

**ACF Winter 2010: Temporary Autonomous Zone**

**Finals Packet 2, written by the Editors (Andrew Hart, Rob Carson, Trevor Davis, Dennis Jang, and Eric Mukherjee) and Eric Kwartler, Ryan Westbrook, and Evan Nagler**

**Tossups**

1. One member of this family shot journalist Victor Noir, and another held the title Duke of Reichstadt. One member of this family was stymied by the Lines of Torres Vedras, was forced to flee after the Battle of Bailén, and was defeated at Vitoria. One descendent of this family served as a trust-busting Attorney General under Teddy Roosevelt. Another member of this family took the name Lodewijk I as King of Holland. Other members of this family included the king of Westphalia, as well as the Spanish king during the Peninsular War. In addition to Jérôme and Joseph, it included the man who led the coup of Eighteen Brumaire and became the first Emperor of the French before losing the Battle of Waterloo. For 10 points, name this family of Napoleon.  
ANSWER: **Bonaparte**
2. These organisms produce a prolamin storage protein called zein which is used to synthesize vicara fibers. Experiments by DeVries and Correns explained the "xenia" effect observed in this organism by invoking double fertilization. These organisms, which have distinctive male inflorescence are closely related to the "teosinte" grasses. Experiments on the triploid aleurone layers of its endosperm led to the discovery of the Ac/Ds system which confers varying colour patters in this organism; that experiment led to a Nobel Prize for Barbara McClintock's discovery of transposons. For 10 points, identify this crop which provides the ingredients for tortillas.  
ANSWER: **maize** [or **corn**; or **Zea mays**; or **Z. mays**]
3. This work is the first treated in another book about "reading" this work's author, by Alexandre Kojève. This work distinguishes religion in art from other types of religion. Its preface treats "scientific cognition" and questions the extent to which this work's title concept is "negative" in its author's trademark "Zusehen" style. This work contrasts "absolute freedom and terror." The progression detailed in this work culminates in its section "the truth of self-certainty." This intended first part of its author's "comprehensive system" of Wissenschaft describes all social conflict as stemming from its author's "master/slave dialectic." For 10 points, name this work that examines phases of developing consciousness, the seminal work of Georg Friedrich Hegel.  
ANSWER: **Phenomenology of the Spirit** [accept **Phenomenology of the Mind**; **Die Phenomenologie des Geistes**]
4. One character resurrects a dead *volva* in order to help cure this figure's nightmares in the *Vegtamskvida*, a poem also known as this character's "dreams." His hall is said to lie in the place of the "fewest baneful runes." The wolf-riding giantess Hyrrokkin was once asked to launch this character's ship. The son of this resident of Breidablik lived in Glitnir, from which he settled disputes. The giantess Thokk refused Hermod's pleas to weep for this owner of Breidablik, which resulted in Loki being bound in a cave until Ragnarok. This owner of Hringhorni was the husband of Nanna and Forseti, and he was eventually avenged by his half-brother Vali. For 10 points, identify this son of Odin who was accidentally killed by his brother Hodr, the most beautiful of the Aesir.  
ANSWER: **Balder** [or **Baldr** or **Baldur**; accept **Vegtamskvida** or **Baldrs draumar** or equivalents until "this figure"]
5. The major structural proteins of these entities use the PTAP motif to recruit the ESCRT-1 ["escort-one"] complex and the LYPxL motif to recruit the ALIX protein in order to facilitate the budding process. In addition to possessing the Gag polyprotein, these entities produce the Vif protein which counteracts the effects of the cytidine deaminase APOBEC3G. They are unable to infect individuals who possess a homozygous 32 base pair deletion in the CCR5 protein. The glycoprotein gp120 found on them allows them to dock onto CD4 receptors, and azidothymidine is a reverse transcriptase inhibitor that is used to treat infections by this agent. For 10 points, name this retrovirus that mostly infects immune cells and which causes AIDS.  
ANSWER: **HIV** [or **human immunodeficiency virus**]

6. The protagonist of this novel imagines a meeting attended by Lady Cockpurse and Reggie St. Cloud, whom a bridge-playing morphine addict nicknamed the “shameless blond” had brought in an airplane. Minor characters include the private detectives Blenkinsop and James, who accompany the protagonist and a waitress named Milly to a seaside resort, and the protagonist's son, John Andrew, whose death while riding his horse Thunderclap leads the protagonist's wife to confess to an affair with John Beaver. The protagonist's wife Brenda eventually marries his friend Jock Grant-Menzies after he chooses to accompany Mettinger on an expedition to Brazil, where he is captured by Todd and forced to read Dickens to him in perpetuity. Taking its name from *The Waste Land*, this is, for 10 points, what novel about Tony Last by Evelyn Waugh.

ANSWER: *A Handful of Dust*

7. A scene in this work at the Gate of Wisdom sees a priest convince the protagonist that women have trivial opinions. In one of its scenes, a character falsely claims that he rescued the protagonist from a snake, after which three women hand the liar a rock and padlock his mouth shut. This opera features the famous “Tremble not, my dear son” aria, and its incredibly demanding aria “Der Hoelle Rache” requires a range up to F6 for its soprano role. A man dressed in bird's feathers in this opera is Papageno, who is a servant of the villain. The plot of this opera centers on the love of Tamino for the maid Pamina, and the attempts to thwart the relationship by the Queen of the Night. For 10 points, name this work that features an instrument which can change men's hearts, an opera by Wolfgang Amadeus Mozart.

ANSWER: *The Magic Flute* [or *Die Zauberfloete*]

8. Lionel McKenzie, Gerard Debreu, and this man are the namesakes of a basic model in general equilibrium theory, while the fundamental paradox that exists in the determination of demand for information was described in this economist's work *Essays in the Theory of Risk-Bearing*. This economist helped define measures of risk aversion with John Pratt, while state contingent claims, which pay out one unit in certain states, are known as his namesake type of securities and are used in analysis of security markets. The Gibbard-Satterthwaite theorem generalized the most famous claim made by this author of *Social Choice and Individual Values*. For 10 points, name this American economist who stated that Pareto efficiency, independence of irrelevant alternatives, and non-dictatorship are among the criteria that cannot all be satisfied in a “fair” voting system.

ANSWER: Kenneth Arrow

9. While in Rome, this artist depicted a muscular title character who brandishes white-hot iron in one hand while Apollo enters the central scene. This artist depicted the voluminous black hair of a man wearing a green coat in one of his portraits. A drunken outdoor feast culminates in the drunken crowning one of the revelers in this artist's work that shows the triumph of Bacchus. This artist of a portrait of Juan de Pareja and *Los Borrachos* showed the titular goddess's face reflected towards the viewer in his *Rokeby Venus*. He also depicted Ambrosio Spinola receiving the keys of a city in a painting also sometimes called “The Lances.” For 10 points, name this artist who depicted the *Surrender of Breda* and also painted a dwarf and a large dog next to the Infanta Margarita in his *Las Meninas*.

ANSWER: Diego Velazquez

10. This country was the home to a 1975 coup that killed its first president and his entire family. Yahya Khan was the prime minister of the country that this nation seceded from at this time of this new nation's independence. This country's independence war was preempted by Operation Chengiz Khan. The current prime minister of this country is Hasina Wazed, the daughter of its national hero referred to as Sheikh Mujib. Its namesake Nationals Party was founded by Zia Rahman. It moved for independence by electing members of the Awami League to the legislature of the nation it was then a part of. For 10 points, name this nation that seceded from another country in 1971, prior to which it was known as East Pakistan.

ANSWER: Bangladesh [or East Pakistan until read; do not accept or prompt on “Pakistan”]

11. Gary Karr arranged this composer's cello sonata in A Minor as a double bass concerto, while folk music collected by Lindeman gave inspiration to four symphonic dances, the Opus 64 of this composer. He included two wordless Hallings in his *Album for Male Chorus*, while a drum roll and a set of octaves played by the solo instrument open this composer's famous piano concerto in A Minor. An *Arietta* is the first of the 66 short piano pieces in one collection by this composer, whose lament *The Death of Ase* accompanies the title mountain outlaw's return just in time for his mother's death in part of another work. For 10 points, name this Norwegian composer whose works include his *Lyric Pieces* and *In the Hall of the Mountain King*, which is part of the incidental music to *Peer Gynt*.

ANSWER: Edvard Grieg

12. During one episode in *The Seven Valleys*, one of these figures is said to be represented by a watchman that chases a man until the man encounters his long-lost love. That example of these figures is also responsible for destroying the hosts of Sennacherib. The first Book of Enoch claims that one of these figures bound Azazel under the desert Dudael; that one guides Tobias to Media and frees Sarah from Asmodeus in the Book of Tobit. The only figure specifically named as holding this position serves as the commander of the armies of God, while the most famous one in Islam revealed the Qur'an to Muhammad. For 10 points, identify these messengers of God that include Uriel, Raphael, Gabriel, and Michael.

ANSWER: archangels

13. One of this author's novels features a despot who has the power to declare any month in the year the seventh month and is opposed by the movement for the voice, which gains traction when the despot loses his voice. In addition to *Wizard of a Crow*, this author wrote about a group of people who meet on a bus en route to the "Devil's Feast" in *Devil on the Cross*. A family is forced to give up their farmland after the titular action falls through in his best-known drama, *I Will Marry when I Want*. A Derek Walcott poem provides the title of this man's novel about the circumstances surrounding a brothel fire in Ilmorog, while the betrayal of the resistance fighter Kihika by the putative hero Mugo is central to his most famous work. For 10 points, name this Kenyan author of *Petals of Blood* and *A Grain of Wheat*.

ANSWER: James Ngugi Wa Thiong'o

14. The Vyazovkin MFK technique allows for the calculation of this quantity in terms of the conversion rate. In the rate-process theory for viscosity developed by Eyring, an analogue of this quantity is measures the formation of "holes" which fluid molecules can occupy. For gas phase reactions, this quantity is equal to the enthalpy of formation of the transition state minus 2 RT, and the height of a potential barrier in a reaction profile is analogous to this quantity. It appears in the exponential term of the Arrhenius equation, enzymes and catalysts lower this quantity of a reaction. For 10 points, identify this energy which the reactants must overcome before they can proceed to the products of the reaction.

ANSWER: activation energy

15. One of the central characters in this show failed to disclose his sealed juvie record for an aggravated battery charge, and went on to star as Northwestern's quarterback before busting his childhood mentor as a child molester. Another of this show's characters had an abortion in Italy as a teenager, and suspects an Italian Catholic priest of killing her former best friend during a botched exorcism. Early episodes of this show see one of its characters constantly foiled in chess because he cannot "think outside the box." Agent Hotchner is the head of the unit central to this show, which also features a skinny-tie wearing dude with a 187 IQ named Dr. Spencer Reid. For 10 points, name this CBS show in which a team of profilers from the Behavioral Analysis Unit apprehend serial killers.

ANSWER: Criminal Minds

16. In one poem by this author, misidentification of the title characters' bodies leads the speaker to ask, "Who really gave two figs?" The speaker asks, "O mother, mother, where is happiness?" in this author's "the sonnet-ballad," which is part of the appendix to a mock epic poem by this author. The protagonist's husband falls asleep while reading *Sex in the Married Life* while she reads *Of Human Bondage* in a novel by this author of two collections titled after "Bronzeville." The sections "Notes from the Childhood and the Girlhood," "The Womanhood," and "The Anniad" make up another collection by this author of *Maud Martha*, while a better-known poem concerns "The Pool Players/Seven at the Golden Shovel." For 10 points, name this African-American author of *Annie Allen* best-known for "We Real Cool."

ANSWER: Gwendolyn Brooks

17. Near the Cauchy horizon, a Rindler observer will see an analogue to this phenomenon in the Unruh effect. Its namesake temperature is proportional to the surface gravity of its source. The size of bodies in which this phenomenon originates must be small, because increasing mass decreases the power of it. It happens when a particle resulting from pair production tunnels through the event horizon. The no-hair theorem mandates that this phenomenon be in a mixed state, even for the input of a pure quantum state, a result at odds with Liouville's theorem that results in an "information paradox." This phenomenon eventually leads to black hole evaporation. For 10 points, name this thermal radiation named for the author of *A Brief History of Time*.

ANSWER: Bekenstein-Hawking radiation [prompt on black-body radiation]

18. Prior to this battle one side had resupplied at Bristol and undertaken a false fortification of Sodbory. Lord Wenlock failed to provide reinforcements at this battle, before which one side was denied entry to Gloucester, leading to a forced march in an attempt to cross the Severn River. The losers in this battle were headed to Wales in order to join forces with Jasper Tudor and try to offset the loss of an allied force at the Battle of Barnet, and this battle saw the death of Edward, Prince of Wales. The third Duke of Somerset to die in a certain conflict was executed following this battle, and it also resulted in the capture of Margaret of Anjou. For 10 points, name this throne-winning victory for Edward IV in the Wars of the Roses, taking place at a namesake abbey.

ANSWER: Battle of **Tewkesbury**

19. The protagonist of this man's first novel chases his naked father around a billiard table in an attempt to bludgeon him to death with iron dumbbells only to relent once he catches him. This author explored his religious heritage in *Embezzled Heaven* and *Hearken unto the Voice*, while this man's dramatic subjects include the Emperor Maximilian and the apostle Paul. Better-known plays by this author include an adaptation of *The Trojan Women* and a play in which vagabonds deify the malformed son of Stevan Milic, *Goat Song*. This author fictionalized himself as Arthur Englander in *The Pure of Heart*, but he is better known for characters like Gabriel Bagradian and a girl who has a religious vision in the Grotto of Massabielle, Bernadette. For 10 points, name this Austrian author of *The Forty Days of Musa Dagh*.

ANSWER: Franz **Werfel**

20. The dissent in this case compares it to a case involving a state mortgage law, *Bronson v. Kinzie*, and that dissent was written by Stephen Field. The opinion in this case cites two treatises by Lord Chief Justice Matthew Hale, referencing a cessation of *juris privati*. This case specifically regarded the violation of the Constitution of 1870, and the decision by Morrison Waite rests on the argument that when public good is at stake, the government can regulate private property. This case was a victory for an organization led by Oliver Hudson Kelley, though it was overturned in a case that presaged the creation of the Interstate Commerce Commission, the *Wabash* case. For 10 points, name this 1879 Granger case, which upheld the constitutionality of regulating grain elevator rates in a Midwest state.

ANSWER: **Munn** v. *Illinois*

21. This polity won the Battle of Macclodio while led by Francesco Foscari; that occurred in a conflict that concluded with the Peace of Lodi and was fought against Filippo Maria Visconti. The League of Cambrai was formed to oppose this polity, which had a government including the Council of Ten. In 1171 Manuel I ordered the arrest of all of this polity's citizens in his lands, and this polity led the siege of its rebellious vassal city, Zara. Enrico Dandolo led this polity during the Fourth Crusade, for which it was contracted to build a giant fleet. Alexius I granted this polity the right to trade without taxation in the Byzantine Empire. Styled the "Most Serene Republic," it was a rival of Genoa for control of Mediterranean trade. For 10 points, name this Italian city-state that, like Genoa, was ruled by a Doge.

ANSWER: Republic of **Venice**

22. While the title character of this work is helped by her servant Tobe, the ladies of the town feel that she should not forget *noblesse oblige*, without calling it that. Recalling the actions of the title character's great-aunt Wyatt, the townspeople send for two female cousins, who bring the title character a silver toilet set, but this occurs after men have snuck onto her property to sprinkle lime. Thanks to Colonel Sartoris, the title character had not been paying taxes for many years, but the discovery of the corpse of Homer Barron and a strand of hair indicates that she had been sleeping with her poisoned companion for even longer. The death of Miss Grierson occurs at the start of, FTP, which short story by William Faulkner?

ANSWER: "A **Rose for Emily**"

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**Bonuses**

1. Identify some things related to nattering nabobs of negativity, for 10 points each.  
[10] That phrase was uttered by this Vice President under Nixon, who was forced to resign due to allegations of extortion and bribery dating to his time as Governor of Maryland.  
ANSWER: Spiro Theodore **Agnew**  
[10] The line was written by this Nixon speechwriter who won a Pulitzer Prize for his long-running conservative column in *The New York Times*.  
ANSWER: William **Safire**  
[10] Another speechwriter for Nixon was this presidential advisor to Ford and Reagan who pushed for the latter to visit a graveyard where Waffen SS members were buried. He sought a presidential nomination in 1992, 1996, and 2000.  
ANSWER: Pat **Buchanan**
2. Identify the following Incan deities, for 10 points each.  
[10] This god's full name includes the title Kon-Tiki, and he was worshiped as both the god of sun and storms. He wears the sun as a crown.  
ANSWER: **Viracocha** [accept Kon-Tiki **Viracocha** or Apu Qun Tiqsi **Wiracutra**]  
[10] Ilyap'a was the Incan god of this phenomenon; he produces it when he slings stones at pots carried by his sister, who represents the Milky Way. If you tie up a black dog, Ilyap'a will send this phenomenon in pity.  
ANSWER: **rain** [prompt on **weather**; accept equivalents like **precipitation**]  
[10] This god, usually stylized the son of Viracocha, is a straight-up sun god. The Sapa Inca claims direct descent from this god, who is married to Mama Quilla, the moon.  
ANSWER: **Inti**
3. This singer is infamous for a song in which she claims that "we gonna fight 'til we see the sunlight." For 10 points each:  
[10] Name this girl who's got pedicures on her "toes, toes" and boys lighting up her "phone, phone" in the song "Tik Tok."  
ANSWER: **Kesha** [or **Ke\$ha**; or Kesha Rose **Sebert**]  
[10] Kesha is the featured vocalist on this track in which the titular action occurs to the singer's head "when you go down, down." In it, the singer is losing his money and out of control because his woman is taking his bankroll.  
ANSWER: "**Right Round**"  
[10] "Right Round" was a moderate hit for this artist who praised "apple bottom jeans," "boots with the fur," and "Reeboks with the straps" in his magnum opus, "Low."  
ANSWER: **Flo Rida** [or Tamar **Dillard**]
4. The first section of this work lays out the Necessary of Definitions, an attempt to axiomize many social functions. For 10 points each:  
[10] Name this book whose fourth part outlines a "confederacy of deceivers" that tries to gain power by promulgating "dark and erroneous doctrines."  
ANSWER: **Leviathan**: *The Matter, Forme and Power of a Common Wealth Ecclesiasticall and Civil*  
[10] This author advocated forming commonwealths headed by absolute monarchs in his *Leviathan*.  
ANSWER: Thomas **Hobbes**  
[10] Hobbes postulates that commonwealth is the only way to escape this state, the only possible state of man in the state of nature; in it, life is pretty nasty, brutish, and short.  
ANSWER: the state of **war** [accept **war of all against all**; or **bellum** omnium contra omnes]

5. Identify some important Byzantine families, for 10 points each.  
 [10] The most famous member of this family temporarily ended the Great Schism with the Second Council of Lyon after reclaiming Constantinople from the Latin Empire. That man, Michael VIII, established this family as the final Byzantine dynasty.  
 ANSWER: **Palaeologus** [or **Palaeologan**]  
 [10] Michael Palaeologus gained his first crown by usurping this family's hereditary title of Emperor of Nicaea. This family included two Theodores, the first of which won a victory over Kay-Khusraw, Sultan of Rum.  
 ANSWER: **Lascaris** [or **Lascarid**]  
 [10] This family contributed a series of important military leaders during the Macedonian dynasty, including the emperor Nicephorus II and a man who, like the similarly named Bardas Sclerus, led a revolt against Basil II.  
 ANSWER: **Phocas**
  
6. Name the following Andrew Marvell poems, for 10 points each.  
 [10] This poem opens with "The forward youth that would appear / Must now forsake his Muses dear" and was written with the title character's arrival in England.  
 ANSWER: "An **Horatian Ode** upon Cromwell's Return from Ireland"  
 [10] Written during Marvell's time as a tutor for Mary Fairfax, this poem describes the title structure and asks "Why should of all things man unrul'd / Such unproportion'd dwellings build?"  
 ANSWER: "**Upon Appleton House**, to my Lord Fairfax"  
 [10] This carpe-diem poem speaks of "vegetable love" and "the conversion of the Jews" and opens by lamenting, "Had we but world enough, and time" in speaking to the title character.  
 ANSWER: "**To His Coy Mistress**"
  
7. Particle physics! For 10 points each:  
 [10] These particles were posited by Pauli to explain the missing energy from the beta-decay. The Super Kamiokande and Homestake experiments attempted to study the flavor oscillations of these leptons.  
 ANSWER: **neutrinos**  
 [10] Bruno Pontecorvo sometimes co-names this 3x3 matrix that describes the flavor oscillations of neutrinos.  
 ANSWER: **PMNS** matrix [or the Pontecorvo-**Maki-Nakagawa-Sakata** matrix]  
 [10] This effect posits that the neutrino oscillations are significantly higher when neutrinos travel through matter. One of the requirements for this effect is that neutrinos possess mass.  
 ANSWER: **MSW** effect [or **Mikheyev-Smirnov-Wolfenstein** effect]
  
8. After misunderstanding a conversation between servants, this man killed Lu Boshe's entire family; earlier, he turned a botched assassination attempt of Dong Zhuo into a presentation of a sword as a gift. For 10 points each:  
 [10] Identify this author of the poem "Though the Tortoise Lives Long," the first King of Wei.  
 ANSWER: **Cao Cao**  
 [10] Cao Cao serves as a primary antagonist in this semi-historical novel, written by Luo Guanzhong. It features the peach garden oath brothers Zhang Fei, Guan Yu, and Liu Bei fighting for Shu-Han against Wu and Wei.  
 ANSWER: **Romance of the Three Kingdoms** [or **Sanguo Yanyi**]  
 [10] After his father Jian and his brother Ce are assassinated by Huang Zu and Xu Gong respectively, this man became both the first King and Emperor of Wu. His sister Shangxiang married Liu Bei, with whom he allied at the Battle of Red Cliffs.  
 ANSWER: **Sun** Quan [accept **Sun** Zhongmou or **Emperor Da** of Wu]
  
9. Identify the following about the best kind of solar eclipses, fictional ones, for 10 points each:  
 [10] Hank Morgan escapes being burned at the stake by predicting an eclipse in *A Connecticut Yankee in King Arthur's Court*, a novel by this American author of *The Prince and the Pauper* and *Pudd'nhead Wilson*.  
 ANSWER: Mark **Twain** [or Samuel Langhorne **Clemens**]  
 [10] Later novelized in collaboration with Robert Silverberg, this Isaac Asimov short story depicts the total societal collapse that results when the only visible one of the planet Lagash's six suns is eclipsed.  
 ANSWER: "**Nightfall**"  
 [10] The antagonistic High Priest of Amon Herhor successfully predicts a solar eclipse in *Pharaoh*, the only historical novel written by this Polish author. His other novels include *The Doll*, *The Outpost*, and *The New Woman*.  
 ANSWER: Boleslaw **Prus** [or Aleksander **Glowacki**]

10. This woman is “of the spheres” in a painting in which she is depicted using overlapping colored spheres. For 10 points each:  
 [10] Give the first name of this woman, also depicted in *Dream Caused by the Flight of a Bee around a Pomegranate a Second Before Awakening*.  
 ANSWER: **Gala** [accept **Galatea**]  
 [10] Gala was the wife of this mustachioed Spanish painter whose affinity for melting clocks is evinced in his *The Persistence of Memory*.  
 ANSWER: Answer: Salvador Domingo Felipe Jacinto **Dalí** i Domènech, 1st Marquis of Púbol  
 [10] Swans resting on a lake have the reflections of these animals in a Dalí work appropriately titled *Swans Reflecting these animals*.  
 ANSWER: **elephants**
11. This man’s interest in Native Americans can be evidenced from his 1851 ethnographic work *The League of the Ho-de-no-sau-nee or Iroquois*. For 10 points each:  
 [10] Name this American anthropologist who expounded his theories about social organization and kinship in his work *Systems of Consanguinity and Affinity of the Human Family*.  
 ANSWER: Lewis Henry **Morgan**  
 [10] This Morgan work is subtitled “Researches in the Lines of Human Progress from Savagery through Barbarism to Civilization” and discusses his theory of human progress from savagery through barbarism to civilization.  
 ANSWER: **Ancient Society**  
 [10] Morgan’s theories presented in *Ancient Society* influenced the work *The Origin of the Family, Private Property, and the State*, written by this man. Much earlier, this man done some work on the Communist Manifesto.  
 ANSWER: Friedrich **Engels**
12. Victory in this battle allowed for the winners to sign the Treaty of Windsor the next year. For 10 points each:  
 [10] Name this defeat for John I of Castile which allowed John of Aviz to be proclaimed king of a newly independent nation.  
 ANSWER: Battle of **Aljubarotta**  
 [10] John of Aviz established a dynasty of kings of this nation which signed the Treaty of Windsor with Britain. This nation was later ruled by the Braganza family.  
 ANSWER: **Portugal**  
 [10] John I unsuccessfully attempted to attack Castile with the assistance of this English nobleman, whose daughter he married. This son of Edward III and father of Henry IV held the title Duke of Lancaster.  
 ANSWER: **John** of **Gaunt**
13. Tyndarus and Philopomenus are eventually reunited with their father Hegio in his *The Captives*. For 10 points each:  
 [10] Name this playwright of *Amphitryon* and *Aulularia*, or *Pot of Gold*.  
 ANSWER: **Plautus**  
 [10] The titular long-lost twins come looking for each other and are reunited despite the machinations of the hilariously-named Peniculus in this Plautus play, which later inspired Shakespeare’s *A Comedy of Errors*.  
 ANSWER: *The* **Menaechmi**  
 [10] In this other Plautus play, the titular character tricks both Simo and Ballio and wins the slave-girl Phoenicium free of charge for her hapless lover, Calidorus.  
 ANSWER: **Pseudolus**
14. It was composed in celebration of the signing of the Treaty of Aix-la-Chapelle and originally called for three sets of timpani and strings. For 10 points each:  
 [10] Name this orchestral suite which features a bourree and the character pieces *La Paix* and *La Rejouissance* before ending with two minuets.  
 ANSWER: **Music for the Royal Fireworks**  
 [10] *Music for the Royal Fireworks* was composed by this composer, who composed his *Water Music* in response to a request from George I and also composed some Messiah oratorio with a “Hallelujah” chorus.  
 ANSWER: George Frideric **Handel**  
 [10] Handel also composed this oratorio for the Duke of Cumberland’s return after the victory at Culloden. It includes the chorus “See the conquering hero comes” and takes its name from an apocryphal book of the Bible.  
 ANSWER: **Judas Maccabaeus**

15. N-acyl homoserine lactones are important in mediating this behavior. For 10 points each:  
 [10] Identify this behavior which is utilized by bacteria during the formation of biofilms to help in calculating the density of nearby cells.  
 ANSWER: quorum sensing  
 [10] AI-2 quorum signaling pathway is used by this common intestinal bacterium, which has a virulent O157:H7 strain.  
 ANSWER: Escherichia Coli [or E. Coli]  
 [10] In E. coli, this compound binds to the *lsr* operon, thereby inhibiting the synthesis of AI-2 molecules. In glycolysis, an aldolase breaks down fructose-1,6-bisphosphate into G3P and this molecule.  
 ANSWER: dihydroxyacetonephosphate [or DHAP]
16. Practitioners of this religious philosophy strive to achieve equilibrium through “actionless action,” or *wei wu wei*. For 10 points each:  
 [10] Identify this Chinese belief system, founded by Laozi, which centers on following the “way.”  
 ANSWER: Daoism [or Taoism]  
 [10] His namesake scripture opens with the parable of the small bird failing to comprehend the large bird. This Taoist figure once woke from a dream not sure if he was a man dreaming of a being butterfly or a butterfly dreaming of being a man.  
 ANSWER: Zhuangzi [accept Chuang Tzu or Master Chuang or other equivalent translations]  
 [10] Some versions of the Taoist Pantheon list the Three Pure Ones as the highest of deities, while others ascribe that role to this figure, who forced Sun Wukong to work in his stables and who assigned the animals to the zodiac.  
 ANSWER: the Jade Emperor [accept Yu Di or Yu Huang]
17. This sculptor depicted a lion biting a man’s thigh in his *Milo of Croton*. For 10 points each:  
 [10] Name this sculptor who is better known for crafting an equestrian statue that rests on a huge rock called the Thunderstone, his *Bronze Horseman*, which depicts Peter the Great.  
 ANSWER: Etienne Maurice Falconet  
 [10] Falconet was among the ranks of sculptors associated with this ornate movement. Other sculptors in this movement include Bouchardon and Clodion.  
 ANSWER: Rococo  
 [10] Bouchardon achieved fame with a sculpture of Cupid doing this action with the club of Hercules, atop the hide of the Nemean Lion.  
 ANSWER: fashioning a bow [accept equivalents that involve making a bow]
18. This man enforced his nepotism-fueled school uniform policy by personally standing on a rooftop and shooting rioters. For 10 points each:  
 [10] Name this man who ousted Daniel Dacko and was tried in absentia for, among other things, cannibalism.  
 ANSWER: Jean-Bedel Bokassa [or Bokassa I; or Salah Eddine Ahmed Bokassa]  
 [10] Bokassa was the leader of this African nation, a former French colony with capital at Bangui.  
 ANSWER: the Central African Republic [accept CAR; or République centrafricaine; or Republique centrafricaine]  
 [10] France was so annoyed by strife in the CAR that they sent a bunch of helicopters to Chad and personally ousted Bokassa in this operation, sometimes called France’s “last colonial expedition.”  
 ANSWER: Operation Barracuda
19. They can be divided into the “system” type, in which a hypervisor controls the sharing of physical resources between different computers, and the more famous “process” type. For 10 points each:  
 [10] Identify these constructs used to provide a platform-independent programming environment, the most famous example of which is probably Java’s.  
 ANSWER: virtual machines  
 [10] This standard CISC [“sisk”] processor architecture, designed by Intel, actually fails to meet all of the requirements for system virtualization set by Popek and Goldberg.  
 ANSWER: x86  
 [10] The CPU-memory separation in the stored-program computer architecture named for this man causes what John Backus termed this man’s namesake “bottleneck.” This polymath also invented merge sort.  
 ANSWER: John von Neumann [or Neumann Janos Lajos]



20. Lutetium is the heaviest element to experience this phenomenon. For 10 points each:  
[10] Identify this term which describes the decrease of the atomic radius in a namesake series of elements.  
ANSWER: **lanthanide contraction**  
[10] The lanthanide contraction occurs because electrons in these orbitals feel a greater nuclear charge with an increase in atomic number.  
ANSWER: **4f** orbital  
[10] Though none have yet been created, elements past number 118 must fill this orbital, whose namesake block would theoretically contain eighteen elements. Both the Bohr model and Dirac equation break down after the end of this orbital's namesake block.  
ANSWER: **g-** orbital
21. This movement called for "soviets without Bolsheviks," but it was put down by Lev Trotsky. For 10 points each:  
[10] Name this 1921 rebellion of sailors from a namesake naval base.  
ANSWER: **Kronstadt** Rebellion  
[10] The Kronstadt Rebellion instigated Lenin to adopt this program which loosened the communist economy. It allowed for the return of agriculture and small-scale private industry.  
ANSWER: **New Economic Policy**  
[10] New Economic Policy replaced this economic policy used by the Soviet Union after 1918. Including the seizure without recompense of peasant agricultural output, it resulted in mass-starvation and a huge drop-off in productivity.  
ANSWER: **War Communism**
22. The title character advises his great-aunt Emily on how to deal with the nervous breakdown of her step-daughter, Kate, whom he takes to Chicago to escape her depression. For 10 points each:  
[10] Name this novel about Binx Bolling, who attempts to define his life through the titular activity.  
ANSWER: *The **Moviegoer***  
[10] *The Moviegoer* is a novel by this author of *Love in the Ruins* and *The Thanatos Syndrome*.  
ANSWER: Walker **Percy**  
[10] In this other Percy novel, retired lawyer Will Barrett crawls into a cave beneath a golf course to await the titular event until a toothache causes him to fall through a ventilation shaft into a greenhouse owned by escaped mental patient Allie Huger. It shares its name with a poem that sees a falcon turn in a widening gyre.  
ANSWER: *The **Second Coming***