netherlands** or Koninkrijk der **Nederlanden**, accept **Dutch** East India Company, accept **United Provinces** of the Netherlands, accept **Dutch** Republic]
[H] Sukarno's successor, Suharto, established this authoritarian regime. Suharto engaged in a violent purge of communists during the transition to this regime, which orchestrated the 1991 Santa Cruz massacre.
ANSWER: **New Order** [or *Orde Baru*; accept *Orba*]
<World History — Athreya> [Edited]

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15. **In an essay, this author claimed that both Kurtz and Marlowe understood that "the darkness has an autonomy of its own," but that Joseph Conrad had the "tragic limitation" of being "a creature of his time." This author argued that the decline of a class's power is shown by Thomas Bertram's trips to Antigua in *Mansfield Park*. This author included the essays "Two Visions of Heart of Darkness" and "Jane Austen and Empire" in (\*)** *Culture and Imperialism*. In an earlier book, this author claimed that Western authors have created a myth based on imperialist stereotypes and Eurocentrism. For 10 points, name this Palestinian-American postcolonial author of *Orientalism*.
ANSWER: Edward **Said**
<Other Literature — Condron> [Edited]

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15. This hero single-handedly holds off the army of Queen Medb ("mayv") after Macha ("MAH-kuh") curses the men of Ulster to become as weak as a woman in labor at their time of need. For 10 points each:
[M] Name this hero who wields the Gae Bulg ("gay boolg"), a barbed spear that he can only throw using his toes. This hero receives his nickname after killing a guard dog.
ANSWER: **Cú Chulainn** ("koo KUL-in") [or **Cú Chulaind** or **Cúchulainn** or **Sétanta**]
[H] Cú Chulainn receives the Gae Bulg from this "Warrior Maid" who trains him at her castle of Dún Scáith ("doon skah"). Cú Chulainn fathers Connla with this woman's sister and rival, Aífe ("EE-fuh").
ANSWER: **Scáthach** ("SKAH-hack")
[E] Scáthach and Cú Chulainn appear in the Ulster Cycle of this country's mythology. Other heroes from this country include Fionn mac Cumhaill ("fin mik-KOOL"), whose son Oisín ("UH-sheen") dictates its Fenian Cycle to Saint Patrick.
ANSWER: **Ireland** [or **Éire**; accept **Irish** mythology]
<Mythology — Yin> [Edited]

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16. **An emissary of this empire named Rychaldus attempted to forge an alliance at the Council of Lyon. The Compendium of Chronicles was a history of this empire authored by Rashid al Din. This empire's general, Kitbuqa, was executed by Mamluks after losing the battle of Ain Jalut. After two of this empire's messengers were killed, this empire conquered the (\*)** Khwarezmian Empire. The Tigris river is said to have run black with ink after troops from this empire destroyed the House of Wisdom and ended the Abbasid Caliphate after the Siege of Baghdad. This empire's Middle East holdings evolved into the Ilkhanate. For 10 points, name this empire founded by Genghis Khan.
ANSWER: **Mongol** Empire [accept **Ilkhanate** before mention]
<World History — Louis Li> [Ed. Iyer]

16. Some critics believe that Antonie van Leeuwenhoek posed as the central scholar for these two paintings. For 10 points each:

[H] Name these two oil paintings. In one of these two paintings, the scholar examines a globe; in the other, he holds a compass while studying a map.

ANSWER: The *__Astronomer__* AND *The __Geographer__* [prompt on either painting individually]

[M] *The Astronomer* and *The Geographer* were painted by this Baroque artist, whose other portraits include *The Allegory of Faith*.

ANSWER: Johannes **Vermeer** [or Jan **Vermeer**]

[E] Vermeer may be most famous for a portrait that depicts a girl in a turban wearing this piece of jewelry.

ANSWER: **pearl earring** [or *__Girl with a Pearl Earring__*; prompt on pearl or earring]

<Painting aand Sculpture — Yin> [Ed. Bowman]

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17. **Some of these compounds function by mimicking juvenile hormones. Those examples of these compounds, which include hydroprene and methoprene, are growth regulators. Alternatives to the use of these compounds include push-pull strategy and a type of integrated management. Natural examples of these compounds include pyrethrum** ("pye-REE-thrum") **and (\*)** nicotine. One of these compounds was banned in 1972 after it was shown to cause eggshell thinning. The adverse environmental effects of DDT ("D-D-T") and other examples of these compounds were exposed in Rachel Carson's book *Silent Spring*. For 10 points, name these chemicals that are used to kill pests.

ANSWER: **pesticide**s [accept **insecticide**s; prompt on insect growth regulators before mention]

<Chemistry — French> [Edited]

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17. The "Monstrous Coalition" ousted *Domnitor* Alexander Cuza, the reformist ruler of a predecessor to this state. For 10 points each:

[H] Name this state that was born out of the "United Principalities." One king of this country attempted to unify it with a neighbour at the urging of Stefan Stambolov, but backed down due to Russian pressure.

ANSWER: Kingdom of **Romania** (The king was Carol I.)

[E] The medieval regions of Wallachia, Moldavia, and this region cover most of the modern-day territory of Romania. Vlad the Impaler served as voivode of this region, which came to be associated with vampires.

ANSWER: **Transylvania** [or *__Erdély__* or *__Ardeal__*]

[M] The *Sași ardeleni* is the name given to a group of this ethnicity who settled in Transylvania. Towns populated by this ethnicity founded the Hanseatic League.

ANSWER: **German** [or *__Deutsche__*; accept Transylvanian **Saxons**]

<European History — Laurence Li> [Edited]

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18. **Using the "Magic Fingers" reminds this character of a barbershop quartet called the Four-Eyed Bastards. This character's wife is involved in a car crash and dies of carbon monoxide poisoning on her way to visit this character in the hospital after he survives a plane crash. This husband of Valencia Merble becomes enemies with (\*)** Roland Weary before Roland dies from gangrene. This character lives with Montana Wildhack while visiting Tralfamadore ("tral-FAM-uh-dor"). For 10 points, name this character who becomes "unstuck in time" and survives the firebombing of Dresden in Kurt Vonnegut's novel *Slaughterhouse-Five*.

ANSWER: Billy **Pilgrim** [or **Billy** Pilgrim]

<Long Fiction — Ashbrook> [Ed. Condron]

18. James Merrill used one of these objects to write the poem *The Changing Light at Sandover*. For 10 points each:

[M] Name these objects that William Fuld claimed to have invented. They consist of a plank with the letters of the alphabet, numbers, yes, no, and sometimes other words on them, along with a planchette ("plan-SHET").

ANSWER: **Ouija** board [accept **spirit board** or **talking board**]

[E] Emily Hutchings claimed to have received the novel Jap Herron from this author through an Ouija board. While alive, this author wrote *The Adventures of Tom Sawyer*.

ANSWER: Mark **Twain** [accept Samuel **Clemens**]

[H] The scientist Michael Faraday, among others, attributed the actions of Ouija boards and similar Spiritualist practices to this effect, in which one makes small movements unconsciously.

ANSWER: **ideomotor** effect [accept **ideomotor** phenomenon or **ideomotor** response or **Carpenter** effect]

<Other — McAvoy-Bickford> [Ed. McAvoy-Bickford]

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19. **In a film set in this country, a maid files down her mistress' sharp tooth after giving her a lollipop during a bathing scene. In a film by a director from this country, Minister Mason gives a speech that states, "you wouldn't put a shoe on your head." At the end of that film, Curtis sticks his hand into the moving cogs of a train that houses all of humanity during an (\*)** ice age. In another film from this country, the "subway" smell of a man almost gives away his hiding place. In that film, a poor family uses peach fuzz to trigger a housekeeper's allergies in a plot to secretly enter the employ of a rich family. For 10 points, name this home country of the director of *Snowpiercer* and *Parasite*, Bong Joon-ho.

ANSWER: **South Korea** [or **Republic of Korea** or **ROK**; prompt on Korea; do NOT accept or prompt on "North Korea" or "Democratic People's Republic of Korea"] (The first film is *The Handmaiden* directed by Park Chan-wook.)

<Film — Victor Li> [Ed. Bowman]

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19. The narrator of this short story says that the title location aims to "show everything in a false light." For 10 points each:

[H] Name this story in which the painter Piskaryov stalks a woman who works at a brothel and in which Lieutenant Pirogov has an affair with a married woman.

ANSWER: "**Nevsky Prospekt**"

[M] In this other story, Major Kovalyov is told he can't print an advertisement by an amused newspaper clerk. This story's title object is seen wearing a civil servant's uniform after being found in a loaf of bread by the barber Ivan.

ANSWER: "The **Nose**" [or "**Nos**"]

[E] "Nevsky Prospekt" and "The Nose" are stories by this Russian author. He also wrote "Diary of a Madman" and "The Overcoat."

ANSWER: Nikolai **Gogol**

<Short Fiction — McAvoy-Bickford> [Ed. Mayers]

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20. **This ruler prohibited Jews from engaging in money-lending activities in his *Capitulary for the Jews*. The iconoclasm of the Isaurian dynasty led the Catholic church to support this ruler instead of Empress Irene. This king ordered the Massacre of Verden while persecuting the pagan Saxons, whose ruler Widukind he had earlier defeated. This ruler's empire was divided in the treaty of (\*)** Verdun after his son Louis the Pious died. This ruler established a capital at Aachen, although he was crowned in Rome by Pope Leo III ("the third") on Christmas Day. For 10 points, name this Frankish king who established the Holy Roman Empire in 800 A.D.

ANSWER: **Charlemagne** [or **Charles I**, or **Charles the Great** or **Carolus Magnus**; prompt on Charles or Karl or Carolus]

<European History — Athreya> [Ed. Laurence Li]

20. Before immigrating to America, Swiss composer Ernest Bloch ("block") wrote a cycle of compositions inspired by the music of these people. For 10 points each:
[M] Name these people. The soloist imitates the blow of a *shofar* in a Bloch suite titled for these people.
ANSWER: **Jew**ish people [accept Ashkenazi **Jew**s]
[E] That suite, Bloch's *Suite Hébraïque* ("ay-brah-EEK") features this middle-voice string instrument as the soloist, although the piece is often performed with the slightly smaller violin..
ANSWER: **viola** [accept **firewood**]
[H] The final piece in Bloch's Jewish Cycle is *Schelomo*, a piece of this type in which the cello soloist evokes the voice of King Solomon. These pieces are generally single-movement, free flowing, and episodic.
ANSWEr: **rhapsody**
<Classical Music — Jeffrey Ma> [Edited]