

**The Brief Wondrous Tournament of WAO** - *Málà Yousufzai, served extra spicy*

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Packet by Berkeley

## TOSSUPS

1. **The design of Ferniehirst Castle was apocryphally influenced by the high incidence of this trait in the Kerr clan. Marian Annett posited two codominant alleles that govern motor cortex and speech processing development to explain the relative rarity of this trait. A cross-eyed craftsman with this trait attaches horseshoes to a steel flea in a story by Nikolai Leskov. A study by Faurie and Raymond found a high incidence of this trait in the Yanomami, supporting the hypothesis that this trait confers an advantage in combat because opponents are unfamiliar with it. This trait is correlated with greater (\*) symmetry between brain hemispheres and is often associated with evil, as evidenced by the etymology of "sinister." In court, Atticus Finch establishes that Bob Ewell has this trait, which explains the location of Mayella's injuries. For 10 points, identify this trait found in approximately 10% of the population, which often leads to difficulty using scissors.**

ANSWER: left-handedness <Edited>

2. **The University of Chicago's Ole Kleppa is best known for inventing an early device used in this technique. Calibration in one form of this technique involves a small amount of benzoic acid. A device used for this technique consists of two aluminum "pans" mounted on a chromel-alumel wafer and is surrounded by a jacket. At constant temperature, measuring the decrease in pulse depth with increasing ligand concentration allows the determination of the stoichiometry, binding affinity, and (\*) enthalpy of an interaction. Crystallization during the glass transition can be analyzed in the differential scanning form of this technique. Constant volume devices that can withstand large pressures are used in the "bomb" form of this technique. This technique can be carried out at constant pressure with two nested coffee cups and a lid with holes for stirring and a thermometer. For 10 points, name this technique used to measure the heat evolved by a chemical reaction.**

ANSWER: calorimetry [or bomb calorimetry; or differential scanning calorimetry; or isothermal titration calorimetry; or DSC; or ITC]

3. **In this short story, one character interprets the sight of a black cat trailing a grey cat across the lawn as an ill omen, which is mirrored at the end of this story when two characters exit her house. A character in this story resembles "a very intelligent monkey," and works as an interior designer. In an earlier incident, an infant only known as "Little B" tugs at a dog's ear in the park. A woman and her husband in this story are nicknamed "Face" and "Mug." The protagonist of this story is shown a (\*) poem that begins with the line, "Why must it always be tomato soup?" by the poet Eddie Warren after the Norman Knights leave at the end of a dinner party. This story ends with the image of a "lovely pear tree" as the main character witnesses her husband Harry whispering, "Tomorrow," to Pearl Fulton. For 10 points, name this short story in which Bertha Young gradually loses the title emotion, written by Katherine Mansfield.**

ANSWER: "Bliss"

4. **An emboldened advisor ordered the arrest of rebellious members of this group in the wake of a victory at the Battle of Lens. The holder of the office Master of Requests necessarily became a member of this group. Members of this group bore the brunt of a tax called the *paulette*, which allowed them to transfer offices at will. These people comprised a majority of members of the Knights of the Holy Spirit. This group didn't legally exist from 1789 until an 1804 law passed by (\*) Napoleon. Members of this group were called "of the sword" or "of the robe" depending on their ancestors' occupations. Members of this group decided the proceedings of courts called *parlements* and revolted against**

centralism during the Fronde. For 10 points, identify this class also known as the Second Estate, consisting of magnates in a country with capital Paris.

ANSWER: French nobility [or nobles in France; or noblesse; prompt for country on nobles or nobility until "Napoleon" is read, after which either should be accepted alone; accept parlements or Second Estate until they are read; accept equivalents for nobility like aristocrats or aristocracy] (the leadin is referring to Mazarin's arrests after the Fronde) <Edited>

5. The doorway to the Cloister of the Dead is topped by this artist's lunette of Joseph reading while resting on a large white sack. This artist shared his studio with sculptor Jacopo Sansovino, whose terracotta model of St. John he used for one painting. While this artist visited France, Franciabigio painted two scenes in a series of grisaille frescoes this artist did for a cloister of the Confraternity of St. John the Baptist, the Chiostro dello Scalzo. This artist of two compositionally similar depictions of the Assumption, titled for (\*) *Passerini* and *Panciatichi*, married the widowed Lucrezia del Fede. A painting by this artist shows two putti clutching Mary's legs as she stands on a pedestal adorned with sculptures of the title winged mythological figures. For 10 points, name this early Mannerist "faultless painter" of the *Madonna of the Harpies*.

ANSWER: Andrea del Sarto [accepted either underlined portion; accept Andrea d'Agnolo] <Edited>

6. A man in a novel set in this country changes his name Jurgen, Giorgio, Yogura, and Yiorgos depending on the nationality of soldiers currently occupying his village. The main character of a novel from this country is informed by his traveling companion, a priest, that it is considered sacrilege to carry a shovel around here. Another author from this country satirized a dictator in *The Pyramid* and transformed one of its legends about a castle into the novel *The Three-Arched Bridge*. A genre of verse called (\*) *bejtexhinj* written in its native language flourished during its Ottoman occupation. The title officer of a novel from this country is sent to this country to repatriate corpses of dead Italians from World War II. An author from this country wrote the novels *Chronicle in Stone* and *The General of the Dead Army*. For 10 points, name this home country of the authors Fan Noli and Ismail Kadare.

ANSWER: Republic of Albania

7. A convention during this crisis ultimately rejected Alexander Crummell's petition for greater rights for blacks. Female suffragists supporters of one side during this crisis, including Ann Parlin, organized a series of "Great Clam Bakes." Factions of Democrats called for "Polk, Dallas, and the Liberation of" a leader during this crisis after he became the first to be convicted of treason against a state. Despite living in a mansion on Benefit Street, a political leader during this crisis won the support of landless Irish who did not meet a (\*) property requirement of \$134. The Supreme Court ruled that the legitimacy of the government that this rebellion opposed is non-justiciable in the case *Luther v. Borden*. This rebellion sought to replace the state's colonial charter with the People's Constitution, under which a rival governor was elected alongside Samuel Ward King. For 10 points, name this 1841-42 rebellion in support of universal white male suffrage in Rhode Island.

ANSWER: Dorr's Rebellion/Crisis/War <Edited>

8. In a mechanism analogous to that of motors, one type of these devices is composed of a wiper attached to a rotating shaft which contacts a strip of graphite. These devices are connected to the input of logic circuits to either pull it up to  $V_{CC}$  [V sub CC] or down to ground. A Pi pad is a two port circuit composed of three of these devices. The taper is the ratio of physical adjustment to change in the strength of variable versions of these called (\*) potentiometers. Circuits consisting of only these objects can be simplified by using the Y-Delta and star-mesh transforms. The ideal Voltmeter would be equivalent to an infinitely strong one of these devices. These devices are represented on circuit diagrams by a jagged line and a four colored band system indicates their strengths in Ohms. For 10 points, name these devices that impede the flow of current in a circuit.

ANSWER: Resistors [accept Potentiometers before mentioned]

9. The definite article in Bambara is analyzed as a “floating” example of these linguistic features, which alters the pronunciation of adjacent morphemes but cannot be pronounced in isolation. Interaction between these features in Twi results in their namesake “terracing”, a type of downdrift. The ability of this feature to differentiate words is illustrated by the poem “The Lion-Eating Poet in the Stone Den,” written by a linguist who invented a method to represent it based on a musical staff. It’s not politeness, but a “register” variety of this feature with multiple levels is possessed by most (\*) Bantu languages, as opposed to its “contour” variety. This feature is indicated by a superscript in Wade-Giles, in contrast to a more common Romanization scheme for the same language, which represents it with four different diacritics; the latter system, which applies to the most widely spoken language to possess this feature, is Pinyin. For 10 points, identify this feature possessed by Cantonese and Mandarin in which pitch is used to distinguish words.

ANSWER: tone [accept word forms, like tonality or tonal language; accept pitch until it is read] <Edited>

10. A figure who disguises himself as a god in order to reap the rewards of this event is beheaded for his crime, after which his severed head occasionally swallows the sun, causing solar eclipses. A figure who is traditionally created during this event is welcomed into the home by cleaning the house, after which an idol is bathed in water, in a ceremony that is said to bring wealth to a family. This event, which produces a cow that grants wishes known as (\*) Surabhi, involves the participation of Shesha, who adjusts his younger brother’s head. It produces a poison called *halahala*, which a god tries to swallow, causing his throat to turn blue. The tortoise Kurma provides an axis around which the body of Vasuki can be used to carry out this event, which produces *amrita* nectar. For 10 points, name this event in Hindu mythology in which a great body of a certain substance is well-mixed.

ANSWER: churning of the (cosmic) ocean of milk [accept “sea” for “ocean”; or Samudra manthan; or Sāgar(a) manthan(a); or Kshirasāgar(a) manthan(a)] <Edited>

11. Sara Ruddick, whose thought was largely concerned with mothering, pioneered the philosophy of care, which was linked to this theory by Michael Slote. Robert Merrihew Adams’ Platonic approach to this school of thought bases it on resemblance to God. It’s not Divine Command Theory, but Roger Crisp argued that one essay supporting this view is wrong to assume that classical thought lacked the idea of moral blame. That essay arguing for this view introduced the brute facts in the course of discussing (\*) Hume, and began by asserting the requirement of a philosophy of psychology for ethics. A work arguing for the revitalisation of this ethical view opens by imaging a future-world where science has been lost. “Modern Moral Philosophy” by Anscombe argues for this ethical view, and this view partly titles Alasdair MacIntyre’s best-known book. For 10 points, name this school of normative ethics that emphasizes moral character traits.

ANSWER: virtue ethics

12. This country employed the engineer George Thompson, who detailed a river stronghold dubbed “the Sevastopol of the Americas.” Soon after independence, this country dissolved its military junta in favor of a dual consulship which ruled from chairs labeled Pompey and Caesar. James Buchanan sent a naval mission to this country after it fired on the *USS Water Witch*, killing its helmsman. In this modern-day country, Jesuit policies of giving back income to natives on *reducciones* and coining indigenous words helped contribute to a native language persisting and being spoken by nearly (\*) 90% of the population. It gained its independence by defeating a military expedition led by Manuel Belgrano. It’s not Brazil, but a letter from the Duke of Caxias [CAH-shyas] to Pedro II describes the devastation of a war in which in this country where its fortress of Humaitá was seized. For 10 points, name this country that invaded Mato Grosso under dictator Francisco Solano López.

ANSWER: Paraguay [or Paraguái] <Edited>

13. It's not a proper noun, but this word appears in the name of a movement whose score instructs all instruments, except for the clarinet and violin, to play *sempre pianissimo*. That bitonal movement takes its title, including this word, directly from *The Art of Synthesis* by Alan Leo, and is accompanied by celesta arpeggios. A series of pitches described by this word consisting of [read notes slowly] C-sharp, F-sharp, B-flat, E, A, and D is repeatedly inverted and transposed in a symphonic piece with a part for color organ titled (\*) *Prometheus: The Poem of Fire*. This word, which describes an eerie-sounding chord employed frequently by Alexander Scriabin, is the epithet given to the celestial body depicted in a movement that ends with a fadeout accompanied by an offstage female chorus. For 10 points, Gustav Holst's *The Planets* describes Neptune with what subtitle?

ANSWER: mystic [accept mystic chord or *Neptune: The Mystic*; accept pleroma until "movement" is read; accept Prometheus until "non-proper noun" is read]

14. In this novel, one character is offered beer multiple times, but insists on drinking orange soda. Another character in this novel recounts Phebe's accidental discovery of a wedding ring, confirming Annabelle Trice's complicity in her husband's suicide. A spirit medium named Littlepaugh provides evidence that one character had accepted a bribe for the benefit of a power company, information that is gathered by this novel's narrator because that character supports MacMurfree. That man, not the (\*) "Scholarly Attorney," turns out to be the father of this novel's narrator. This novel's narrator counts his unfinished historical study of his ancestor Cass Mastern as part of a "Great Sleep," and picks up an old man out west leading to his theory of the "Great Twitch." After learning of his sister Anne's affair, Adam Stanton assassinates the governor. For 10 points, name this novel narrated by Jack Burden which details the political rise and fall of Willie Stark, written by Robert Penn Warren.

ANSWER: All the King's Men

15. A coarse method within this structure logically matches a pseudorandom signal, and is called the code phase. Systems like the WAAS obsoleted intentional "selective availability" noise by broadcasting adjustments to assist this structure, leading to a "differential" type of it. This structure is improved by the CORS network, which is part of a class of real time (\*) kinematic methods that enhance this structure through the use of the higher frequency carrier phase. In this structure, a minimum of three of its twenty-seven total constituent units are needed to perform trilateration to yield two points, only one of which lies on the Earth's surface. Developed by the US Department of Defense starting in the 1970s, this structure, also known as Navstar, consists of a constellation of satellites to remotely determine geolocation. For 10 points, name this global navigation satellite system.

ANSWER: Global Positioning System [or Navstar before mentioned; prompt on "global navigation satellite system" or "GNSS" before mentioned]

16. Until the last stage of this process, the products remain stringed together by a syncytium consisting of bridges of cytoplasm. During this process in *Drosophila*, stem cells divide roughly every 24 hours to produce a GB, which undergoes mitotic amplification. In the third stage of this process, the Golgi body engulfs tightly packed chromatin and becomes a structure that contains hyaluronidase and a namesake enzyme. (\*) Sertoli cells serve several supportive functions in the early stages of this process. The products of this process form in the lumen of seminiferous tubules. Due to the sensitivity of the seminiferous epithelium, this process requires a temperature between 1 and 2 degrees Celsius lower than body temperature. The products of this process contain an acrosome and a long flagellum tail and mature in the epididymis. For 10 points, name this process of producing male gametes which occurs in the testes.

ANSWER: spermatogenesis [accept equivalents like sperm production; prompt on gametogenesis]

17. A holder of this office decisively won re-election on the back of taking a non-conciliatory policy towards striking wharf workers during a five month long strike in 1951. A holder of this office was defeated in snap elections that he called while visibly drunk on television. An autocratic holder of this office, nicknamed "King Dick," introduced early social welfare measures that were expanded by a later holder named Michael Savage. In the 1980s, a holder of this office continued some of the free market policies of Finance Minister (\*) Roger Douglas despite being from the Labour Party; that man, David Lange, made his country into one of the first nuclear-free zones. In this office, Richard Seddon switched his position to support the first successful Anglophone effort to grant women suffrage. For 10 points, identify this office once held by Robert Muldoon, the head of state of a country with a large Māori minority.

ANSWER: Prime Minister of New Zealand [accept Premier of New Zealand] <Edited>

18. This is the first name of a saint "of the Five Wounds of Jesus" who lived in Naples in the eighteenth century. A woman of this name went on a pilgrimage to the Holy Land in search of sexual partners, but in Jerusalem that woman of this name had a religious experience that led her to live alone for 47 years in the desert in Egypt. This is the alphabetically later of the names of two (\*) sisters from Bethany in the Gospel of Luke whom Jesus visits at the home they share with their brother Lazarus. A woman of this name was the first person to see Jesus upon his resurrection; that woman is often identified with a penitent sinner who anoints Jesus' feet. According to Catholic doctrine, the most famous woman of this name was conceived free of original sin. For 10 points, identify this name shared by a Magdalene woman and the mother of Jesus.

ANSWER: Mary [accept Mary Frances of the Five Wounds of Jesus, Maria Francesca delle Cinque Piaghe, Mary of Clopheas, Mary of Egypt, Mary of Bethany, Mary Magdalene, or the Virgin Mary] <Edited>

19. In this novel, one character excessively wipes a plate dry since he has not yet learned to do housework properly after his wife's death. One character in this novel recalls a newspaper article in which a priest claims the "DEVIL THAT WAS ABROAD" is responsible for reprehensible behavior of "modern youth." In this novel, the protagonist returns home to find all his stuff sold and the stranger Joe living in his room. Dolin, da Silva, and Rubinstein (\*) lock this novel's protagonist in a room, where he reads the headlines of two pamphlets causing him to jump out of a window. The writer F. Alexander's manuscript shares its name with this novel. The protagonist of this novel undergoes Ludovico's Technique to "cure" him of his violence, and speaks Nadsat to his "droogs." For 10 points, name this novel about the classical music obsessed Alex, written by Anthony Burgess.

ANSWER: A Clockwork Orange

20. Tadao Ando restored a triangular art museum that lies between two of these structures and is topped by a sculpture of two slaves holding up a golden ball on which a woman holding a wind vane and representing *Fortune* stands. The desk that Henry James wrote *The Aspern Papers* at is found in a building that stands opposite one of these structures. Another building that lies between two of these structures was built in response to a plague and is nicknamed *La Salute*. The *curias* of many (\*) Fondaco houses were built to lead to one of these structures. The Bridge of Sighs passes over one of them. The largest one of these structures traces an "S" shape through six *sestieri*, passes the Ca' d'Oro and Ponte di Rialto, and is known as the "Grand" one of these structures. For 10 points, name these structures that gondolas traverse and that link the small islands of Venice.

ANSWER: Venetian canals [or Grand Canal; or Giudecca Canal] <Edited>

TIEBREAKER/EXTRA TOSSUPS

1. A technique that analyzes the results of this process looks for a peak corresponding to a higher mass after using ethyl methanesulfonate in the first step. In some cases, after this process occurs, PCNA is ubiquitinated and an enzyme labeled with the letters eta or zeta is used in a process known as translesion synthesis. Artificially causing this process is done in TILLING and can be done in a site-directed manner. When the rate of (\*) individual events of this process occurring is constant, the molecular clock can be used to determine when two groups of life forms diverged. Pyrimidine dimers are formed when this process occurs due to ultraviolet light exposure. Insertions or deletions can result in the "frameshift" type of this process, and the "point" type affects a single nucleotide. For 10 points, name this process, the alteration of the genome of an organism.

ANSWER: mutation [or site-directed mutagenesis]

2. In this city, a bronze equestrian statue commemorating a military leader features a strangely worn-out horse, leading to a saying that to look sad is to "look like Missori's horse." A post-World War II experimental green district of this city is called QT8, which contains an artificial hill composed of rubble called the "Starmount" and was the product of an exhibition by this city's Triennale museum. This city's Zone 1, out of 9 total, is marked by a triumphal Arch of Peace, while a polychrome (\*) "Madonnina" statue tops a structure in this city took nearly six centuries to complete. A Napoleonic gate names this city's business district, Porta Nuova. This city is home to one of the world's oldest shopping malls, named for Victor Emmanuel II, which is in close proximity to this city's Gothic cathedral, the largest church in Italy, and also contains the opera house La Scala. For 10 points, name this city, the capital of Lombardy.

ANSWER: Milano

## BONUSES

1. In 1964, three members of this organization were brutally murdered in Neshoba County, Mississippi. For 10 points each:

[10] Name this civil rights organization that, as a part of the COFO, led the campaign to register African-American voters in Mississippi in Freedom Summer. This organization's founding Chicago chapter desegregated White City Roller Rink and fought overcrowding and double-shifts in public schools.

ANSWER: CORE [or Congress of Racial Equality]

[10] This co-founder of CORE denounced it in 1993 as a "fraudulent" organization with "no functioning chapters." This civil rights leader organized the Freedom Rides and lost a New York Congressional election to Shirley Chisholm.

ANSWER: James Leonard Farmer Jr.

[10] Another leader of CORE, Floyd McKissick, left it to develop a planned community called New Soul in this state. The Greensboro sit-ins protested a "whites only" lunch counter at a Woolworth store in this state.

ANSWER: North Carolina <Edited>

2. This text argues that masturbation is "the most incontestably pernicious" "irregularity of the venereal appetite", but any law against it would be impossible to enforce. For 10 points each:

[10] Name this essay by Jeremy Bentham first published in 1778. This essay pushes for the decriminalization of sodomy and refutes the argument that gay sex violates women's rights by robbing them of venereal tribute.

ANSWER: "Offences Against One's Self: Paederasty"

[10] Bentham more notably wrote that "nature has placed mankind under the governance of" these two sovereign masters, which determine both "what we ought to do" and "what we shall do". Bentham identified physical, moral, political, and religious "sanctions" of these two sensations.

ANSWER: pain and pleasure

[10] In *An Introduction to the Principles of Morals and Legislation*, Bentham also argued for this cause. This cause was later supported by Peter Singer in a book that coined the term "speciesism."

ANSWER: animal rights [or animal liberation]

3. This psychologist modeled behavior potential as a function of the probability and desirability of a given outcome. For 10 points each:

[10] Name this psychologist who developed a projective sentence completion test with Janet Rafferty. This psychologist distinguished between internal and external loci of control in his landmark *Social Learning and Clinical Psychology*.

ANSWER: Julian B. Rotter

[10] Locus of control is one of the four core self-evaluations along with this concept, the belief in one's capacity to execute behaviors necessary to produce specific performance attainments. Albert Bandura worked on increasing this measure in snake-phobics.

ANSWER: self-efficacy

[10] Bandura studied observational learning of aggressive behavior in an experiment in which many subjects smashed this kind of inflatable toy with a mallet after seeing an adult do the same.

ANSWER: bobo doll <Edited>

4. This author wrote “I must confess: I have achieved a certain technical mastery in the art of staring straight ahead” in a collection of stories republished in 2012 by the New York Review of Books. For 10 points each:

[10] Name this author of the short story collection *Berlin Stories*. This author also wrote about a youth who attends the Benjamenta Institute to learn how to be a servant in his *Jakob von Gunten*.

ANSWER: Robert **Walser**

[10] Walser was from this country, which is also home to Friedrich Durrenmatt. Max Frisch, an author from this country, wrote about an engineer who has an affair with Sabeth, only to find out that she is his illegitimate daughter in *Homo Faber*.

ANSWER: **Switzerland**

[10] In this “history play” by Max Frisch, The Contemporary Man travels back and forward in time to debate with famous historical and literary characters such as Qin Shi Huangdi.

ANSWER: “The **Chinese Wall**”

5. In this algorithm, the result of the namesake operation is usually multiplied by a learning rate and then subtracted from a set of values to update them. For 10 points each:

[10] Name this optimization method, which has “batch” and “stochastic” variants and takes steps in the direction where a function decreases the fastest to find a local minimum.

ANSWER: **gradient descent** [or stochastic **gradient descent**; or batch **gradient descent**]

[10] Gradient descent only works well with this kind of function, whose second derivative is always positive. Functions with this property always lie below the line segment connecting two points on the interval between those points.

ANSWER: **convexity** [or **concave upward**; or **convex downward** ; do not prompt on **concave** alone]

[10] When using stochastic gradient descent, this method is often used to accelerate motion which occurs in the same direction in consecutive steps. In this technique, the update to the weights is modified by adding a constant alpha times the previous update.

ANSWER: adding **momentum**

6. These objects can be defined as an integral of some function between an initial and a final time. For 10 points each:

[10] Name these mathematical objects, which map vector valued functions to scalars, such as the action in Hamiltonian mechanics.

ANSWER: **functionals**

[10] Functionals are maximized or minimized in the calculus of variations, which involves solving an equation named for Euler and this physicist. A quantity named for him equals the kinetic energy minus the potential energy.

ANSWER: Joseph-Louis **Lagrange**

[10] When solving the brachistochrone problem using the calculus of variations, the Euler-Lagrange equation reduces to the Beltrami identity because of this specific condition of the Lagrangian.

ANSWER: it **does not depend on x** [or its **derivative with respect to x is zero** ; accept **horizontal position** in place of x; prompt on **position** in place of **x** by asking “which cartesian coordinate”]



7. This genre of poem got its name from a poem that begins by asserting that "No cloud, no relique of the sunken day / Distinguishes the West" before countering Milton's claim in *Il Penseroso* that the nightingale is "most melancholy" by saying that "In Nature there is nothing melancholy." For 10 points each:

[10] Identify this genre of poem that begun with "The Eolian Harp".

ANSWER: Coleridge's **conversation** poems

[10] Coleridge, the originator of the genre of conversation poems, collaborated with Wordsworth on this revolutionary collection of poetry that included *The Rime of the Ancient Mariner*.

ANSWER: **Lyrical Ballads**

[10] Multiple poems by Wordsworth have been read as replies to Coleridge's conversation poem "Dejection: An Ode." This possible reply describes a man who "fixedly did look / Upon muddy water" in the course of gathering leeches.

ANSWER: "**Resolution and Independence**"

8. A painting by this artist shows three girls at a chalkboard writing the numbers "2", "3", and "4", while a different painting of a restaurant is divided vertically into two sides by a yellow rope. For 10 points each:

[10] Name this artist, who depicted a group summiting a hill underneath a blue sky dotted with six birds in a series that begins with a crowd of silhouettes filing in through doors labeled "Chicago", "New York", and "St. Louis".

ANSWER: Jacob **Lawrence** [all the paintings are from his *Migration Series*]

[10] Jacob Lawrence is best known for this series, named for the fact that it depicts the mass movement of African-Americans from the South to the urban North. Its various panels were reunited by the MoMA for the exhibition *One-Way Ticket*.

ANSWER: **Migration**

[10] Jacob Lawrence created a series about this man at age twenty, which is now held in the Amistad Research Center, before revisiting the subject for another series over forty years later. The original series comprised 41 tempera panels, but Lawrence reworked it down to 15, which he screenprinted with the help of Lou Stovall.

ANSWER: **Toussaint L'Ouverture** [accept either] <Edited>

9. Name these Muslim polities with historical caste systems, for 10 points each.

[10] The *Siyasatnama* of Nizam ul-Mulk describes a system of social stratification in this region left over from when it was the heartland of the Sassanid Empire. It was later ruled by the Safavid dynasty.

ANSWER: **Iran** [or **Persia**]

[10] The Muslim conquerors who established this sultanate in the 13th century referred to themselves as *ashraf*, or sons of Muhammad, and eventually split into groups loosely aligned with the local caste system. The last line of rulers of this state came from the Lodi dynasty.

ANSWER: **Delhi** Sultanate

[10] This modern-day country has a *de facto* caste system in which a class of marginalized people called al-Akhdam are generally shunned by the rest of society and forced to work menial jobs.

ANSWER: Republic of **Yemen** <Edited>

10. In the 1970s and 1980s in San Francisco, opponents of development warned that this process would take place. For 10 points each:

[10] Name this process whereby construction of skyscrapers would allegedly obliterate the unique character of the city and make its appearance homogeneous. This process is named for a place in the United States.

ANSWER: **Manhattanization**

[10] Opponents of development, particularly those who desire development to be relocated, are today often known by this derisive five-letter acronym.

ANSWER: **NIMBY** or **[Not In My Backyard]**

[10] Development in San Francisco is often impeded by environmental restrictions, many of which are intended to protect this large body of water next to the city. The Golden Gate connects this body of water to the Pacific Ocean.

ANSWER: **San Francisco Bay** [prompt on partial answer]

11. In the citric acid cycle, pyruvate is converted to oxaloacetate by an enzyme that carries out one reaction in this general class with biotin as a prosthetic group. For 10 points each:

[10] Name this general class of biochemical reactions, which includes carboxylations. Tetrahydrofolate is the substrate for several of these reactions, with the namesake element being in varying intermediate oxidation states.

ANSWER: **one-carbon transfers** [or **single carbon transfers**]

[10] The S-adenosyl derivative of this amino acid is the substrate for one-carbon transfers involving the most reduced group, the methyl group. Tetrahydrofolate and Vitamin B12 participate in the single carbon transfer that recycles it from homocysteine.

ANSWER: **methionine** [accept **Met** or **M**]

[10] The start codon codes for methionine in the initiation of this process, in which messenger RNA provides the template for assembling proteins using amino acids.

ANSWER: **translation**

12. One uprising in this city targeted the Duke of Arcos and was sparked by a tax on fruit. For 10 points each:

[10] Name this city where the fisherman Masaniello briefly took power as captain-general in 1647.

Viceroy Pedro Álvarez de Toledo earlier closed this city's Accademia Pontaniana as part of his policy of Spanish-ization.

ANSWER: **Naples** [or **Napoli**; or **Napule**]

[10] In the 15th century, Naples came under the control of this Spanish confederation after Alfonso V defeated René of Anjou. This composite monarchy entered a dynastic union with Castile under Ferdinand II.

ANSWER: Crown of **Aragon** [or Corona d'**Aragón**; or Corona de **Aragón**; or Corona d'**Aragó**]

[10] This lowest class in Naples, comprised of beggars and other *lumpenproletariat* types, were one of the most powerful monarchist forces in Early Modern Neapolitan politics. Their members strongly opposed the Parthenopean Republic and backed the Jansenist *sanfedisti* movement.

ANSWER: **lazzaroni** <Edited>

13. In the second part of this novel, Jacobus is nursed to health by the Namaqua tribe, but later turns on them when he is expelled due to an argument. For 10 points each:

[10] Name this novel, which features Jacobus' adventures in the-yet-to-be explored South Africa. Its first section details Eugene Dawn's work for an American psychological warfare tactic in Vietnam.

ANSWER: Dusklands

[10] *Dusklands* is the first novel of this South African writer, who wrote about the Magistrate's resistance in a novel whose title references a Constantine Cavafy poem, *Waiting for the Barbarians*.

ANSWER: John Maxwell Coetzee

[10] Coetzee created this recurring fictional writer of *The House on Eccles Street* who lectures on animal rights and literary censorship in a novel titled for her. She also appears in *Slow Man* and *The Lives of Animals*.

ANSWER: Elizabeth Costello [prompt on "Elizabeth"]

14. A *Festival* setting of this hymn by Britten opens with the choir chanting in apparent free time backed by organ chords in  $\frac{3}{4}$ . For 10 points each:

[10] Name this Christian hymn that Handel set to music to commemorate the Treaty of Utrecht and the Battle of Dettingen. Bruckner's setting of this hymn is occasionally used as a finale for his unfinished ninth symphony.

ANSWER: Te Deum

[10] The prelude of this composer's D Major *Te Deum* is the theme song of the Eurovision Song Contest. This French Baroque composer of *David et Jonathas* included a cromorne in his unusual *Mass for several instruments in place of the organ*.

ANSWER: Marc-Antoine Charpentier

[10] This composer's *Te Deum* contains an often omitted "March for the presentation of the colours" and six other movements labeled hymn, prayer, or hymn and prayer. This composer also wrote *Harold in Italy* and *Symphonie Fantastique*.

ANSWER: Hector Berlioz

15. In an argument against the universality of the Oedipus complex, Bronislaw Malinowski cited this society as an example of one where boys are disciplined by their mother's brother. For 10 points each:

[10] Identify this oceanic society, where Malinowski also studied the *kula* ring exchange.

ANSWER: Trobriand Islanders [accept anything with Trobriand in it]

[10] "The Mother's Brother in South Africa" was written by this other anthropologist, who also studied banter between men in South Africa and their mothers-in-law as "joking relationships." He distinguished his conception of functionalism from his contemporary Malinowski.

ANSWER: Alfred Reginald Radcliffe-Brown

[10] A maternal uncle slides his buttocks down a boy's legs as part of the *naven* ceremony, which was identified by this anthropologist as a method of counteracting schismogenesis. This thinker also developed the theory of "double binds" as an explanation for schizophrenia.

ANSWER: Gregory Bateson <Edited>

16. For 10 points each, answer the following about the “King of the Four Quarters, King of the Universe,” Naram-Sin of Akkad:

[10] Naram-Sin’s victory stele, which depicts him trampling the Lullubi, was plundered by Shutruk-Nahhunte and taken to this Elamite capital. This winter capital of the Achaemenid Empire was brutally sacked by Ashurbanipal.

ANSWER: **Susa** [or **Shush**; or **Shushān**; or **Cūšā**]

[10] “The Curse of Akkad” tells of how Naram-Sin angered Enlil, causing him to summon this people to wreak havoc in his lands. This people from the Zagros Mountains conquered Akkad in the late 3rd millennium BCE.

ANSWER: **Gutians** [or **Guti**; or **Quti**]

[10] Naram-Sin was the grandson of this first Akkadian king, who unified Sumeria by defeating the king of Uruk, Lugalzagesi. The epic King of Battle describes this ruler’s victory over Nur-Dagan, the king of Purushanda.

ANSWER: **Sargon** of Akkad <Edited>

17. Answer the following about the Hindu festival of Karva Chauth [CAR-vah ch-OATH], for 10 points each:

[10] During Karva Chauth, women perform a fast on behalf of their husbands until they view this object, which is worshipped as the god Chandra.

ANSWER: the **Moon**

[10] The second word in Karva Chauth means this number, as it is celebrated on this day of the month of Kartik. There are this many *varnas* in the caste system, and this is the number of Vedas.

ANSWER: **four**

[10] During the end of Karva Chauth, the wife will look through a sieve at the moon and then her husband after placing one of these objects on a silver plate or *thali*. These objects are used in *arti* ceremonies and often found alongside colorful *rangoli* art.

ANSWER: oil **lamps** [or **diya**; or **deepa**; do not accept or prompt on “candle”]

18. This song was arranged by Jimmy Mundy for the best known recording of it, and its lyrics state “When the music goes around, Everybody goes go to town.” For 10 points each:

[10] Name this song written by Louis Prima. A performance of this song featured Gene Krupa playing tom-tom accompaniment to a clarinet solo before Jess Stacy played an unplanned impressionistic piano solo.

ANSWER: “**Sing, Sing, Sing**” [or “**Sing Sing Sing (With a Swing)**”]

[10] This musician’s band performed “Sing, Sing, Sing” for the first jazz concert at Carnegie Hall in 1938. This jazz clarinetist was known as the “King of Swing.”

ANSWER: Benjamin David “Benny” **Goodman**

[10] A year before the Carnegie Hall show, Goodman challenged drummer Chick Webb’s band to a contest at this New York city, leading Krupa to say “Webb cut me to ribbons!” Webb wrote a standard titled for “Stompin’ at” this location.

ANSWER: the **Savoy** Ballroom <Edited>

19. This condition causes one character to end up in a cave and fight off a panther, after which he rescues a woman held hostage by the Lenni-Lenape. For 10 points each:

[10] Name that condition affecting Edgar Huntly, the title character of a 1799 novel, who tries to find the murderer of Waldegrave. The novel is subtitled for the “memoirs” of one suffering from this condition.

ANSWER: **sleepwalking** [or **somnambulism**]

[10] This early American novelist wrote *Edgar Huntly*. The bilquist Carwin is found out to be the source of voices that drive Theodore to slaughter his family in his novel *Wieland*.

ANSWER: Charles Brockden **Brown**

[10] Many of Brown’s novels, including *Wieland*, are representative of this literary genre that often features elements of horror and romance, and whose European origins are usually traced to Walpole’s *The Castle of Otranto*.

ANSWER: **Gothic** fiction

20. This bonus is brought to you by the number five and the letter “C” for Chemistry. For 10 points each,

[10] A pair of Cyclopentadienyl [cy-clo-pen-tuh-die-ene-il] groups, five carbon ligands with maximum hapticity of five, sandwich the central atom in this class of compounds. Tebbe’s reagent, one of these compounds, has titanium sandwiched by two cyclopentadienyl ligands which is then linked to aluminum via a methylene and chloride bridge.

ANSWER: **metallocenes**

[10] Isoprene, the 5 carbon compound that forms terpenes, also polymerizes to form polyisoprene, the natural form of this material. It is strengthened by vulcanization.

ANSWER: **rubber**

[10] Orcinol, Ferric Acid, and Hydrochloric acid react with pentose sugars to form a blue mixture of furfural in this test.

ANSWER: **Bial’s** test

#### EXTRA BONUSES

1. This railway station is connected underground to adjacent stations that have similar names, a “Nishiguchi” station and a “Sanchōme” station that is located in the third district of its service area. For 10 points each:

[10] Name this massive railway station, one of the world’s busiest. It is named for its surrounding area, which is home to the Tokyo Metropolitan Government Building. To the east of this station is the red-light district Kabuki-chō.

ANSWER: **Shinjuku** Station [or **Shinjuku-eki**]

[10] JR East, Tokyo’s major private railway provider, is also an operator of this network of inter-city high-speed railway lines. Its name literally means “new trunk line,” but its colloquial name references the conical shape of one of its early trains. Both names are acceptable.

ANSWER: **Shinkansen** [or **bullet train**]

[10] *Shinkansen* trains run through the Seikan Tunnel, which is the longest to have this locational feature. The Channel Tunnel, or “Chunnel” also has this feature.

ANSWER: it runs **undersea** [accept any answer indicating that the tunnels are underwater]