2021 ACF Nationals
Packet by Texas
Edited by Matt Bollinger, Jordan Brownstein, Andrew Hart, Ike Jose, Jack Mehr, Eric Mukherjee, Derek So, Jerry Vinokurov, Ryan Westbrook, and Jennie Yang

Tossups

1. Abraham Joshua Heschel argued that this concept, rather than faith, was the central attribute of a religious Jew, and proposed a new translation for the Hebrew term for this concept. The Talmud compares a person who lacks this concept to a treasurer with keys to an inner gate, but not the outer gate. In the Book of Acts, Cornelius the Centurion belongs to a religious grouping named for this concept, consisting of Gentiles who worship the Jewish God. This concept is the last of the gifts of the Holy Spirit enumerated in the Book of Isaiah, which notes that the Messiah will "delight" in this concept. At the end of the Book of Ecclesiastes, the speaker notes that "the whole duty of man" consists of keeping the commandments and this concept. Psalm 111 states that this concept "is the beginning of wisdom." For 10 points, name this concept in Abrahamic religions, defined as awe in the face of the Creator.
ANSWER: the **fear** of **God** [or fear of the **Lord**; or fear of **Yahweh**; or **yirat ha-shem**; or **mora shamayim**; or **Theosebeia**; prompt on fear by asking "fear of what?"; prompt on piety; prompt on awe before "awe" is read]

2. Stelae ("STEE-lee") near the shores of this body of water feature a high priest holding a *kero* beaker in one hand and a snuff tablet in the other. The Kalasasaya compound, or "Stopped Stones," along this body of water feature a sunken central enclosure surrounded by descending staircases. *Totora* reeds from this body of water were used to make boats by a civilization that followed a three-rule law code: "do not steal, do not lie, do not be lazy." The "Virgins of the Sun" were sent to an island in this body of water to learn fine weaving and beadwork, making them wives for the *kuraka* class. A monumental door near this body of water features a carving of a deity with rays emanating from its head as it holds a staff in each hand; that door is the Gateway of the Sun. The Tiwanaku culture was centered on this body of water, as was an empire expanded by Pachacuti. For 10 points, name this Bolivian lake sacred to the Inca.
ANSWER: Lake **Titicaca**

3. David Ruzic's team at UIUC developed the Tripack magnetic configuration to increase the yield of the HiPIMS ("high pims") version of this process, which employs a magnetron to generate microsecond pulses. Laser excitation of a rare gas to generate a hollow cathode discharge can be used to generate this process, which is most effective at the minimum of the Paschen curve. The magnetron gas aggregation variety of this process is the most popular way of producing magnetoplasmonic nanoparticles. A Kaufman source provides a secondary beam in an ion-assisted process of this type, which is frequently used to pre-clean surfaces for etching. Modern industrial implementations of this process typically involve a plasma whose gas atoms are used to bombard a target, with the result used in downstream processes like thin film manufacture. For 10 points, identify this process commonly used in physical vapor deposition, in which metal particles are ejected from a surface after bombardment with either plasma or gas.
ANSWER: **sputter**ing [accept **sputter deposition**; prompt on physical vapor deposition before "deposition" is read; prompt on deposition until "deposition" is read; do not accept or prompt on "etching"]

4. This author created a tourist who hears a story from his boatman about a priest who murdered Maria and Giuseppe's child, thinking it was the Antichrist. In another story by this author, a writer returns to the Alpine town of Vorta, where that writer set her first novel, only to discover that its popularity has turned the place into a tourist trap. A prophetic story by this author imagines a subterranean dystopia whose inhabitants communicate exclusively through video calls. In that story, the rebellious Kuno dies with his mother Vashti after the title system collapses. "The Story of the Siren," "The Eternal Moment," and "The Machine Stops" are short stories by this author. This author wrote another story about Mr. Bons, who meets Dante before falling out of the title vehicle. For 10 points, name this author of "The Celestial Omnibus," more famous for such novels as *Maurice* and *A Room with a View*.
ANSWER: E. M. **Forster** [or Edward Morgan **Forster**]

5. The self-described hippie Paul LaBombard Jr. became a millionaire developer in this city, after he changed his name to Pritam Singh and started a Sikh commune, camping in this city's harbor on Christmas Tree Island. This city was also the birthplace of the first black actor to become a millionaire, the vaudeville performer Stepin Fetchit. Artist John Martini shows his work at the Lucky Street Gallery in this city, also home to Mel Fisher's Heritage Museum and the Fort East Martello Museum, which houses a "haunted doll" named Robert. Sloppy Joe's Bar was the favorite hangout of this city's most famous resident, who lived here with Snow White, a cat with six toes that would prowl around Mallory Square. For 10 points, name this home of the Ernest Hemingway House, which is the southernmost point in the continental United States, located at the end of the Overseas Highway connecting the Florida Keys.
ANSWER: **Key West**, Florida

6. *Specific word required.* A position named for this concept originated in a 1996 paper that imagines Possum the Cat hiding in a closed desk door, and suggests principles like the Rule of Attention. David Kaplan called operators that can change this concept "monsters" and claimed they couldn't exist in natural language. Keith DeRose's "bank cases" support the theory that attributions of knowledge depend on this concept, a position that was introduced in David Lewis's "Elusive Knowledge" and is opposed by invariantism. Frege's introduction to *The Foundations of Arithmetic* proposes a principle named for this concept that instructs, "never ask for the meaning of a word in isolation" without this concept. Indexicals are defined as expressions whose references change based on this concept, which Type-1 Chomsky grammars are "sensitive" to. For 10 points, give this term for the circumstances of an utterance.
ANSWER: **context** [or **contextual**ism; or the **context** of the utterance; prompt on the <u>sentence</u>; prompt on the <u>proposition</u>; prompt on <u>index</u>icality until "indexicals" is read; or the <u>utterance</u> until "utterance" is read]

7. This musician criticized derivative jazz musicians on a track originally titled "If Charlie Parker Was a Gunslinger, There'd Be A Whole Lot of Dead Copycats," which appeared on an album whose cover depicts this musician as a Chinese official in front of a picture of a dragon. On one album by this musician, poet Jean Shepherd narrates a story about a performer injured during a show in Pittsburgh; that album features his track "Haitian Fight Song." This musician unconventionally asked his psychotherapist, Edmund Pollock, to provide liner notes "explaining" the songs on one of his albums, which features subtitles like "Stop! Look! And Sing Songs of Revolutions!" for tracks originally conceived as scenes in a ballet. Early albums by this musician include *The Clown* and one titled for his "dynasty." For 10 points, name this composer of *The Black Saint and the Sinner Lady*, a famous jazz bassist.
ANSWER: Charles **Mingus**

8. An event in the life of a person with this first name is commemorated by a stone monument at the foot of Highgate Hill. Under the alias John Palmer, a man with this first name was arrested after he shot another man's gamecock. That man's exploits were fictionalized in the novel *Rookwood*. After hearing bells ring out the phrase "Turn again," a person with this first name remained in London, and left his vast fortune to charity there. That man with this first name became wealthy from the rat-catching abilities of his cat according to a folk tale, was elected Lord Mayor of London three times, and had the surname Whittington. A legendary figure with this first name rode the mare Black Bess and was hanged for horse theft. For 10 points, give this first name of the notorious highwayman Turpin.
ANSWER: **Dick** [or **Richard**; or **Dick** Whittington; or **Richard** Whittington; or **Dick** Turpin; or **Richard** Turpin]

9. In Sigismund Krzhizhanovsky's ("kshish-uh-NOV-skee's") story "The Bookmark," this place uproots itself to join the Russian Revolution. In a play set in this location, a lion, an ostrich, and a macaroon-loving boy are among the things that emerge from a camera. Two phonographs narrate the dialogue of that 1920 play, which centers on a wedding at this place. In a poem, this place is analogized to a "shepherdess" whose "bridges are a bleating flock." This place is called a "pure signifier" that is ubiquitous despite its uselessness in the title essay of the companion volume to *Mythologies*. Guillaume Apollinaire, who alludes to this place at the beginning of "Zone," describes its "eloquent tongue"in a *calligramme* shaped like it. Apocryphally, the author of "Ball of Fat" would eat lunch in this structure because it was the only part of the city where he could not see it. For 10 points, name this iconic, wrought-iron Paris landmark.
ANSWER: the **Eiffel Tower** [or **Tour Eiffel**; prompt on Paris; prompt on France]

10. An essay titled for this process discusses the "Ptolemaic imagery" of the words "sunrise" and "sunset," which does not imply a "rejection of Copernican doctrine," to contradict Benjamin Whorf's imagined "Mr. Everyman, the natural logician." That essay begins with Bertrand Russell's quip about a "nonlinguistic acquaintance with cheese" to argue that this process must flow from the understanding that meaning inheres in signifiers, not signifieds. Hans Vermeer's "Skopos theory," Danica Seleskovitch's "interpretive theory," and Eugene Nida's "dynamic/formal distinction" are key concepts in academic "studies" of this process. This process is the subject of a Roman Jakobson essay on its "linguistic aspects," which suggests addressing "deficiency" with semantic shifts or circumlocutions. "Sense for sense" is one method of, for 10 points, what linguistic process that can also be done "word for word"?
ANSWER: interlingual **translation** [accept **translating** from one language to another]

11. Gordon Seagrave served as a doctor under this general and described his policy that soldiers march at exactly 105 paces per minute. Ronald Reagan narrated a propaganda film titled for a new supply route established by this general, originally called the Ledo Road, which was created with the help of the "Forgotten Army" of Orde Wingate. The lone reporter with this general, Jack Belden, wrote that he chose to go by foot instead of plane, claiming "I prefer to walk," in a book titled for his "retreat." This general was replaced by Albert C. Wedemeyer, a move criticized in Barbara Tuchman's Pulitzer-Prize winning book on him. While serving as chief of staff to a man he derisively nicknamed "Peanut," this general clashed with Claire Chennault on whether an air or ground strategy was most effective. For 10 points, name this aide to Chiang Kai-Shek and commander of American ground forces in the China-Burma-India theater of World War II, nicknamed "Vinegar Joe."
ANSWER: Joseph **Stilwell** [or Joseph Warren **Stilwell**]

12. Waleed Al-Salam introduced the "sieved" type of these things, which are generated by replacing their recurrence relations with simpler ones. A sequence composed of these things must take the form of a set of recurrence relations according to Favard's Theorem. The theory of these things grew out of Stieltjes' work on approximating continued fractions, and Stieltjes later used these to model and solve moment problems. The so-called "classical" set of these things give their name to solutions to the Sturm-Liouville theory which do not possess singularities. The Rodrigues formula gives the coefficients of a set of these things, which is normally generated by applying the Gram-Schmidt process to the simplest infinite monomial sequence. For 10 points, Legendre gives his name to an oft-used example of what mathematical expressions whose associated inner product is 0 with respect to some measure?
ANSWER: **orthogonal polynomial**s [accept **Legendre** **polynomials**; prompt on polynomials by asking "with what property?"]

13. One king of these people warred against the Dorian king Aegimius, but was defeated when his opponent got the help of Hercules in exchange for a third of his land. These people's warriors included Exadius, who threw the head of a stag at Grineus, poking both his eyes out with its antlers. Another of these people was killed by having trunks of fir trees piled on him since his skin could not be pierced, though he may have escaped as a golden bird. Polypoetes and Leontius lead these people during the Trojan War. These people included a daughter of Elatus who wished to become a man after she was raped by Poseidon and took the name Caeneus. These people also included the seer Mopsus, and were named for their king Phlegyas. Pirithous embroiled these people in their most infamous dispute by inviting a rival group to his wedding with Hippodamia. For 10 points, name these people of Thessaly who fought a war against the Centaurs.
ANSWER: **Lapith**s [accept **Phlegyan**s until "Phlegyas" is read, but prompt after it is read]

14. The narrator of this book feels the "nothing gaze" while listening to a man speak about the legionnaires in Claire Denis' *Beau Travail.* At the beginning of this book, the narrator recalls a conversation she had comparing the merits of sentences starting "yes, and" and "yes, but" after vomiting on her blouse. A passage in this book considers Judith Butler's remark that "we suffer from the condition of being addressable." One section of this book ends with the narrator commenting on a picture of Caroline Wozniacki with a stuffed top and shorts. John Lucas, the husband of this book's author, created many "Situation Videos" to accompany passages from this book, including one with a series of photographs of Zinedine Zidane's headbutt and one written in memory of Trayvon Martin. For 10 points, name this multimedia series of poems and lyric essays subtitled "An American Lyric" written by Claudia Rankine.
ANSWER: *__Citizen__: An American Lyric*

15. The smallest artwork held by the MoMa is an abstract landscape titled for this scene, one of the "Microbes" that Max Ernst painted after moving to Arizona. A painting of this scene is located directly above Filipino Lippi's *St. Paul Visiting St Peter in Prison* in a room whose paintings Michelangelo was copying when Pietro Torrigiani punched and permanently disfigured his nose. This scene is visible in the left-hand background of a verdant courtyard in the Prado Annunciation by Fra Angelico, who also depicted it in his Cortona Annunciation. Black rays representing God's voice emanate from a narrow archway on the left side of a painting of this scene that was censored with fig leaves three centuries after it was painted; that painting is next to *The Tribute Money* in the Brancacci chapel. For 10 points, a sword-wielding angel flies over two weeping nudes in Masaccio's version of what Biblical scene?
ANSWER: the **expulsion** from the Garden of Eden [accept Adam and Eve being **expelled** from the Garden of Eden; prompt on answers mentioning only the Fall of Man, or Adam and Eve, or Garden of Eden, or answers that don't mention "expulsion"]

16. Undesirable components of this quantity are eliminated with Lowdin annihilators. Naaman et al discovered that layers of stearoyl lysine are able to "select" for this quantity, an effect known as its namesake chiral-induced selectivity. The expectation value of the square of this quantity is used to detect its namesake contamination, which is eliminated by using restricted open-shell Hartree–Fock. Two times this quantity plus one equals this quantity's multiplicity, which is the leading superscript of a term symbol. Pascal's triangle is used to determine peak splitting due to coupling of this quantity between non-equivalent protons in H1 NMR. The lowest energy state is the one that maximizes the total amount of this quantity according to Hund's first rule, which is why orbitals are singly-occupied before pairing. For 10 points, name this fourth quantum number equal to plus or minus one half for electrons.
ANSWER: **spin** angular momentum [prompt on angular momentum; do not accept "orbital angular momentum"]

17. This composer included four horns, string orchestra, and shotgun in a *Sinfonia da Caccia in G Major*. Johann Schobert was offended by this man's suggestion that his works were easy to play. A book by Ruth Halliwell is more sympathetic than most accounts to this composer, who is characterized as exploitative and manipulative in a biography of another composer by Maynard Solomon. Most scholars now believe this composer of a D major trumpet concerto, and not Michael Haydn, wrote the *Toy Symphony*. This author of *A Treatise on the Fundamental Principles of Violin Writing* praised the musical abilities of his daughter Nannerl. He is best known for accompanying a more notable composer on a grand tour through Europe after leaving their home of Salzburg. For 10 points, name this person who encouraged the career of his child prodigy son Wolfgang.
ANSWER: **L**eopold **Mozart** [prompt on Mozart]

18. Prior to taking the throne, this ruler fought in a battle where he requested seven boats from his master of the infantry, but that man burned seven boats just to spite him. While defending the siege of Senon, this emperor was betrayed by his generals Marcellus and Barbatio, but he still managed to crush Chnodomar in a battle at Strasbourg, after which he sent that Alamanni king to Milan as a prisoner. He commanded an army that included his chief biographer, Ammianus Marcellinus, who lamented his death at Samarra during his campaign against the Sassanids. After this ruler exhumed the body of a man named Babylas, a group in Antioch took offense and set fire to the area, then heckled him at the games. This ruler, who took the throne on the death of Constantius II, satirized those events by writing his Misopogon, or the Beard-Hater. For 10 points, name this Roman emperor whose rejection of Christianity led him to be dubbed the Apostate.
ANSWER: **Julian** the Apostate [or **Julian II**; or **Julian I**; or Flavius Claudius **Julianus** Augustus]

19. An invasive pest that primarily feeds on members of this genus is *Phoracantha semipunctata*. The sole species in the genus *Holocryphia* is named for the fact that it causes cankers in members of this genus. The monoterpene 1,8-cineole ("1-8-sin-ee-ohl") was originally discovered in members of this genus, one member of which has the largest number of terpene synthase genes of any sequenced genome in its kingdom. The genome of the *grandis* and *globulus* species in this genus revealed that these members of the *Myrtales* order belong in a sister clade to the eurosids. The inflorescence in members of this genus contains both inner and outer opercula. Because members of this genus form extensive epicormic buds, they are able to regenerate after wildfires. An animal which primarily feeds on members of this genus has a nearly 100 percent prevalence of chlamydia. For 10 points, name this genus of tree that is eaten by koalas.
ANSWER: ***Eucalyptus***

20. In a long poem from this country, a business tycoon writes the words "increased production, increased export and construction" on a woman's breasts. The author of that poem, *The Five Bandits*, smuggled a 12,000 word "Declaration of Conscience" out of a prison in this country. The speaker of a poem from this country wonders "how can heaven keep silent?" during the title "Great Springtime." A popular poem in this country begins "when you leave, weary of me, without a word I shall gently let you go." That poem from this country, "Azaleas," was translated by David McCann. Outcry erupted in this country after the publication of the poem "Monster," an account of sexual harassment by "En" who is based on an author from this country who attempted to write an account of every person he ever met in *Ten Thousand Lives*. For 10 points, name this home of the poets Kim Sowol and Ko Un.
ANSWER: **South Korea** [or **Republic of Korea**; prompt on <u>Korea</u>]

Bonuses

1. The goldfields of this river witnessed a 1912 massacre when workers revolted against poor conditions in the gold mines, which were partly owned by the Gintsburg family. For 10 points each:
[10] Name this river home to a group of "Cheeks" and "Pillars," which represent early Cambrian metazoan reef belt near its meeting with the Buotama.
ANSWER: **Lena** River
[10] The Lena originates just west of this Russian lake, probably the world's most ancient lake and certainly the deepest.
ANSWER: Lake **Baikal**
[10] This completely unrelated gold mine in the town of Lead, South Dakota was where physicist Raymond Davis, Jr. and his team discovered the solar neutrino problem.
ANSWER: **Homestake** Mine

2. This composer's aleatoric pieces, like the four *Sonogramas*, were inspired by composers like Luigi Nono and Iannis Xenakis. For 10 points each:
[10] Name this Cuban composer of pieces like *El Decamerón Negro* and a sonata dedicated to Julian Bream.
ANSWER: Leo **Brouwer** [or Juan Leovigildo **Brouwer** Mezquida]
[10] Leo Brouwer primarily composed for this six-stringed instrument. Joaquín Rodrigo's *Concierto de Aranjuez* also features this instrument.
ANSWER: **guitar**
[10] The third of Brouwer's *Tres piezas latinoamericanas* is a solo guitar arrangement of *La Muerte del Ángel*, a tango by this Argentinian composer and creator of *nuevo tango*.
ANSWER: Astor **Piazzolla** [or Astor Pantaleón **Piazzolla**]

3. Originally known as the Reedsville Project, 165 homes were constructed in this town, each costing two thousand dollars. For 10 points each:
[10] Name this pet project of Eleanor Roosevelt, the first planned town under the Subsistence Homesteads Division of the New Deal. FDR delivered a high school commencement address here in 1938.
ANSWER: **Arthurdale**, West Virginia
[10] One financial backer of Arthurdale was this Jewish man, who chaired the War Industries Board under Woodrow Wilson. In 1946, he used the Acheson-Lilienthal Report to create a namesake plan to regulate atomic energy.
ANSWER: Bernard **Baruch**
[10] Weedpatch Camp, another New Deal settlement built by the WPA near Bakersfield, California, was featured in this iconic novel about Tom Joad and his family.
ANSWER: The ***Grapes of Wrath***

4. This man, the son of the comet-god Wahieroa and the mortal woman Matoka, goes on a quest to avenge his parents' death at the hands of the giant Matuku, who he chops into pieces. For 10 points each:
[10] Name this Polynesian hero of the Tawhaki cycle, helped by the gods to create a canoe in their sacred forest.
ANSWER: **Rata**
[10] The myth of these people tells that Kupe eloped by fleeing in an ocean-faring canoe to found "Aotearoa," the land of the long white cloud, killing the monster Wheke in modern New Zealand.
ANSWER: **Maori**
[10] This Algonquin hero descended from the sky in a magic stone canoe with his weak twin brother Malsum the Wolf. He stole the gift of tobacco from Grasshopper and founded the lands of all Wabanaki tribes including the Mi'kmaq.
ANSWER: **Glooskap** [or **Gluskabe**; or **Kluskap**; or **Koluskap**; or **Gluscabi**]

5. The first critical account of this activity was a 1959 paper by sociologist Gregory Stone that described its shifting modality from "production" to "consumption" among the "mass child" as mirroring a broader cultural shift from the 1930s to the 1950s. For 10 points each:
[10] The sociologist Joel Best annually updates a paper on the "social construction of urban legends" to debunk the myth of adult "sadism" in what activity, a myth that may trace its roots to the actions of Fremont, California dentist William Shyne in 1959?
ANSWER: **trick or treat**ing [prompt on Halloween] (The myth is that there are razor blades in candy.)
[10] Stone's monograph on "trick or treating" analyzes the shift from "inner-directed" to "other-directed" society that was traced in this landmark 1950 book of sociology.
ANSWER: The **_Lonely Crowd_** (By David Riesman, Nathan Glazer, and Reuel Denney.)
[10] Theodore Caplow and Margaret Holmes Williamson noted that Halloween was one of the most secular holidays in a survey of celebrations in this city. This is the generic name given to Muncie, Indiana in a series of studies begun by Robert and Helen Lynd in the 1930s.
ANSWER: **Middletown**

6. UPGMA, maximum parsimony, and maximum likelihood methods are often used for constructing these diagrams, which can be paired with a molecular clock to show divergence times. For 10 points each:
[10] Name these diagrams that show evolutionary relationships between species.
ANSWER: **phylogenetic tree** [accept **phylogeny**; accept **dendrogram**; or **cladogram**; prompt on evolutionary tree]
[10] A well-designed phylogenetic tree can be used to detect this effect, a form of convergent evolution in which a characteristic is present in multiple species, but [emphasize] *not* in their common ancestor.
ANSWER: **homoplasy**
[10] Some instances of homoplasy are actually instances of this effect, in which genetic mechanisms are conserved across widely-divergent species, even when visible characteristics are not. An example is the eye-related gene PAX6 being conserved across many metazoan lineages that were thought to have evolved eyes independently.
ANSWER: **deep homology** [prompt on homology]

7. Answer the following about literature that takes place in Kansas, for 10 points each:
[10] This early example of true crime written by Truman Capote details the murder of the Clutter family in Holcomb, Kansas and the subsequent arrest and trial of Richard Hickock and Perry Smith.
ANSWER: **_In Cold Blood_**
[10] This author's *The All-True Travels of Lidie Newton* is set during Bleeding Kansas. Her other novels include *The Greenlanders* and a retelling of *King Lear* set in Iowa that follows the aging farmer Larry Cook and his daughters.
ANSWER: Jane **Smiley** (The novel is *A Thousand Acres*.)
[10] This author's autofictional stand-in Adam Gordon wins a national debate competition in his 2019 novel *The Topeka School*. Gordon is sent on a prestigious poetry fellowship in Madrid in this author's debut novel.
ANSWER: Ben **Lerner** (The novel is *Leaving the Atocha Station*.)

8. After converting to Islam, this man took a name meaning "head of the household" while serving under Sultan Ahmed III. For 10 points each:
[10] Name this Hungarian-born diplomat who established a printing press in Istanbul around 1720, which published the world atlas of Katip Celebi.
ANSWER: Ibrahim **Muteferrika**
[10] Muteferrika was a court advisor during the Ottoman era named for this flower, which according to Charles Mackay had caused a "mania" among the Dutch back in 1636.
ANSWER: **Tulip**s [or **Tulip Era**; or **Tulipmania**; or **Tulip Period**; or **Tulipa**]
[10] Under Ahmed III, the Ottomans began to use Greek administrators of this family to govern most of their western provinces. They were named for the Greek quarter of Constantinople and included men like Alexander Yspilantis who served as Voivode of Wallachia and Moldavia.
ANSWER: **Phanariot**s [or **Phanariote**; or **Fanariot**s; or **Phanar**]

9. Unlike their maximally localized variants, when these functions follow a Pipek–Mezey localization scheme they do not mix sigma and pi orbitals. For 10 points each:
[10] Name this set of orthonormal functions analogous to localized molecular orbitals for crystalline systems.
ANSWER: **Wannier** functions
[10] Wannier functions are more convenient for analyzing band structure than the functions named after this physicist, which consist of a plane wave times a periodic function of distance. He won a Nobel with Purcell for developing NMR.
ANSWER: Felix **Bloch** [accept **Bloch** state; accept **Bloch** functions]
[10] Another application of Wannier functions is in modeling the dynamics of these composite quasiparticles, which consist of an electron-hole pair.
ANSWER: **exciton**

10. In a short story by this author, a man is shamed by his wife for failing to buy groceries on credit before meeting a man in a yellow station wagon who he believes to be a policeman. For 10 points each:
[10] Name this author who wrote about a miscommunication when a man tries to buy a clay statue in "A Horse and Two Goats." This author's final stories were published in a collection alongside his novella *The Grandmother's Tale*.
ANSWER: R. K. **Narayan**
[10] Narayan's first short story collection is titled for the "Days" of this fictional South Indian town that is also the setting of his novels *The Guide* and *Swami and Friends*.
ANSWER: **Malgudi**
[10] A Malgudi novel is titled for one of these animals who comes under a monk's care after being abused in a circus. An Aravind Adiga novel titled for a "white" one of these animals is framed as a series of letters from a rickshaw puller to the Chinese Premier Wen Jiabao.
ANSWER: **tiger** [accept A *Tiger for Malgudi*; accept The *White Tiger*]

11. This historian's most recent book, *The Pioneers*, centers on Manasseh Cutler's efforts to pass the Northwest Ordinance of 1787 and open the American West. For 10 points each:
[10] Name this historian, author of two Pulitzer Prize-winning biographies of Harry Truman and John Adams.
ANSWER: David **McCullough** [or David Gaub **McCullough**]
[10] McCullough is best-known for a book titled after this year. A document written in this year lists the "repeated injuries and usurpations" of George III.
ANSWER: **1776**
[10] This historian's "Ideological Origins of the American Revolution" challenged Charles Beard's theory of the Revolution as a class war. Social history revolving around the Atlantic was pioneered by this historian in his *Atlantic History: Concepts and Contours*.
ANSWER: Bernard **Bailyn**

12. At the premiere of this oratorio, police began removing student protesters carrying red flags and a portrait of Che Guevara; in response, its composer disrupted the performance of his own piece by leading a chant of "Ho, Ho, Ho Chi Minh!" For 10 points each:
[10] Name this "oratorio *volgare e militare*." Over the course of this oratorio, the chorus gradually leaves Jean-Charles' side of the stage to join La Mort.
ANSWER: The **Raft of the Medusa** [or Das **Floss der Medusa**]
[10] *The Raft of the Medusa* was composed by this left-wing German composer of the opera *The Bassarids*.
ANSWER: Hans Werner **Henze**
[10] Another leftist composer, Cornelius Cardew, once claimed that this compatriot of Henze's "served imperialism." This avant-gardist composed the opera cycle *Licht*, which features his *Helicopter String Quartet*.
ANSWER: Karlheinz **Stockhausen**

13. A book about this event begins by analyzing Jesus's quote "Noli me Tangere" to Mary Magdalene and suggesting that a "new form of Communism" arose from it. For 10 points each:
[10] Name this event interpreted through the lens of *Kill Bill Volume 2* in a Slavoj Žižek ("SLAH-voy ZHEE-zhek") book. Jean-Luc Nancy claimed that Giorgio Agamben was "exceptional[ly stupid]" for denying the existence of this event.
ANSWER: **COVID**-19 pandemic [or the **pandemic**; or the **coronavirus**]
[10] In fall of 2020, Michael Sandel updated his popular Harvard course on this concept to cover "Ethics in the Age of Pandemic." This concept titles a John Rawls book that presents the "original position" thought experiment.
ANSWER: **justice** [accept A Theory of **Justice**]
[10] A 104-year-old philosopher from this country published a quarantine to-do list that included "drawing a flock of sheep." Eugene Thacker wrote a foreword to *The Trouble with Being Born*, an aphoristic book by a thinker born in this country.
ANSWER: **Romania** (The philosophers are Mihai Sora and Emil Cioran.)

14. The circular "Fuxi arrangement" of these symbols, rotated counterclockwise by 45 degrees, surrounds a Tai Chi symbol on the flag of South Korea. For 10 points each:
[10] Name these symbols, which Fu Xi invented by observing the markings on a tortoise shell. These symbols are made up of three stacked horizontal lines, where solid lines represent "yang" and broken lines represent "yin."
ANSWER: Eight **Trigrams** [or **Bagua**; or **Pakua**]
[10] This Confucian classic provides interpretations for sixty-four hexagrams made up of paired trigrams. This text is popular among New Age types as a tool for divination.
ANSWER: **I Ching** [or **Yijing**; or the **Book of Changes**; or the **Classic of Changes**]
[10] In Feng Shui, these objects are often inscribed with the Eight Trigrams and arranged to manipulate *chi*. These objects can be placed above the front door to protect from negative energy.
ANSWER: a Bagua **mirror** [accept convex **mirror**s; accept concave **mirrors**]

15. In *The Book of the City of Ladies,* Lady Reason claims that this author wrote misogynistic literature because he was castrated. For 10 points each:
[10] Name this author, whom Christine de Pizan criticized for the misogyny of his handbook for lovers, *Ars Amatoria*.
ANSWER: **Ovid**
[10] This poet drew on the *Ovide Moralise* for the "Fountain of Narcissus" that the lover gazes into in the first part of the *Romance of the Rose*. This poet's work was expanded by the later Jean de Meun.
ANSWER: Guillaume de **Lorris**
[10] The *Ars Amatoria* inspired the didactic passages of this work by Juan Ruiz, which includes a battle between Sir Carnal and Lady Lent, as well as a lament for the death of the go-between Trotaconventos.
ANSWER: The ***Book of Good Love*** [or ***Libro de Buen Amor***]

16. A Willie Cole work uses an ironing board to depict this sort of object, which the Ghanaian artist Godfried Donkor has often painted at the feet of the boxer Jack Johnson. For 10 points each:
[10] Cheryl Finley's book *Committed to Memory* is about art depicting what sort of object, such as the 1788 *Brooks* engraving? The lower right of a painting titled for one of these objects depicts creatures reminiscent of its artist's *Sunrise with Sea Monsters*.
ANSWER: **slave ship**s [prompt on ships or boats]
[10] An ironing board was also used to represent a slave ship in this artist's *I'll Bend But I Will Not Break*. Alison, the creator of many sculptures of antlered women, is the daughter of this artist of *The Liberation of Aunt Jemima*.
ANSWER: Betye **Saar**
[10] Sondra Perry's 2018 installation *Typhoon Coming On* immersed visitors in this British painter's *The Slave Ship*.
ANSWER: J. M. W. **Turner** [or Joseph Mallord William **Turner**]

17. Tomas de Zumalacarregui created this country's namesake omelette by whipping together a mixture of eggs, potatoes, and onions during wartime. For 10 points each:
[10] Name this country where Bourbon monarchs fought to retain control in the Carlist Wars.
ANSWER: Kingdom of **Spain**
[10] This conservative Spanish prime minister switched places with Liberal Praxedes Mateo Sagasta during the *turno pacifico*. His support of the Carlists led to his 1897 assassination by Italian anarchist Michel Angiolillo.
ANSWER: Antonio **Cánovas** del Castillo
[10] Cánovas appointed this man administrator of Cuba, where he was infamously nicknamed "butcher" for putting thousands in concentration camps.
ANSWER: Valeriano "Butcher" **Weyler** [or Valeriano **Weyler** y Nicolau, 1st Duke of Rubí, 1st Marquess of Tenerife]

18. These studies can be subject to the file-drawer problem, which can be detected by looking for asymmetry in a funnel plot. For 10 points each:
[10] Name this type of study that aggregates the results of already-published studies to get a larger sample size. The results of these studies are usually displayed in a forest plot.
ANSWER: **meta-analysis** [prompt on review or systematic review]
[10] A common method of normalizing the effect size in a meta-analysis is Hedges' g, which is normalized by the pooled version of this quantity. This quantity is the square root of the variance.
ANSWER: **standard deviation** [or **SD**; prompt on sigma]
[10] In contrast to aggregate data meta-analysis, this more costly and more powerful form of meta-analysis doesn't use summary data and instead combines the full dataset from each individual study.
ANSWER: **IPD** [or **individual participant data** meta-analysis]

19. Azacrowns can be used as the starting material for high-dilution syntheses of these molecules, the most commonly studied example of which is notated [2.2.2] ("two-two-two"). For 10 points each:
[10] Name these molecules that display peak selectivity, unlike the plateau selectivity of crown ethers. Cobalt-based template syntheses have been used by Alan Sargeson to create a class of these molecules called "sepulchrates."
ANSWER: **cryptand**s
[10] The peak selectivity of cryptands refers to their ability to strongly bind specific examples of these metals. Tables of binding constants for cryptands usually include these group 1 elements.
ANSWER: **alkali** metals
[10] These host molecules, with a preorganization between crown ethers and cryptands, are crown ethers that have one or more podand arms that also bind to the guest. Bibrachial examples of these molecules are known as BiBLEs.
ANSWER: **lariat** ethers

20. Ian eats a dead baby while waiting for Cate to return with a sandwich in *Blasted*, a play from this decade. For 10 points each:
[10] Name this decade, which saw the emergence of the vulgar and confrontational "in-yer-face theater" movement. Playwright Sarah Kane both rose to fame and died during this decade.
ANSWER: 19**90s**
[10] Among the admirers of Sarah Kane's play *Blasted* was this playwright, whose absurdist plays include *The Dumb Waiter*.
ANSWER: Harold **Pinter**
[10] One of the biggest names in in-yer-face theater was this man, who wrote about the alienated youth of post-Thatcher England in the explicit play *Shopping and Fucking*.
ANSWER: Mark **Ravenhill**