## 2020 Matt Cvijanovich Memorial Tournament:

Edited by Ganon Evans, Jacob O’Rourke, William Grossman, Karthik Prasad, Stefan Calin, Eric Chang, Alex Dzurick, and Sean Phillips<br>Written by Lalit Maharjan, Arjun Gonuguntla, Michael Eng, Annie Lin, Shohom Chakraborty, Aditya Sivakumar, Ameya Singh, Bo Chi, Vishal Kanigicherla, Pratyush Jaishankar, Joshua You, Rohan Shelke, Aidan McWilliams, and generous submissions

## Packet 12

## TOSSUPS:

Note to players: two answers required.

1. The last Byzantine exile Andreas Palailogos left his titles to these monarchs. These monarchs signed the Capitulations of Santa Fe, and also formalized the Holy Brotherhood as an early police force. Henry VIII created the Church of England to divorce these monarchs' daughter (*) Katherine. The friar Tomas de Torquemada converted Muslim land reconquered by these monarchs in Granada. These leaders' Alhambra Decree expelled Jews from their country in 1492, the same year they sponsored the voyage of Christopher Columbus. For 10 points, name this king and queen duo who united Castille and Aragon, creating modern Spain.
ANSWER: Ferdinand and Isabella of Spain [accept either order, prompt on partial answers; accept Ferdinand II of Aragon and Isabella I of Castille; accept Fernando V of Castille and Leon; prompt on the Catholic Monarchs or "Los Reyes Catolicos"] <Ganon Evans>
2. For 10 points each, answer the following about director Shinichiro Watanabe ["shin-ih-sheer-o wat-ahn-ah-bay"] .
[10] Watanabe is perhaps best known for directing this anime that follows Spike Spiegel, a bounty hunter, as he grapples with his past. The legendary anime composer Yoko Kanno composed the tracks "The Real Folk Blues," "Space Lion, and "Tank!" for this jazz-inspired TV show.

## ANSWER: Cowbov Bebop

[10] Fuu, Jin, and Mugen appear in a hip-hop heavy Watanabe anime titled for one of these Japanese warriors "Champloo." One of these warriors named Jack fights Dark Lord Aku in a Cartoon Network anime-inspired show.
ANSWER: Samurai [accept Samurai Champloo or Samurai Jack]
[10] This DJ and Lo-fi hip-hop pioneer worked with Shinichiro Watanabe to create the soundtrack for Samurai Champloo. Modal Soul and Metaphorical Music are albums produced by this man before he tragically died in a 2010 car accident.
ANSWER: Nujabes [accept Jun Seba] <Karthik Prasad/Lalit Maharjan>/<ed. GE>
2. Philip Pullman argued that this country's Gentle Queen was excluded from later books because of her discovery of sex. A character in this country is fed Turkish Delights, and this country contains the massive castle (*) Cair Paravel. One character in this country is almost sacrificed on the Stone Table, and part of this country is ruled by Susan and Peter until they return to Professor Kirke's home in England. Lucy Pevensie encounters a faun delivering packages in the snow after arriving in this country through a wardrobe. The White Which attempts to conquer this country, but is foiled by the lion Aslan. For 10 points, name this fictional country created by C.S. Lewis.
ANSWER: Narnia [accept The Chronicles of Narnia or anything mentioning Narnia] <Ganon Evans $>/<$ ed. WG>
2. Who let the dogs out and into this Eastern European history bonus? For 10 points each:
[10] The mongrel dog Laika became the first living organism to orbit the Earth in a Soviet probe of this name. The Space Race began when the Soviets launched the first satellite into space with this name. ANSWER: Sputnik [accept Sputnik 1 or Sputnik 2]
[10] The War of the Stray Dog began when an officer from this country was shot chasing his lost dog across a border at Petrich and into Bulgaria. The secret society Filiki Eteria provoked this country's independence war, during which Lord Byron died.
ANSWER: Greece [accept the Hellenic Republic or Hellas; accept Elleniki Demokratia]
[10] This leader ordered mass deployment of the Sarplaninac [shar-pla-nee-natz] shepherd dog as a guard animal during World War II. This advocate of "national communism" broke with Joseph Stalin and was the only European founder of the Non-Aligned Movement.
ANSWER: Josip Broz Tito [or Josip Broz] <Ganon Evans>
3. A defensive player for this NFL team died in 2000 following a car accident that happened while traveling to the NFC championship. The father of this team's current quarterback was a professional baseball pitcher for teams including the Minnesota Twins. Alex Smith played for this team before being traded to (*) Washington. A former Philadelphia Eagles coach led this team to defeat the San Francisco 49ers for their second Super Bowl win. Andy Reid coaches, for 10 points, what team quarter-backed by Patrick Mahomes II that won the 2020 Super Bowl?
ANSWER: Kansas City Chiefs [accept either underlined portion] (The first line is about Derrick Thomas) <Lalit Maharjan>/<ed. GE>
3. While in exile for 14 years, this man was served fruits by Shabari, who was so devoted that she tasted every fruit before she gave it to ensure they were ripe and tasty. For 10 points each:
[10] Name this man who fought the demon-king Ravana and became king of Ayodhya in his namesake Sanskrit epic.
ANSWER: Rama [or Ramachandra; accept Ramayana]
[10] This woman married Rama after he broke the bow of Shiva. This woman was captured by Ravana and underwent a trial by fire to prove her purity after her rescue.
ANSWER: Sita
[10] Before leaving for exile, Rama was asked by Bharata to give him these objects, which he placed on the royal seat to indicate the true ruler of Ayodhya.
Answer: sandals [or padukas; prompt on shoes] <Aditya Sivakumar>/<ed. EC>
4. In one poem titled for this substance, the author discusses "a uniform hieroglyphic" and "the beautiful uncut hair of graves." This substance repeats the phrase "Let me work" in a poem that begins "Pile the bodies high at Austerlitz and Waterloo" by Carl Sandburg. The speaker declares this substance to be "the flag of my disposition" after a child asks him "what is" this substance in the poem (*) "Song of Myself." A collection titled for this substance includes the poems "O Captain! My Captain!" and "I Sing the Body Electric." For 10 points, a Walt Whitman poetry collection is titled for "Leaves of" what plant?
ANSWER: grass [accept Leaves of Grass or summer grass; prompt on leaves with "Leaves of what plant?"] <Ganon Evans>/<ed. WG>
4. A proponent of this philosophy described society's journey through three mentally conceived stages in an essay titled "The Course of [this philosophy]." For 10 points each:
[10] Name this branch of philosophy supported by Auguste Comte that suggests that all knowledge can either be scientifically proven or logically explained.
ANSWER: positivism [accept positive philosophy]
[10] A circle of positivist philosophers in this country included Kurt Gödel ["gur-dell"]. Frank Ramsey translated the works of a philosopher from this country whose Philosophical Investigations was edited by Bertrand Russell.
ANSWER: Austria [accept Österreich] (The philosopher in question is Ludwig Wittgenstein.)
[10] In Auguste Comte's System of Positive Polity, he proposes that there should be a religion without this being. Theology is the study of the nature of this creator being.
ANSWER: God <Aditya Sivakumar>/<ed. GE>
5. This practice can be done at a pieve, a location where catechumens without a place for this activity in their cathedral can participate in this rite. Aspersion and affusion structures that contain a material for this are called fonts. In Matthew 28:19, Jesus told his disciples to "go make disciples of all nations" (*) by doing this, and one religious sect defers this until adulthood. In certain denominations, a triple immersion is used to conduct this rite for infants, and holy water is sometimes used to remind people of this practice. For 10 points, name this sacrament of initiation into Christianity with water.
ANSWER: baptism [accept word forms such as baptizing people] <Vishal Kanigicherla>/<ed. KP>
5. This artistic technique was used extensively during the Renaissance to create masterpieces such as The Creation of Adam and The Last Supper. For 10 points each:
[10] Name this technique that involves painting on newly laid wet plaster. Its opposite secco variety sees pigments applied onto dry plaster, contributing to its worse durability.
ANSWER: fresco [accept buon fresco]
[10] This artist extensively used ultramarine pigment applied with the secco fresco technique. Considered the Father of the Renaissance, he is best known for his Ognissanti Madonna and Lamentation.
ANSWER: Giotto di Bondone
[10] Lamentation is located on the walls of the Arena type of this building. Filippo Brunelleschi won a competition to design the dome for one of these religious buildings in Florence.
ANSWER: church [accept chapel, prompt on temple, anti-prompt on cathedral] <Michael Eng>/<ed. EC>
6. An artist from this movement created a terracotta sculpture that represents Nymph and Satyr Carousing; that artist was Clodion. A painting from this movement depicts couples traveling to a title location sacred to Aphrodite. This movement, which included (*) The Embarkation for Cythera, saw another painting where a bishop pushes the title object while a voyeur looks up at the central girl. Associated with extreme ornamentation, pastel colors, and themes of love, for 10 points, name this art movement exemplified by Jean-Honoré Fragonard's The Swing.
ANSWER: Rococo [accept Late Baroque; do NOT prompt or accept "Baroque"] <Michael Eng>/<ed. EC>
6. This novel opens with the gift of the dog Barabbas, which foreshadows Esteban's curse that he will die like a dog. For 10 points each:
[10] Name this novel in which the psychic Clara del Valle predicts the accidental poisoning of her sister Rosa the Beautiful.
ANSWER: The House of the Spirits [or La Casa de los Espíritus]
[10] This Chilean author of The House of the Spirits frequently included magical realism in her novels, including one in which Rolf guides the title girl Eva Luna to the paradise of La Colonia.
ANSWER: Isabel Allende [or Isabel Allende Llona]
[10] Allende wrote that this magical realist author "gave us back our history." This Colombian author chronicled multiple generations of the Buendía family in the city of Macondo in his novel One Hundred Years of Solitude.
ANSWER: Gabriel García Márquez [prompt on García or Márquez alone; prompt on Gabo or Gabito] <Eric Chang>/<ed. WG/GE>
7. Two different forms of this protein are detected using BOLD ["BOLD"]-contrast imaging in fMRI ["f-M-R-I"]. While the "A" type of this protein is most common, its less common "A2" type can be increased in beta thalassemia. This protein exists in "tense" and "relaxed" states. The Bohr effect describes how this protein is affected by acidity and (*) carbon dioxide concentration. This protein consists of four porphyrin rings that each surround an iron center. Carbon monoxide is toxic because it readily binds to this protein. For 10 points, name this molecule in red blood cells that carries oxygen.
ANSWER: hemoglobin [accept $\underline{\mathbf{H b}}$ or $\underline{\mathbf{H g b}}$ ] Lalit Maharjan>/<ed. SC>
7. The Darcy-Weisbach Equation is a generalized form of this law. For 10 points each-
[10] Name this equation which shows that the volume flow rate of an incompressible fluid in a tube is proportional to the radius of the tube to the fourth power.
ANSWER: Hagen-Poiseuille equation
[10] The Poiseuille equation only applies to this type of motion, where each particle follows a streamline path. It is the opposite of turbulent motion.
ANSWER: laminar flow
[10] The Poiseuille equation determines that the volume flow rate is inversely proportional to the coefficient of this quantity. This quantity can be defined as a fluid's resistance to motion.
ANSWER: viscosity <Shohom Chakraborty>/<ed. SC>
8. The Penske corporation owns a location in this city's suburbs that contains a 200 foot tall glass pagoda. The NCAA is headquartered in this city, whose NBA team plays in Bankers Life Fieldhouse. The RCA Dome in this city was replaced with (*) Lucas Oil Stadium, which is the site of the NFL Scouting Combine. This city's name appears in a sports venue whose start and finish line is a strip of bricks and which hosts a notable 500 mile long automobile race each year. For 10 points, name this Midwestern city home to the Pacers and the Colts.
ANSWER: Indianapolis [accept Indy 500, prompt on "Speedway"] <Lalit Maharjan>/<ed. AD>
8. Congratulations, you are a merchant traveling from Mediolanum to the Eternal City of Rome in 71 BC ! Answer the following about what you experience, for 10 points each:
[10] Travel is quite easy to Rome as you travel on some of the 250,000 miles of these structures. A medieval proverb claims all of these structures "lead to Rome."
ANSWER: Roman roads [accept streets or highways; accept via or viae]
[10] In Florentia, you complain to a magistrate that nearby roads aren't the necessary 8 Roman feet in width, as according to this law code. This numerically named law code of Ancient Rome was publicly displayed on bronze tablets in Roman cities for all the populace to see.
ANSWER: Law of the Twelve Tables [accept Leges Duodecim Tabularum or Duodecim Tabulae] [10] You gag a little from the smell of Spartacus and 6,000 other slave rebels crucified alongside this "Queen" of Roman roads. Roman defeats during the Second Samnite War encouraged the construction of this first large scale Roman road project.
ANSWER: Appian Way [or the Via Appia] <Ganon Evans>
9. At the Versailles Conference, this leader allegedly allowed David Ben-Gurion to create a Zionist state in his country. This man worked in the Comintern with his mentor Dmitry Malinuisky and launched the August Revolution in his home country against the Japanese-collaborator Bao Dai. This man negotiated the (*) Geneva Accords and won the Battle of Dien Bien Phu against French colonial forces. Operation Rolling Thunder targeted this leader's namesake trails which were used to support operations like the Tet Offensive. Saigon was renamed after, for 10 points, what communist leader of Vietnam?
ANSWER: Hồ Chí Minh [accept Bác Hồ or Bác; prompt on Nguyễn Sinh Cung, Nguyễn Tất Thành, Nguyễn Ái Quốc] <Shohom Chakraborty>/<ed. GE>
9. Some characters in American Literature really should not be driving. For 10 points each:
[10] Daisy Buchanan hits her husband Tom's mistress Myrtle Wilson in a yellow Rolls Royce owned by the title character of this F. Scott Fitzgerald novel.
ANSWER: The Great Gatsby
[10] Clyde Griffiths' friend Willard Sparser murders a young girl while racing a car in this author's novel An American Tragedy. The Wisconsinite Caroline Meeber travels to Chicago to become an actress in this author's novel Sister Carrie.
ANSWER: Theodore Dreiser
[10] Inspired by Chappaquiddick, this author wrote a novella in which Kelly Kelleher nearly drowns after "the Senator" drunkenly crashes into the title Black Water. Arnold Friend beguiles Connie to enter his car in this author's short story "Where Are You Going, Where Have You Been?"
ANSWER: Joyce Carol Oates <Ganon Evans>/<ed. WG>
10. Delayed extraction is used in a form of this technique where ions are accelerated to the same potential using an electric field. That form measures time-of-flight and can be paired with an ionization technique like MALDI. Bromine containing compounds are easily identified by their identical $M+$ and $M+2$ peaks. This technique passes an unknown compound through (*) electric fields in order to identify its components according to a ratio of the namesake quantity to charge. For 10 points, name this form of spectrometry that plots results according to a quantity measured in kilograms.
ANSWER: mass spectrometry [accept MS] <Lalit Maharjan>/<ed. SC>
10. This principle was defined alongside constitutional supremacy in an 1803 decision about the appointment of Midnight Judges. For 10 points each:
[10] Name this power of the Supreme Court to rule a law unconstitutional. John Marshall originated this power in the case Marbury v. Madison.
ANSWER: judicial review [prompt on review; prompt on scrutiny]
[10] Judicial review didn't exist when John Jay decided Chisholm v. Georgia from this leadership position of the Supreme Court. Its current holder is John Roberts.
ANSWER: Chief Justice of the Supreme Court
[10] The second ever usage of judicial review was this case, in which the Missouri Compromise was ruled unconstitutional. This case decided that its plaintiff was not a free citizen ever after living in the Wisconsin territory.
ANSWER: Dred Scott v. Sanford <Ameya Singh>/<ed. GE>

## 11. The exploration of this region is the subject of the Solutrean hypothesis. The Kelp Highway

 Hypothesis attempts to explain the pre-Clovis sites in this region. A questionable book by Gavin Menzies claims this region was first visited by the Chinese. The settlement of (*) Vinland by Leif Erikson is generally accepted to have occurred in this region. The population of this region is widely believed to have occurred during the Last Glacial Maximum using the Bering Land Bridge. For 10 points, name this region that was long said to have been discovered by Christopher Columbus.ANSWER: America [accept either North America or South America, accept the New World; prompt on the West Coast, California, Alaska, or any other specific regions in the Americas with "What landmass is that region on?"] <Lalit Maharjan>/<ed. GE>
11. Lucifer has attempted to test the faith of humans for millennia, according to the Bible. For 10 points each:
[10] Name this location where Lucifer, in the form of a snake, convinced Eve to break a promise to God by eating an apple from the Tree of Knowledge.
ANSWER: The Garden of Eden [prompt on paradise]
[10] In his tests to prove that anyone can denounce God, Satan killed all close to this man and cast disease on him. This man initially kept to his faith by claiming "naked I came from my mother's womb."
ANSWER: Job [accept Book of Job]
[10] Before asking Jesus to throw himself from a temple, Satan asked Jesus to do this to sate himself. To end another 40-day hunger, God rained down a substance from the sky that let people do this.
ANSWER: making bread [accept turning stones into bread or making matzah; accept eating bread] $<$ Vishal Kanigicherla>/<ed. KP>
12. In one myth, this deity took on an epithet after accidentally killing her best friend in a sparring match. This deity gave Heracles a rattle to help him defeat the Stymphalian ["stim-phal-ee-an"] birds, and Ericthonius was born after Hephasteus tried to have sex with this deity. This deity turned (*) Arachne into a spider after she bested her in a weaving contest, and offered Paris fame and glory if he chose her as the fairest. An olive branch helped this goddess win the patronage of a city over Poseidon. This deity sprouted directly from Zeus' head, fully grown and armed. For 10 points, name this Greek goddess of wisdom.

12. Instead of ink, over 70 features of deep sea squids eject photophores which distract predators via this phenomenon. For 10 points each:
[10] Name this process by which a living organism produces light.
ANSWER: bioluminescence
[10] In Aliivibrio fischeri, the gene Luxl ["LUX-l"] codes for an acylated homoserine lactose which acts as an autoinducer for this process causing bioluminescence. This process allows population density dependent gene regulation.
ANSWER: quorum sensing
[10] To produce bioluminescence, A. fischeri luciferase reacts luciferin with oxygen and this compound. This compound is produced during oxidative phosphorylation through its namesake "synthase."
ANSWER: $\underline{\text { ATP }}$ [or adenosine triphosphate] <Stefan Calin>/<ed. SC>
13. Severe deficiency of thiamine causes this phenomenon amongst alcoholics in Korsakoff Syndrome. The case study patient HM challenged Donald Hebb's process of consolidation of this phenomenon. Retroactive and proactive interference are two possible explanations for this phenomenon, as is (*) retrieval failure. The rate of this phenomenon was mapped on an exponential curve relative to the study of nonsense syllables by Hermann Ebbinghaus. Alzheimer's and dementia are frequently characterized by, for 10 points, what phenomenon which occurs in patients with amnesia? ANSWER: forgetting memories [accept memory loss; accept amnesia until "Alzheimer's," prompt afterward; prompt on dementia or Alzheimer's with "What phenomenon is symptomatic of that disorder?י’] <Ganon Evans><ed. AD>
13. Lili Boulanger ["Boo-lawn-jay"] was a piano virtuoso who, in 1913, became the first woman to win the Prix de Rome at only 19 years old. For 10 points each:
[10] Boulanger's frequent usage of parallel sevenths and ninths as well as pedal points to provide harmonic stability was influenced by this composer, whose own works include the Suite bergamasque's piece Clair de Lune.
ANSWER: Claude Debussy [or Achille-Claude Debussy]
[10] Boulanger won the Prix de Rome for a cantata based on this literary work. Charles Gounod's most successful opera was based on this work, which is evoked in Franz Liszt's Mephisto Waltzes.
ANSWER: Faust [accept either Faust, Part I or Faust, Part II; accept Faust et Hélène]
[10] A sarrusophone features prominently in one of three settings of these texts written by Boulanger. Igor Stravinsky wrote a neoclassical symphony based on these texts which features the phrase "Alleluia."
ANSWER: Book of Psalms [accept the Symphony of Psalms; accept specific psalms such as Psalm 150; prompt on the Bible] <Ganon Evans $>/<$ ed. KP $>$
14. Nicolas Chédeville arranged this collection for the hurdy-gurdy and musette. This collection was originally published with four sonnets of unknown authorship. The second section of this collection ends, after a few seconds of silence, with many fast sixteenth notes depicting a $\left(^{*}\right.$ ) storm. In a section of this collection, a viola passage depicts a goatherd's barking dog. This collection was published with a set of 8 pieces in the larger work The Contest Between Harmony and Invention. For 10 points, name this group of four concerti by Antonio Vivaldi, the first of which is "Spring."
ANSWER: The Four Seasons [accept Le quattro stagioni; prompt on Contest Between Harmony and Invention until mention] <Shohom Chakraborty> /<ed. KP>
14. Answer the following about jazz music's influence on American writers. For 10 points each: [10] Thelonious Monk responded "makes sense" when this Beat Generation poet asked him to read his massive poem "Howl." This author also penned the poem "Kaddish" upon the death of his mother. ANSWER: Allen Ginsberg
[10] "Jazz June" and "Die Soon" are two lines preceded by "We" in this Gwendolyn Brooks poem which describes seven pool players at the Golden Shovel.
ANSWER: "We Real Cool"
[10] Stan Getz frequently performed the saxophone while this author read poems from his collection $A$ Coney Island of the Mind. This founder of the City Lights bookstore was arrested for obscenity after publishing "Howl."
ANSWER: Lawrence Ferlinghetti $<$ Ganon Evans $>/<$ ed. WG $>$
15. Two types of this mineral are found on the left and right vertices of the QAPF diagram. The continuous branch of Bowen's reaction series consists entirely of one form of this mineral. They're not pyroxenes, but members of this group of minerals have two planes of cleavage at 90 degrees to each other. All of these minerals contain (*) aluminum, while the plagioclase variety also contains calcium or sodium. The potassium containing the orthoclase variety of this mineral is given a 6 on the Mohs Hardness Scale. For 10 points, name this group of tectosilicate minerals, the most abundant group of minerals in Earth's crust.
ANSWER: feldspars [prompt on "tectosilicates"; prompt on "aluminosilicates"; antiprompt on "orthoclase" or "plagioclase"] <Rohan Shelke $>/<$ ed. SC $>$
15. Jull established a scale of classifying the "weathering" of these objects on a scale ranging from W0 to W6. For 10 points each:
[10] Name these objects of extraterrestrial origin that unlike meteors, are defined by the fact that they survive their fall to the surface.
ANSWER: meteorites
[10] The iron in iron meteorites is mainly present as the minerals kamacite and taenite, which are alloys of iron and this other element which combines with cadmium to make rechargeable batteries.
ANSWER: nickel [accept Ni]
[10] Treating cross sections of iron meteorites with acid can cause these patterns to appear. These patterns are figures of intertwining kamacite-taenite crystals, and consist of long, crisscrossing bands.
ANSWER: Widmänstatten patterns [or Thomson structures] <Arjun Gonuguntla>/<ed. SC>
16. A character in this novel claims a "good chemist is worth twenty poets" and later mocks a bachelor who was stood up by Princess R. The "disciple" Sitnikov takes two characters to visit Madame Kukshina in this novel. Pavel Petrovich duels a character in this novel who kisses the servant Fenichka and later dies of a typhus infection received from performing an (*) autopsy. The noblewoman Anna Odintsova appears in this novel, which begins as Arkady Kirsanov returns home with his nihilist friend Bazarov. For 10 points, name this novel about different family generations by Ivan Turgenev.
ANSWER: Fathers and Sons [or Progeny and Progenitors; accept Fathers and Children; accept Otsi i Deti] <Ganon Evans>
16. The Lugar Center and Georgetown University ranked this woman as the most bipartisan senator in Congress. For 10 points each:
[10] Name this Maine senator, who won a hotly contested 2020 Senate Race against Maine Speaker of the House, Sara Gideon.

## ANSWER: Susan Collins

[10] Collins cast a crucial "yes" vote for this man's contentious 2018 Supreme Court appointment, during which Dr. Christine Blasey Ford accused him of sexual misconduct.
ANSWER: Brett Kavanaugh
[10] Another controversial Collins vote was against passing this 2017 policy. John McCain cast a dramatic thumbs down vote on the Senate floor to kill a bill that would have enacted this policy. ANSWER: repealing Obamacare [accept repealing the Affordable Care Act or ACA; accept the American Health Care Act or Health Care Freedom Act or AHCA or HFCA; accept descriptive answers indicating any sort of cancellation or ending of the Affordable Care Act; accept replacing Obamacare; accept replacing Obamacare for Trumpcare; accept ] <Ganon Evans $>/<\mathrm{ed}$. AD $>$
17. A political cartoon about this event shows John Bull laughing atop "Shakespeare's Cliff" as five men rob an American, represented by Columbia. Timothy Pickering and Charles Lee wanted a full-scale war after this event. The 1778 Treaty of Alliance was nullified after this event, which also led to the (*) Quasi-War. The name of this event was derived from the substitution of the names with letters in documents released by the Adams Administration. For 10 points, name this event in which the French diplomat Charles Talleyrand attempted to solicit bribes from Elbridge Gerry, Charles Pinckney, and John Marshall.
ANSWER: $\underline{\mathbf{X Y Z}}$ Affair $<$ Ameya Singh $>/<$ ed. GE $>$
17. One way this bonding theory is more versatile than Lewis diagrams is because it doesn't need to show multiple resonance structures. For 10 points each:
[10] Name this bonding theory, which revolves around the idea of atomic orbitals combining to form these namesake entities.
ANSWER: molecular orbital theory [or MO theory]
[10] MO theory can, for example, explain why oxygen gas has this property where it is attracted to magnetic fields, in contrast with diamagnetism.
ANSWER: paramagnetism [or paramagnetic]
[10] Oxygen is paramagnetic because its pi star orbitals are degenerate which occurs when multiple orbitals are of equal amounts of this quantity. A ground state is excited with the addition of this quantity.
ANSWER: energy <Michael Eng>/<ed. SC>
18. They are not elegies, but Rainer Maria Rilke ["RILL-kuh"] wrote a cycle of 55 of these works to the mythological figure Orpheus. The tenth of a work of this type by one author of $\mathbf{1 9}$ of these works begins "Death be not proud (*), though some have called thee," and these works generally contain a change in theme marked by a volta in the ninth line. Elizabeth Barrett Browning asked "How Do I Love Thee?" in a collection of these works "from the Portuguese." For 10 points, name this fourteen-line poetic form used commonly by Petrarch and Shakespeare.
ANSWER: sonnets [accept $\underline{\text { Sonnets }}$ to Orpheus; or Holy Sonnets; or Sonnets from the Portuguese; prompt on poems] <Eric Chang>/<ed. WG>
18. C.L.R. James analyzed this country's revolution in context of the French Revolution in his book The Black Jacobins. For 10 points each:
[10] Name this Caribbean nation where yellow fever decimated Charles Leclerc's troops attempting to stop a massive slave revolt in 1821.
ANSWER: Haiti [prompt on Saint-Domingue]
[10] Upon being arrested by Napoleon's government, this revolutionary claimed that the French had "cut down only the trunk of the tree of liberty," but its roots had survived. This leader of the Haitian Revolution was succeeded by his lieutenant Jean-Jacques Dessalines.
ANSWER: Toussaint L'Ouverture [or François-Dominique Toussaint Louverture; or Toussaint Bréda; prompt on Toussaint]
[10] This other lieutenant of L'Ouverture fought an early civil war against the gens de couleur government of the southern Republic of Haiti. This man, Haiti's only monarch, constructed the Sans-Souci palace and instituted the corvée system of forced labor.
ANSWER: Henri I [accept Henri Christophe] <Ganon Evans>
19. In this musical, a man sings "small and white, clean and bright" to describe his country's national flower. A song from this musical tells of a lonely goatherd whose yodeling is heard by many around the land including "one little girl in a pale pink coat." (*) Rolf sings "you are sixteen going on seventeen" in this musical to his love Liesl, and later spares her family as they hide in an abbey. The songs "My Favorite Things" and "Do-Re-Mi" are from, for 10 points, what Rodgers and Hammerstein musical about Maria's quest to bring music to the Von Trapp family?
ANSWER: The Sound of Music <Lalit Maharjan>/<ed. KP>
19. Shakespearian characters frequently inspire other works of literature, for 10 points each:
[10] A coin lands heads 92 times in a row at the beginning of this author's play centering on two of Hamlet's friends, Rosencrantz and Guildenstern Are Dead.
ANSWER: Tom Stoppard
[10] Machado de Assis' Dom Casmurro features a theme of jealousy, which may have been inspired by his time translating this Shakespeare play about the title "Moor of Venice" murdering Desdemona.
ANSWER: Othello [accept The Tragedy of Othello]
[10] This author applied conventions of detective stories to try and discover who killed Duncan in "The Macbeth Murder Mystery." He also wrote a story where the title character imagines flying a Navy hydroplane and smoking a cigarette in front of a firing squad.
ANSWER: James Thurber (the second story is "The Secret Life of Walter Mitty) <Eric Chang>/<ed. WG>
20. Landauer's principle can be derived from this statement. This statement should not be derivable due to its inherent time-asymmetry according to Loschmidt's paradox. Clausius said that heat cannot move from a cold to hot body in a restatement of this law. This law was challenged by a thought experiment where particles are (*) sorted based on speed called Maxwell's Demon. Perpetual motion machines violate this law and the heat death of the universe is predicted by it. For 10 points, name this statement which holds that entropy always increases in a closed system.
ANSWER: second law of thermodynamics <Lalit Maharjan>/<ed. SC>
20. This region's point of Cape Comorin is considered the boundary between the Bay of Bengal and the Arabian Sea. For 10 points each:
[10] Name this subcontinent of Asia, which includes Bangladesh, Pakistan, Sri Lanka, Nepal. and its namesake country. This subcontinent's collision with Asia produced the Himalayas.
ANSWER: Indian Subcontinent
[10] This broad ethnic group has its homeland in the Deccan Plateau of southern India. Telugu is a member of a language family named for this ethnic group of Southern India.
ANSWER: Dravidians
[10] This Dravidian language shares its name with the "Nadu" state of India which contains Chennai. Speakers of this language formed a "Tigers" terrorist group in the 1980s in Sri Lanka.
ANSWER: Tamil [accept Tamil Nadu or the Tamil Tigers] <Ganon Evans>/<ed. AD>

