

## Penn Bowl 2018

### Packet 10

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Tossups

1. **This poet writes that “just like moons and like suns / with the certainty of tides... I” will perform the title action. In another poem, this writer says that an object is “no less to Midas than the mendicant / and no less to you now than the mastodon then.” Neither of those poems were included in her most famous poetry collection, which includes the section “Where Love is a Scream of Anguish.” This author of (\*) *Just Give Me a Cool Drink of Water 'fore I diie* instructs the reader to “say simply / very simply / good morning” and became selectively mute as a result of an assault. She said that she is “the hope and the dream of the slave” in her poem “Still I Rise.” She wrote a poem that opens with “A rock, a river, a tree” that was read at Bill Clinton’s Inauguration. For 10 points, name this author of “On the Pulse of Morning” and *I Know Why the Caged Bird Sings*.**

ANSWER: Maya Angelou

<MT, American Literature>

2. **A self-amplifying version of this phenomenon was discovered by accelerating condensates above the speed of sound by Jeff Steinhauer. In theories with large extra dimensions, an exponent of  $n$ -plus-3 over  $n$ -plus-1 appears in the formula for the lifetime of sources of this phenomenon. Applying the Stefan–Boltzmann law to emitters of this phenomenon gives it a radiated power of  $h$ -bar times  $c$  to the sixth over 15,360 times pi times  $G$ -squared. The fact that the original derivation of this phenomenon had modes of (\*) infinite frequency is called the Trans-Planckian problem. This phenomenon occurs due to tunnelling of pair production products from the event horizon, and would cause the evaporation of micro black holes. For 10 points, name this radiation emitted by black holes, named for the recently deceased author of *A Brief History of Time*.**

ANSWER: Bekenstein–Hawking radiation

<AP, Other Science (Astronomy)>

3. **This poem’s narrator laments “No more the summer of my life remains / My autumn’s length’ning ev’nings chill my veins” before the poem flashes forward to the author’s time. A woman in this poem longs to be exiled in Siberia or Libya to avoid her children becoming orphans in the “lyric-tragic episode,” and the listener is invited to see a “plain with jewels” under a “globe in air,” the “machine of the world,” during a feast on the Isle of Love. This poem features the evil giant (\*) Adamastor, who was banished to the Cape of Good Hope. In this poem, the king of Melinde welcomes a group of sailors who are feuded over by Bacchus and Venus. It begins with an invocation to the muses of the Tagus and describes Vasco da Gama’s attempts to reach Calicut. For 10 points, name this Portuguese epic poem written by Luís Vaz de Camões (“ka-MOISH”).**

ANSWER: *The Lusiads* [or *Os Lusiadas*]

<MT, European Literature>

4. **This man gained fame for representing Caleb McNulty, who had been dismissed on embezzlement charges as Clerk of the House of Representatives. Abraham Lincoln was passed over in favor of this man to represent John Henry Manny in a patent case launched by Cyrus McCormick. Because this man made accusations of disloyalty over the generous truce terms negotiated at Bennett Place, William Tecumseh Sherman refused to shake his hand during the Grand (\*) Review of the Armies. This politician replaced a cabinet member who had**

made calls to arm the slaves, Simon Cameron. An attempt to dismiss this cabinet member resulted in impeachment proceedings on the grounds of violation of the Tenure of Office Act. For 10 points, name this Secretary of War under Andrew Johnson and Abraham Lincoln.

ANSWER: Edwin McMasters **Stanton**

<NR, American History>

5. **This picture's original commission was for a scene of a father defending a son who had murdered his wife, and early sketches of this painting include a staircase and an urn while making one character bare-breasted. A version of this work that adds a broom and spindle lying on the floor was painted by its original artist and Girodet. A small child pushes away a hand trying to shield his eyes in this painting, which is set in a (\*)** marble-arched courtyard. One straight and two curved items in this painting foreshadow the deaths of two characters; they are held by a man in a red cloak, who separates three women lamenting on this painting's right from the title characters on the left, who wear plumed helmets. For 10 points, name this Neoclassical painting by Jacques-Louis David in which three Roman brothers stretch out their hands to swords to make the title vow.

ANSWER: ***Oath of the Horatii*** [or ***Le Serment des Horaces***]

<JC, Painting>

6. **In the folklore of this country, a frog-like creature with red fur sucks people's blood, causing them to shrink and turn into that creature. A figure from this country is embarrassed when comparing his meal with other animals because he ate two women who had committed incest and awakened him with their menstrual blood; those women were the Wawilak sisters. That creature from this country created water by tickling (\*)** frogs' bellies and released all animals from its stomach. Landmarks were described musically to aid navigation in this country's "songlines," which mark the route followed by early creators. Those figures, like the Rainbow Serpent, who slithered across the land to create its rivers and waterholes, created landmarks like Uluru. For 10 points, name this country, whose concept of the Dreamtime comes from its Aborigines.

ANSWER: **Australia**

<JC, Mythology>

7. **"Clouds" of these organelles in *Xenopus* oocytes are called Balbiani bodies. Triphenyl-phosphine-based compounds and choline esters can be used to selectively target these organelles during drug delivery. PGC-1-alpha interacts with PPAR-gamma ("P-par-gamma") to control the biogenesis of this organelle. Proteins targeted to this organelle have presequences that can bind to the (\*) TOM ("tom") complex on its outer membrane. Hereditary defects in this organelle can result in diseases such as Leigh syndrome and Leber Hereditary Optic Neuropathy, which are maternally inherited. This organelle's inner membrane is folded into cristae and contains the components of the electron transport chain. For 10 points, name this organelle that produces ATP, making it the powerhouse of the cell.**

ANSWER: **mitochondria** [or **mitochondrion**]

<PL, Biology>

8. **Miriam Mahdavian created a ballet based on a solo clarinet piece by a composer from this country whose *allegro giocoso* third movement alternates between 2/4 and 3/4 time; that work is *Dance Preludes*. A symphony by a composer from this country begins with a bass ostinato on low F that is repeated throughout all the movements except the third. The second movement of a vocal piece from this country includes lines calling out to the Virgin Mary that were (\*)** found on a Gestapo prison wall. Anton Rubinstein described two pieces from this country in A major and C minor as the "glory" and "tragedy" of this country; those stylized dances are nicknamed "Military" and "Heroic." For 10 points, name this central European country home to Witold Lutoslawski, Henryk Górecki ("HEN-rick goo-RET-skee"), and Frédéric Chopin.

ANSWER: **Poland**

<PL, Music>

9. **The role of these entities in the Revolt of Ghent is the subject of a book by William Morris, whose ideas influenced a form of socialism named for these things created by G. D. H. Cole. These organizations were abolished by the 1791 Le Chapelier Law in France and the Combination Laws of William Pitt the Younger’s government. A hall named for these organizations has served for centuries as the administrative center of the City of London. The nine members of the Signoria of (\*) Florence were chosen from these organizations, which were targeted by wool workers in the Ciompi (“CHOM-pee”) Revolt. One of these organizations named for St. Luke held a monopoly on art in the Low Countries. To become full members of these organizations, journeymen would produce their “master-piece.” For 10 points, name these medieval trade associations of artisans and merchants.**

ANSWER: **guilds** [prompt on unions until “hall” is read]

<NR, European History>

10. **The first one of these institutions in New York State was designed by Joseph-François Mangin and was later replaced by a facility in Ossining. Institutions of this type across Europe, such as Bridewell, were studied in the late 1700s by John Howard, and a book titled *American* [this institution] chronicled the history of these institutions, along with *Mother Jones* reporter Shane (\*) Bauer’s experience working in one of them. David Skarbek’s *The Social Order of the Underworld* studies how these places derive structure and order through groups like the Nuestra Familia. In late August and early September 2018, a nationwide strike was organized in these places to protest exploitative labor practices, and these institutions are said to have created a racial caste system in Michelle Alexander’s *The New Jim Crow*. For 10 points, name these places that hold inmates.**

ANSWER: **prisons** [or **jails**; or **penitentiaries**]

<AJ, Social Science (Sociology)>

11. **A character in this novel is too mortified to propose after calling his love interest his “dearest diddle-diddle-darling” after getting drunk on Vauxhall (“VAWKS-all”) rack punch. This novel’s introduction describes one character as “flexible in the joints” and another who “dances in a very amusing and natural manner.” This novel’s author inserted illustrations confirming a theory that one character murdered her husband for life insurance as her “second appearance in the character of Clytemnestra.” A character in this novel shouts “Vive la France!” and throws a (\*) dictionary out of a carriage window; that wife of Rawdon Crawley has a friend who is eventually won over by the awkward Dobbin after her husband George Osborne dies at Waterloo. For 10 points, name this “novel without a hero” about Amelia Sedley and Becky Sharp, by William Makepeace Thackeray.**

ANSWER: ***Vanity Fair***

<JC, British Literature>

12. **At this monarch’s suggestion, a prompt asking what property rights peasants should have was used for the inaugural essay competition run by the Free Economic Society. This monarch ordered the creation of the Assigment Bank, which issued paper bills backed by copper currency. This monarch gained port cities such as Kerch through an unequal peace that was confirmed by the Treaty of Jassy and signed in the Bulgarian village of (\*) Kuchuk Kainarji. The Confederation of Bar opposed this monarch’s ally Stanislaus II, who was stripped of power after a victory against the Kościuszko (“ko-SHOOSH-ko”) Uprising led to the third Partition of Poland. This ruler was brought to power by a coup d’état against her husband, Peter III. For 10 points, name this enlightened despot and longest-serving empress of Russia.**

ANSWER: **Catherine the Great** [or **Catherine II**]

<AJ, European History>

13. A Japanese chemist discovered that doping polyacetylene with vapors of this atom could greatly enhance its conductivity. Woodward cis-hydroxylation involves formation of a cyclic ion by addition of this element to a double bond. Treating a benzoic acid derivative containing this element with oxone creates an oxidizing agent in which this element is (\*) hypervalent, named for Dess and Martin. Simmons–Smith cyclopropanation involves reaction of a methane molecule disubstituted with this element. Sodium thiosulfate is commonly used in titrations to quantify this element. Lugol’s solution is mainly composed of an anion of this element, which also forms a dark blue complex with starch. This element’s anion is a better leaving group than chloride or bromide. For 10 points, name this second-heaviest halogen with atomic number 53.

ANSWER: **iodine** [or **I**]

<PL, Chemistry>

14. This book’s first line was defined as a “sign of great peace and friendship among two persons,” and an apple tree in it was identified with the Cross by St. Teresa of Ávila, the first female commentator on this book. “Sixty mighty men... wearing swords and expert in war” surround a man who asks why they look at a woman “as upon a dance before two armies.” This book uses the similes “strong as death” and “fierce as the grave” while addressing (\*) “daughters of Jerusalem.” This book is read on the intermediary days of Shabbat during Passover. In this book, a woman’s hair is compared to a “flock of goats” and her breasts to the “twin fawns of a gazelle.” It begins with a woman declaring “let him kiss me with the kisses of his mouth.” For 10 points, name this Old Testament book that compares a young Shulamite woman and her passionate lover to God and Israel.

ANSWER: **Song of Solomon** [or **Song of Songs**; or **Shir HaShirim**]

<LC, Religion>

15. A character in this play says that he wants to be part of a “modern couple” where he’ll “teach [his wife] the waltz” and they’ll both “learn the foxtrot.” After taking a water pail from another character, that character in this work accuses her of not having any shame because she doesn’t cover her breasts, but is unable to say the word breast; he later makes her uncomfortable by kissing her. After a character in this play says that three leaves represent the three hearts she will break, she suggests that four women perform the (\*) “Dance of the Lost Traveller,” in which they imitate a man with a camera. This play is divided into the sections “Morning,” “Noon,” and “Night,” and in it a schoolteacher tries to marry a woman without paying her bride-price. For 10 points, name this play in which Sidi chooses Baroka over Lakunle, written by Wole Soyinka (“WALL-ay SHOW-ying-ka”).

ANSWER: *The **Lion and the Jewel***

<MT, World Literature>

16. In a film that [emphasize] *begins* in this city, a character claims that he cheated on a metaphysics exam by looking into the mind of the student next to him. In another film set in this city, a man sells pictures of Martin Luther King, Jr. and Malcolm X, which go on the Wall of Fame of a pizzeria owner who has a garbage can thrown through his window on an extremely hot day. (\*) Radio Raheem is killed by police in that Spike Lee movie, *Do the Right Thing*. In a movie primarily set in this city, the narrator conjures up Marshall McLuhan from thin air, remembers his childhood home as being literally under a roller coaster, and begins the film by saying that he and the title character just broke up; that movie is *Annie Hall*. Another Woody Allen film set in this location opens with *Rhapsody in Blue* played over a shot of its skyline. For 10 points, name this setting of *Manhattan*.

ANSWER: **New York** City [accept specific boroughs like **Manhattan** until read]

<JC, Other Arts (Film)>

17. This war began after a group of marines masquerading as scrap metal workers illegally raised their flag at Leith Harbour. Troops in this war made weed-killer puns about Operation Paraquet, which was launched under Guy Sheridan to recover ground lost at the Battle of Grytviken. The V-Force Avro Vulcan bombers

were flown in extremely long-range missions under Operation Black Buck during this campaign. Combatants during this war used Exocet missiles to (\*) sink the *HMS Sheffield*, though it was submarine torpedoes that controversially sunk the *General Belgrano*. After establishing a beachhead at San Carlos, the eventual victors won at Goose Green and captured Port Stanley two weeks later, causing Leopoldo Galtieri to be removed from power. For 10 points, name this 1982 war between the United Kingdom and Argentina over a South Atlantic archipelago.

ANSWER: **Falklands War** [or **Guerra de las Malvinas**]

<NR, World History>

18. As a state attorney general, this politician helped develop the 1998 Master Settlement Agreement with the largest tobacco companies in the US. This politician was diagnosed with cancer while campaigning for governor in 2000, which may have contributed to a 10-point loss to John Hoeven. This politician was forced to apologize after a political advertisement in the form of an (\*) open letter misidentified several women as sexual assault survivors. This senator was one of only two Democrats to vote to confirm Scott Pruitt as EPA Administrator. She claimed that watching Brett Kavanaugh's "body language" caused her to change her mind and vote against confirming him to the Supreme Court, a vote that may have further threatened her re-election bid in a red state. For 10 points, name this Democratic senator running for re-election against Kevin Cramer in North Dakota.

ANSWER: Heidi **Heitkamp**

<GA, Current Events>

19. Laura Sjoberg advanced a feminist interpretation of this idea in her article "Why [this concept] Needs Feminism Now More Than Ever." Wendy McElroy presented a libertarian view of this concept in response to an examination of it by Allen Isbell through the lens of Christian ethics. Tests of this concept involve discrimination, proportionality, and necessity. The problem of dirty hands is applied to this concept in a book partially titled for it by Michael (\*) Walzer. The *Requerimiento* did not meet the conditions of this concept with regard to the natives of the New World according to Francisco de Vitoria, who influenced Hugo Grotius's three books on this subject. This term was coined in *City of God* by Augustine of Hippo. For 10 points, name this concept that frames the moral legitimacy of conflict.

ANSWER: **just war** [prompt on partial answer; prompt on international relations or IR]

<NR, Philosophy>

20. In the diagonalized stress-energy tensor for a perfect fluid, this quantity appears in the top left entry, and a perfect fluid is characterized by its pressure and this quantity. Below a Richardson number of 0.25, a gradient of this quantity breaks down. A capital omega symbolizes the ratio of this quantity to its value in a flat universe, also called its "critical" value. This quantity changes maximally at the (\*) pycnocline ("PICK-no-clyne") and can be measured using a hydrometer. The square root of the bulk modulus over this quantity equals the speed of sound. This quantity is constant in an incompressible fluid. The ratio of this quantity to that of water equals the specific gravity, and the element with the maximum value of this quantity is osmium. For 10 points, name this quantity equal to mass divided by volume.

ANSWER: **density** [accept **energy density**: prompt on specific gravity until read]

<EM, Physics>

## Bonuses

1. “The face of a child drawn on a melon” and a baby sparrow eating worms are listed among this book’s list of “Adorable Things.” For 10 points each:

[10] Name this book that includes lists of “Hateful Things” and “Awkward Things,” a *zuihitsu* (“ZOO-ee-heet-soo”) work that describes palace intrigues and everyday life during the Heian (“HAY-on”) period.

ANSWER: *The **Pillow Book***

[10] This author of *The Pillow Book* served under the Empress Teishi, and was called “dreadfully conceited” because she “littered her writing with Chinese characters” by a rival who wrote about Lady Aoi.

ANSWER: **Sei Shōnagon** [accept either name]

[10] That rival of Sei Shonagon was this woman, who wrote what is often considered to be the first novel, *The Tale of Genji*.

ANSWER: Lady **Murasaki** Shikibu

<JC, World Literature>

2. This man has a dream in which he sees angels ascending and descending from a ladder to heaven. For 10 points each:

[10] Name this angel-wrestling progenitor of the twelve tribes who is told that Canaan will belong to him when he is on the run from his brother Esau, whose blessing from Isaac he got for a bowl of lentil stew.

ANSWER: **Jacob** [or **Ya’akov**]

[10] Jacob later has a dream about striped and spotted male goats mating to inform him that this relative of his has been swindling him. This man himself has a dream in which God tells him to say nothing good or bad to Jacob.

ANSWER: **Laban** [or **Lavan**]

[10] Perhaps the most famous dream interpreter in the Bible, Jacob’s son Joseph, has a dream about having one of these objects that stands up, while those of his brothers bow to him.

ANSWER: sheaves of **wheat**

<JC, Religion>

3. In part due to a protest targeting this city, R. B. “Iron Heel” Bennett’s discredited government lost 95 seats in the House of Commons. For 10 points each:

[10] Name this city that was marched on by hundreds of relief camp workers led by “Slim” Evans in the “On-to-[this city]” trek, which was the largest protest of its country’s depression era.

ANSWER: **Ottawa**

[10] A few years prior, Britain left the Gold Standard for a second time because of a run on the pound precipitated by this strike of Royal Navy sailors protesting large naval pay cuts at a Scottish port.

ANSWER: **Invergordon** Mutiny

[10] In 2014, members of this profession began the longest strike in South African history against platinum companies. Arthur Scargill led the NUM, a union of this profession, in a strike against Margaret Thatcher to prevent colliery closures.

ANSWER: **miners** [or **mining**; accept platinum **miners** or coal **miners**]

<NR, European History>

4. Examples of these things for which the commutativity equation always holds are referred to as “abelian.” For 10 points each:

[10] Name these algebraic structures consisting of a set of elements and an operation that satisfies conditions of invertibility, identity, closure, and associativity.

ANSWER: **groups**

[10] Groups named after this French mathematician have automorphisms mapping to and from the splitting field of a function. Normal, separable extensions have subfields corresponding to his namesake subgroups.

ANSWER: Évariste **Galois** (“gal-WAH”)

[10] This theorem states that for a Galois field extension, there exists a bijection between the intermediate fields of the extension and the subgroups of its Galois group.

ANSWER: **fundamental** theorem of Galois theory

<JC, Other Science (Math)>

5. Each language has a different set of these sounds, ranging from just 11 in Pirahã (“pee-rah-HAH”) to 141 in !Kung (“kung”). For 10 points each:

[10] Name these units of sound, the smallest units that can create a change in meaning in a given language. Infants can hear the difference between all of these units at birth, but lose the ability to differentiate those that do not occur in their language.

ANSWER: **phonemes**

[10] These pairs of words, which differ in only one phoneme, must exist in a language for the two sounds to be considered separate phonemes. “Bad” and “dad” are an example in English.

ANSWER: **minimal** pairs

[10] These two languages are often discussed when studying phonemes and minimal pairs. Speakers of one language can differentiate the sounds /r/ (“arr”) and /l/ (“ell”), but speakers of the other cannot, unless they are manipulated to not sound like speech, as studied by Kuniko Miyawaki.

ANSWER: **Japanese** AND **English** [accept **Nihongo** in place of “Japanese”]

<MT, Social Science (Linguistics)>

6. When one character with this last name cannot sleep, her brother reads her a Taoist story about Po Lo choosing a horse based on its spiritual qualities. For 10 points each:

[10] Name this family that appears on the radio show “It’s a Wise Child” and one of whose members, Seymour, kills himself in “A Perfect Day for Bananafish.” Its members also include Zooey and Buddy.

ANSWER: **Glass** family

[10] This creator of Seymour included the rest of the Glass family in his *Nine Stories* and also wrote about the phony-hating Holden Caulfield in *The Catcher in the Rye*.

ANSWER: J. D. **Salinger**

[10] Boo Boo writes the title quotation to Seymour in “Raise High the Roof Beam, Carpenters” on one of these objects, which was part of a Glass childhood tradition.

ANSWER: **mirror**

<JC, American Literature>

7. In this technique, the Arden ratio is the ratio between the dark peak and light trough. For 10 points each:

[10] Name this technique that uses electrodes placed above and below the eye to measure changes in the potential between the cornea and the retina. It is often used to track eye movements.

ANSWER: **EOG** [or **electrooculography**; or **electrooculogram**]

[10] EOG is conceptually similar to EEG, which is often used to diagnose this family of conditions that cause unprovoked seizures. The juvenile myoclonic form of it has a 3-to-6-hertz polyspike and wave pattern on EEG.

ANSWER: **epilepsy**

[10] This is the name given to seizures that involve all of both hemispheres, in contrast with partial or focal seizures.

ANSWER: **generalized** seizures [do NOT accept word forms]

<EM, Biology>

8. This event led to the revocation of UN Resolution 3379, determining that “Zionism is a form of racism and racial discrimination.” For 10 points each:

[10] Name this Palestinian uprising that began at the Jabalia refugee camp and resulted in the Madrid Peace Conference, which grew into the Oslo I Accord.

ANSWER: **First Intifada** [prompt on Intifada]

[10] Much of the fighting during the First Intifada occurred in the West Bank and this region on the Egyptian border.

ANSWER: **Gaza Strip**

[10] In 2000, this opposition leader at the time sparked the Second Intifada by visiting the Temple Mount.

ANSWER: Ariel **Sharon**

<AJ, World History>

9. A work named for this person looks at the stereotypes of “angel” and “monster” for women in Victorian literature. For 10 points each:

[10] Give either that work’s four-word description, or the proper name, of this character. In another work, this character gives her husband a love potion from Christophine after traveling from Jamaica to England.

ANSWER: the **madwoman in the attic** [or Antoinette Cosway; or Bertha Mason; prompt on Mrs. Rochester; prompt on woman in the attic]

[10] The title of *The Madwoman in the Attic* refers to Bertha Mason, the wife of Edward Rochester. She sets fire to Thornfield Hall after being imprisoned in this Charlotte Brontë novel.

ANSWER: **Jane Eyre**

[10] The aforementioned work of feminist literary criticism, *The Madwoman in the Attic*, was written by two feminist literary critics. Name either one.

ANSWER: Sandra **Gilbert** OR Susan **Gubar**

<MT, British Literature>

10. In addition to the main reclining figure, this painting originally contained a figure of Cupid, but it was painted over in 1843. For 10 points each:

[10] Name this painting that shows a woman lying on red and silver sheets with her right arm stretched behind her head.

ANSWER: **Sleeping Venus** [or Dresden Venus]

[10] Very few works can be conclusively attributed to this artist of *Sleeping Venus*, who also painted *The Three Philosophers* and *The Tempest*.

ANSWER: **Giorgione**

[10] This contemporary of Giorgione, whose works are often hard to differentiate from Giorgione’s own, painted *Sacred and Profane Love*.

ANSWER: **Titian**

<MT, Painting>

11. Name some techniques for classifying organic compounds, for 10 points each.

[10] This third-heaviest halogen tests for the presence of an alkene by adding across the double bond. It forms a brown solution that turns transparent in the presence of an unsaturated hydrocarbon.

ANSWER: **bromine** test

[10] If the bromine test fails, you can perform Baeyer test, which involves dihydroxylation of an alkene by a cold form of this ion. The characteristic purple solution will turn brown in the presence of an unsaturated double bond.

ANSWER: potassium **permanganate** [prompt on MnO<sub>4</sub><sup>-</sup>]

[10] This other test is used to detect aldehydes using a fuchsin (“FYOOK-sin”) dye. The reagent in this test is also used alongside periodic (“pur-eye-ODD-ic”) acid in a common histological stain.

ANSWER: **Schiff**’s test



<PL, Chemistry>

12. This movement spurred the return of semi-retired jazz musicians such as Kid Ory or Red Nichols. For 10 points each:

[10] Name this style of jazz sometimes referred to as “traditional” jazz. It typically refers to a revival movement during the 1930s to 1950s in response to Bebop, and it featured a standard front line of trumpet or cornet, trombone, and clarinet.

ANSWER: **Dixieland**

[10] Although some bands incorporated elements of Chicago style into Dixieland music, Dixieland mostly marked a return to this traditional style named after a historic Louisiana city.

ANSWER: **New Orleans** style

[10] The name “Dixieland” was likely a reference to the Original Dixieland Jazz Band, who famously recorded the first jazz record ever issued. The most famous standard by the ODJB was likely this demanding piece, which was recorded with incredible speed and skill by Art Tatum.

ANSWER: “**Tiger Rag**”

<PL, Other Arts (Jazz)>

13. According to the “critical” philosophy of this process, the goal should be emancipation from oppression through the creation of a critical consciousness. For 10 points each:

[10] Name this process carried out in pedagogy, theorists of which include Maria Montessori.

ANSWER: **education** [accept equivalents like **teaching**; prompt on school or learning]

[10] This work by Paulo Freire is a foundational text of critical pedagogy. It argues against the “banking” model of education and for a model where students also create knowledge.

ANSWER: ***Pedagogy of the Oppressed*** [or ***Pedagogia do Oprimido***]

[10] Freire acknowledges that the oppressed may fear freedom, but says it will come via this process of “reflection and action directed at the structures to be transformed.”

ANSWER: **praxis** [prompt on practice]

<MT, Philosophy>

14. An explosion during a battle named for this place was heard more than one hundred miles away in Pensacola. For 10 points each:

[10] Name this fort garrisoned by escaped slaves that was obliterated when a heated cannonball landed in its powder magazine. Andrew Jackson’s destruction of this fort marks the beginning of the First Seminole War.

ANSWER: **Negro Fort** [or Fort **Gadsden**]

[10] The Negro Fort was located in this state, which is where most of the fighting in the Seminole Wars occurred. Spain ceded this state to the US by the terms of the Adams–Onís Treaty.

ANSWER: **Florida**

[10] Seminoles descend from this Native American confederacy, whose Red Stick faction fought a civil war with a Lower faction led by William McIntosh. Andrew Jackson ended their namesake war at the Battle of Horseshoe Bend.

ANSWER: **Creek** Confederacy [or **Muscogee**]

<NR, American History>

15. At the end of this poem, a sailor drowns after being so entranced by the titular figure’s singing that he doesn’t look at the rocks around him. For 10 points each:

[10] Name this Heinrich Heine poem in which the titular figure “combs her golden hair” as she watches the Rhine flow below her.

ANSWER: “The **Lorelei**” [or “Die **Lorelei**”]

[10] Heinrich Heine was a Romantic poet from this country home to the author of “Ode to Joy,” Friedrich Schiller.  
ANSWER: **Germany**

[10] This author is credited with the first depiction of the character Lorelei in his ballad “Zu Bacharach am Rheine” (“tsoo BACH-ah-rakh ahm RYE-nuh”), which was written for his novel *Godwi*. He collaborated with Achim von Arnim (“AH-kheem fon AR-neem”) on *Des Knaben Wunderhorn* (“duss k’NAH-bin VOON-duh-horn”).

ANSWER: Clemens **Brentano**

<MT, European Literature>

16. Knights often had awkward relationships with their brothers. For 10 points each:

[10] This Saracen knight totally fails to recognize his brother Safir while fighting when he is disguised as Hector. This non-Pellinore knight kills the Questing Beast and feuds with Tristan over Isolde.

ANSWER: **Palamedes** [or **Palomides**]

[10] This knight’s brother Lionel tries to murder him because he rescued a maiden rather than saving him from being whipped with thorns. He is the only knight to return from retrieving the Holy Grail with Galahad and Percival.

ANSWER: Sir **Bors** the Younger

[10] This knight’s brother Kay rudely tries to take credit for his pulling a sword out of a stone. In one French romance, this head of the Round Table has a sarcastic talking parrot.

ANSWER: **Arthur**

<JC, Mythology>

17. Because tuning methods that made playing this group of pieces possible were not invented until the late 1600s, this group was the first of its type. For 10 points each:

[10] Name this group of pieces by J. S. Bach that consists of a prelude and fugue in every major and minor key.

ANSWER: *The **Well-Tempered Clavier*** [or ***Das wohltemperierte Klavier***]

[10] This composer used the first prelude from *The Well-Tempered Clavier* to create his version of *Ave Maria*. He also wrote the opera *Faust*.

ANSWER: Charles **Gounod** (“sharl goo-NOH”)

[10] This composer’s *Concert Fantasy on Themes from Gounod’s Faust* incorporates the famous Waltz from the second act in its final theme. This violin virtuoso composed many fantasies on operas, such as *Carmen Fantasy*.

ANSWER: Pablo de **Sarasate** (“sah-rah-SAH-tay”)

<MT, Music>

18. Mesons are held together by this force, which is described by QCD and acts on particles that have color charge. For 10 points each:

[10] Name this force that holds quarks together in protons and neutrons. It is carried by gluons.

ANSWER: **strong** force

[10] This Japanese scientist suggested the existence of mesons in 1935. He is the namesake of a screened potential energy function for nuclear forces, sometimes named for Poisson.

ANSWER: Hideki **Yukawa**

[10] The quark model predicts this formula which states that charge equals isospin plus one half times the quantity baryon number plus strangeness.

ANSWER: **Gell-Mann–Nishijima** formula

<AP, Physics>

19. In one scene from this musical, the titular astronomical phenomenon causes Pierre to experience a moment of enlightenment. For 10 points each:

[10] Name this 2012 musical written by Dave Malloy and Rachel Chavkin based on a chapter from *War and Peace*. Josh Groban made his Broadway debut in this musical in 2016.

ANSWER: ***Natasha, Pierre & the Great Comet of 1812***

[10] Natasha was originally played by this mixed-race actress, better known for playing the role of Eliza Schuyler in the musical *Hamilton*.

ANSWER: Phillipa **Soo**

[10] Phillipa Soo also starred in the Broadway adaptation of this quirky French romantic comedy about a shy waitress who carries out elaborate schemes to make other people happy.

ANSWER: ***Amélie*** [or *Le Fabuleux Destin d'Amélie Poulain* or *The Fabulous Destiny of Amélie Poulain*]

<JK, Trash (Film)>

20. One of these people stole a woman's letter about her husband's obsession with baths. For 10 points each:

[10] Name these people, originally wheat collectors who also worked as a secret service. Rankov suggests they were based out of the Castra Peregrina.

ANSWER: ***frumentarii***

[10] This successor of Trajan and creator of the *frumentarii* built a namesake wall in Britain.

ANSWER: **Hadrian**

[10] Hadrian suppressed this rebellion. Its namesake, Simon, established the independent Jewish state of *Nasi* ("nah-SEE") after separating from Judea.

ANSWER: **Bar Kokhba** ("COKE-bah") rebellion [or **Third Jewish Revolt** or **Third Jewish-Roman War** or **Second Revolt of Judea**; prompt on partial answer]

<JC, European History>



