

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

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Packet by Michigan and Maryland B

TOSSUPS

1. One of this author's characters angrily kicks his pregnant dog, inducing a miscarriage, when his father doesn't come home. Another of this author's characters cries "Ain't I got beauty too?" while reminiscing about his mother and his conversations are frequently interrupted by the sound of an alarm. A character created by this author dies when a wall falls on him while he is trying to save a baby from the slum clearance crews, and is friends with the Butcher, who kills people by stabbing them in the heart with a bicycle spoke. soaks his feet every night after getting home from his job as a (*) gatekeeper at the zoo. A character created by this author never ends up meeting his pen pal, Ethel Lange, and is resentful of the fact that his brother has lighter skin than him and can pass for white. This author of *Tsotsi* wrote a play about the brothers Morrie and Zachariah. For 10 points, name this South African author of *Blood Knot*.

ANSWER: (Harold) Athol (Lanigan) Fugard

2. The speaker of a poem by this author opens, "The last twenty years were good for practically everybody / save the dead." This author suggests that "Maybe the Almighty Himself has turned a bit bourgeois / and uses a credit card" in "Transatlantic." A poem by this author remarks that "one last verse / awaits its end," declares that its title poet "sleeps soundly," and says, "thine Island was its twin." This poet was mentored by Anna (*) Akhmatova and was forced into 18 months of hard labor on a farm for "social parasitism." This poet says, "when "the future" is uttered, swarms of mice / rush out of the Russian language and gnaw a piece / of ripened memory" and attributes "all rhymes" and his "wan flat voice" to his place of birth in his "A Part of Speech." This poet wrote "Elegy for John Donne." For 10 points, name this Nobel Prize winner and USSR exile who was named Poet Laureate of the U.S. in 1991, the author of the collection *To Urania*.

ANSWER: Joseph Brodsky

3. A series of 172 "questions" addressed to this thing are included in Qu Yuan's *Songs of Chu*. During the Tang dynasty, Daoists identified ten "greater grottoes" thought to be small manifestations of this thing, which they believe has 36 divisions. The Way of the "Masters" of this thing was followed by members of the Five Pecks of Rice movement. This thing is signified by the first character in the word for the Japanese emperor. Both the *Book of Documents* and the *Book of Odes* credit the (*) Duke of Zhou with inventing a theory of politics named for this concept. Traditional Chinese worldviews equated civilization with the world "under" this concept. The Three Pure Ones are thought to exist in this location, which is ruled by the Jade Emperor. For 10 points, identify this place which confers a "Mandate" on the rightful ruler of China.

ANSWER: Chinese heaven [or Tian; or Ten; or Cheon; accept Mandate of Heaven or Questions to Heaven; accept any form of the world Celestial; prompt on the divine or less specific answers] <Edited>

4. An annual race commemorates how two men made a 90 kilometer journey through the snow to reach a future king with this name to convince him to lead an army. A king of this name, assumed by his mother and most others to be gay, constructed an "English Park" in his Haga Pavillion and wrote several plays to be performed at the Royal Theater he founded. A non-English king of this name outright nationalized the monasteries and lands of the Catholic Church in implementing the (*) Reformation, which he did with the assistance of the Petri brothers. The assassination of a king of this name at the opera is depicted in the opera *Un ballo in maschera*. Another king of this name expelled Christian II of Denmark and founded a dynasty whose members included the winner of Breitenfeld. For 10 points, give this name of the founder of the Vasa dynasty, as well as his grandson, a Swede known as the "Lion of the North."

ANSWER: Gustavus <Edited>

5. A member of this genus has a namesake pathogenicity island that codes for its type three secretion system. The Ty21a vaccine is used to protect against a member of this genus. Infection by a member of this genus can be diagnosed by observing antibodies against the O-somatic antigen in the Widal test. A member of this genus that is unable to synthesize (*) histidine is used to test the mutagenic potential of a substance in the Ames test. It's not Rickettsia, but infection by a member of this genus can cause a rash of rose-colored spots. One of the two species in this genus typically only infects reptiles. Infection of blood by member of this genus results in typhoid fever. For 10 points, name this genus of gram-negative rod-shaped bacteria often associated with raw chicken.

ANSWER: salmonella

6. A force in this battle marched 180 miles in only four days to reach it, despite being deserted by many seasonal levies. The losing commander in this battle was killed when he took an arrow to the neck. Soldiers on the losing side of this battle left their armor on an accompanying fleet, where the commander's son in law led reinforcements later called "Orre's Storm." According to legend, a over 40 men were killed at this battle by a lone (*) axeman who was later speared in the groin. This battle took place at the intersection of all the major roads of Yorkshire along the Derwent River. It brought an end to a ploy for political control by the winning commander's brother, who invited a foreigner to help crush his former enemy Morcar of Northumbria. The ambitions of Tostig and his Norwegian allies were brought to an end by -- for 10 points -- what victory by Harold Godwinson over Harald Hardrada's invaders?

ANSWER: Battle of Stamford Bridge <Edited>

7. A group of Dutch painters that included Jan Asselijn worked in this city and were known as the Bentvueghels, meaning "birds of a feather," and had "bent names" like "Beer Fly" or "The Ferret". Simon Vouet spent most of his time in Italy in this city, after which he introduced the Italian style of painting to France. A *Last Judgment* fresco showing Christ in a mandorla was painted for Santa Cecilia in this city, though it was only rediscovered in 1900. This city was the site of debate about the ideal number of figures in a painting between Pietro da Cortona and Andrea Sacchi, members of this city's (*) Academy of St. Luke. Pietro Cavallini was from this city, as was the painter who collaborated with his teacher on the painting *The Fire in the Borgo*. Before fleeing to Naples, Caravaggio worked in this city. For 10 points, name this city where Raphael painted the Vatican's Stanza della Segnatura.

ANSWER: Rome [or Roma] <Edited>

8. The resolution of instabilities in these representations are modeled by a mean field theory later modified by Cook to add a stochastic force term and which was originally formulated by Cahn and Hilliard. Topologically consistent bundles on these representations are constructed using Schrienmaker's method. These representations are calculated computationally by CALPHAD methods in the (*) Thermo-calc software. Miscibility gaps on these representations can indicate spinodal decomposition. Mass fraction of components on these representations can be calculated by drawing tie lines and applying the lever rule. Common features in these representations include a critical points and triple points. For 10 points, name these diagrams that show whether solids, liquids, or gases will exist at a given temperature and pressure.

ANSWER: phase diagrams

9. Photographer F. Holland Day was very possessive of his extensive archive relating to this poet, frustrating Amy Lowell's attempts to write a biography of him. A poem by this author asks what is "more serene than Cordelia's countenance" and "more gentle than a wind in summer," answering that it is the "soft closer of our eyes," sleep. The speaker exhorts "O love me truly!" at the end of every stanza in "You say you love; but with a voice." This poet of "Sleep and Poetry" described how he was convinced of humour's superiority to wit in a letter that described the (*) capacity to be in uncertainty without "any irritable reaching after fact." He wrote that "heard melodies are sweet, but those unheard are sweeter" in a poem addressing an "Attic shape" described as a "foster-child of Silence and slow Time." For 10 points, name this poet who declared "Beauty is truth, truth beauty" in "Ode on a Grecian Urn."

ANSWER: John Keats

10. After visiting America for Joseph Stalin, Anastas Mikoyan developed a recipe for this dish that is still known as the "doctor's" type of it in Russia. Sweden's Falun Mine lends its name to a type of this dish called *falukorv*. A type of this food referred to with the adjective "Lebanon" was invented by Pennsylvania Dutch. A type of this dish called *alheira* was supposedly first made by Portuguese Jews who pretended to convert to Christianity. In Spain, the (*) *embutido* type of this food is uncooked, and in England "black pudding" is actually a type of this food. The printer Christoph Froschauer served this dish during Lent in an action defended by Protestant reformer Ulrich Zwingli. This food is served alongside potatoes in bangers and mash. For 10 points, name this food made of meat wrapped in a casing, examples of which include *kielbasa* and *bratwurst*.

ANSWER: sausages [accept specific types, such as kielbasa or kolbasa, until they are read]

11. The Wyoming Valley was disputed between the Pennamites and settlers referred to by this word in a set of three mid-18th century conflicts. According to a widespread misconception, this word derives from the Cherokee word for "coward." At the end of an aphorism often attributed to E.B. White, this term is said to refer to "somebody who eats pie for breakfast" or "somebody who still uses an outhouse." This word is prefixed by the adjective "swamp" in an outdated term for rural (*) northeasterners. Hardworking farmers plowing land for the Erie Canal inspired a term for American resourcefulness, in which this word serves as an adjective for "ingenuity." Soldiers nicknamed "Johnnies" often used this nickname for their opponents during a 19th century conflict. For 10 points, name this pejorative term for Union forces in the Civil War, which was followed by "Doodle Dandy" in a popular Revolutionary War song.

ANSWER: Yankees <Edited>

12. A ritual that takes place at this location is said to rid participants of ten sins. At a ritual for the dead at this location, the names of the dead are recited while offerings of balls of rice and sesame seeds are made. A celebration at this location that is held when Jupiter is in Aquarius and the Sun is in Aries takes place every twelve years. From a religious standpoint, the Kaveri is often identified with this location, which one religious text claims to contain 35 million sacred (*) *tirthas*. This location's descent from heaven is represented as the *avatarana*, and its ritual importance is shown by a story in which this place revived the sixty thousand sons of King Sagara. It is the destination of the Haridwar Kumbh Mela pilgrimage, and the holy city of Varanasi is next to this location, in which it is commonplace for Hindus to bathe. For 10 points, name this river which is sacred in Hinduism.

ANSWER: Ganges River [or Ganga or Gonga] <Edited>

13. A pro-Kremlin protester threw a jar of his urine at a photo of one of these people at a 2016 exhibition called *Absence of Shame*. The cover images of the collections *The Last Day of Summer* and *Radiant Identities* depict these people. Jock Sturges and David Hamilton have been criticized for their photographs of these people. These people are the subject of the photography book *Tulsa* by Larry Clark. In her early work, Sally Mann courted controversy with photographs of these people. Anne Geddes is best known for her photographs of these people. (*) Steve McCurry garnered fame for his photograph of one of these people in a red headscarf, which was displayed on the cover of National Geographic; that person of this type was from Afghanistan. For 10 points, name this type of person, one of whom was photographed holding a toy hand grenade in Central Park by Diane Arbus.

ANSWER: children [or young people; accept young girls or young boys; accept babies; accept teenagers; accept kids] <Edited>

14. Two and three point correlation functions of currents are used in conjunction with operator product expansion to derive rules for sums important in this theory. The expectation value of the Wilson loop of this theory depends on the loop's area. Observation of tauon decay can be used to determine a coupling constant in this theory. The Callen-Gross relation relates two functions in this theory that predict the outcome of deep inelastic scattering experiments, the (*) Bjorken scaling functions. Self-interactions in this theory make perturbative calculations impossible, so most computations are done by simulating this theory on a lattice. This theory's symmetry group is the eight-dimensional SU(3). Some particles described by this theory are never seen in isolation due to confinement, including quarks and gluons. For 10 points, name this theory of the strong force.

ANSWER: QCD or quantum chromodynamics

15. This philosopher cited the decision theory of Gibbard and Harper in a defence of two-boxing Newcomb's problem in the paper "Why Ain'cha Rich?" This philosopher claimed that, ignoring inadmissible evidence, if a rational believer knows that the chance of some event E is X, then she will believe to degree X that E will occur. This thinker revised that principle, called the Principal Principle, because of its conflict with a doctrine of his that claims "the world is a vast mosaic of local matters of particular fact." This originator of (*) Humean Supervenience attacked three forms of ersatzism in a chapter called "Paradise on the Cheap?" from a book which uses counterpart theory to support his thesis that possible worlds are causally isolated from each other and exist in the same sense that our world exists. For 10 points, name this philosopher who argued for modal realism in *On the Plurality of Worlds*.

ANSWER: David (Kellogg) Lewis

16. Linear operators which satisfy the Leibnitz rule are equivalent to this type of space for a smooth manifold. One way of constructing this type of space using the dual of the ratio of a maximal ideal and the square of a maximal ideal is named for Zariski. The pushforward of a map, is from this kind of space to this kind of space. Given an affine connection, one can define a geodesic as a curve which parallel transports its own (*) vector of this type. A vector field on a manifold is a map from the manifold to *this* bundle. This kind of vector is defined as the partial derivative of each vector component with respect to its coordinate. This function is the square root of secant squared minus 1, and the derivative is the slope of a line which has this relationship to a curve. For 10 points, what word names the function which is given by sine over cosine?

ANSWER: tangent [or tangent space or tangent function; or tan]

17. *Description acceptable.* Advocates of this political objective were targeted by a state-sponsored terrorist organization called The Red Hand. A group known as the "throat-cutters" supported this objective, as did a group that carried out thirty attacks on Red All Saints' Day. Demonstrators favoring this political objective who were celebrating the surrender of Nazi Germany were fired upon in 1945 in the town of Setif. After this goal was achieved, Jean Bastien-Thiry made a failed assassination attempt that inspired the novel (*) *The Day of the Jackal*. This goal was opposed by a paramilitary organization known as the OAS. Hundreds of thousands of *pieds-noirs* moved north after the achievement of this goal, which brought Ahmed Ben Bella to power and came about as a result of the Évian Accords. The FLN pushed to achieve -- for 10 points -- what goal that resulted in a large French colony in North Africa becoming a sovereign state?

ANSWER: Algerian independence [accept obvious equivalents that involve making Algeria not be a French colony anymore] <Edited>

18. At a point marked *Un poco ritardando al capriccio*, a piece in this collection transitions to an E-flat major interlude after a C-minor opening played at triple-forte marked *presto furioso*. They're not by Beethoven, but the rarely-used name "Apassionata" was given to a piece in this collection in the 1910 edition of them by Ferruccio Busoni. After these pieces' composer created a symphonic poem based on a Victor Hugo poem, he divided one of these pieces into three sections and revised it to share a title with that symphonic poem in (*) 1851. The composer's revision of these pieces' 1837 edition gave programmatic titles to several of them, such as "Wilde Jagd" [VILL-duh YAHGD], as well as ones depicting a will-o'-the-wisp and one depicting a Cossack strapped to a horse titled "Feux Follets" and "Mazeppa," respectively. For 10 points, name this set of twelve challenging etudes by Franz Liszt.

ANSWER: Transcendental Etudes [prompt on etudes by Liszt]

19. Obsolete examples introduced in this work were eliminated in the abridged version of it by Otto Ruhle. Internet seminars and a guide to reading this text work created by David Harvey in the wake of the 2008 recession. A takedown of the theories presented in this work is presented in a book about its author "and the Close of His System" by Eugen Böhm von Bawerk. Slavoj Žižek highlighted this book's description of its central concepts as "the religion of everyday life." A study about this work resulted from an author's seminars involving Etienne Balibar. A study by (*) Louis Althusser is titled for "reading" this book, which introduces the measurement of the time required to produce something in terms of "socially necessary labor." After its main author died, Karl Krautsky published its fourth volume as *The Theory of Surplus Value*. For 10 points, name this book which in which Marx and Engels outlined their comprehensive economic theory.

ANSWER: *Das* Capital [or Capital; accept *Reading Capital*] <Edited>

20. In one story in this collection, L.D. is unable to articulate "one more thing" to Maxine on his way out after throwing a pickle jar at her. A "plotless" story in this collection involves a woman wondering why a drunk man asked her and her husband to dance at his garage sale. The narrator of a story in this collection is told by his wife to wash his hands when he tries to reconcile with her, after discovering her affair with an aerospace engineer he calls "Mr. Fixit." In this collection's title story, a (*) cardiologist desires to kill his ex-wife with swarms of bees and doesn't understand the meaning an old couple's injured in a car accident. In the title story of this collection, Nick and Laura listen to Terri discuss her abuse by her ex-boyfriend Ed. For 10 points, two couples discussing romance over gin form the basis of the title story of what collection by Raymond Carver?

ANSWER: *What We Talk About When We Talk About Love*

TIEBREAKER/EXTRA TOSSUPS

1. A former director of this country's DAS intelligence agency was sentenced in November 2016 for the 1989 assassination of a presidential candidate. Natalia Ponce names a law that combats the rate of acid attacks in this country, which has risen above rates in several Islamic nations. This country's eastern border was sporadically opened and closed in 2016, only allowing some migrants to enter its city of (*) Cucuta. LaMia Flight 2933 crashed in this country, killing all but three members of the Chapecoense soccer team. This country's residents narrowly rejected a peace deal between an organization led by "Timochenko" and the 2016 recipient of the Nobel Peace Prize, Juan Manuel Santos. For 10 points, name this country still plagued by the guerrilla group FARC.

ANSWER: Republic of Colombia [or República de Colombia]

2. After one member of this group was born, his cries caused all of the donkeys near his birthplace to bray loudly. A member of this group was advised to cover his groin with a cloth when obtaining a boon from his mother. The maternal uncle of these people used his dead parents' bones to make a set of objects that would always turn the way he desired. A woman in a balcony laughed at one of these people after he fell into a pool, mistaking the water for glass. The blindfolded mother of these people bore a single fetus that was cut and buried underground in pots of butter. The eldest of these people, who was killed by an illegal blow to the thighs during a (*) mace-fighting match, commanded the second-eldest to disrobe a woman after they won a rigged game of dice. The eldest of these people, Duryōdhana, appointed Bhīshma and Karna as his generals, but both were felled by Arjuna. For 10 points, name these people who fought the Kurukshetra war against their cousins, the Pāndavas.

ANSWER: Kauravas [or Dhārtarāstras]

BONUSES

1. This man was the only monarch of the Thonburi Kingdom, in which role he subjugated the Lanna Kingdom and arranged for the burial of Ekatat, the last ruler of Ayyuthaya. For 10 points each:

[10] Name this revered king, who is sometimes de-legitimized for being partly of Teochew Chinese ancestry. He positive relations with Portugal, Britain, and Netherlands, receiving gifts of guns from each, but was killed by a friend who proceeded to establish the Chakri dynasty.

ANSWER: **Taksin** the Great [or Zhèng Xìn]

[10] Taksin was kind of insane, as he believed himself to be one of these figures and thought his blood would turn from red to white. Wu Zetian was thought by some to be an incarnation of the “Maitreya” one.

ANSWER: **Buddhas** [accept **Maitreya** Buddha]

[10] Contemporary to Taksin were the rulers of the Shah dynasty in this modern-day country, who considered themselves incarnations of Vishnu and were later subordinated by the Rana family. Its *kukri*-wielding troops put up a fierce resistance to British invasion from 1814 to 1816.

ANSWER: **Nepal** <Edited>

2. In *Ressentiment*, Max Scheler claimed that this thinker valued patriotism over love of mankind because it seemed to him that one’s native country’s values are necessarily superior to those of mankind in general. For 10 points each:

[10] Name this thinker who corresponded with Leibniz about the possibility of reuniting the Protestant and Catholic Churches. This bishop disputed with Fénelon after expanding a brief decrrial of Quietism into his *Instructions sur les états d'oraison*.

ANSWER: Jacques-Bénigne **Bossuet**

[10] Georges Hardy’s classic study of the inspirations and influences on Bossuet’s *Discourse on Universal History* concludes that this Church Father’s *The City of God* was the principal source. He also wrote the *Confessions*.

ANSWER: St. **Augustine** of Hippo

[10] Bossuet was a contemporary of this philosopher, who synthesized the thought of St. Augustine and Descartes. This author of *The Search After Truth* is the most famous proponent of occasionalism.

ANSWER: Nicolas **Malebranche**

3. Answer the following about places that lack access to the sea, for 10 points each:

[10] In *The Winter's Tale*, Hermione's infant daughter is left as a foundling on the coast of this region. When writing the play, Shakespeare must have failed to notice that this region is actually landlocked.

ANSWER: **Bohemia**

[10] Even though this country lost its navy when it became landlocked as a result of the Treaty of Trianon, it was nonetheless ruled by the admiral Miklós Horthy for over two decades.

ANSWER: **Hungary** [or **Magyarország**]

[10] This landlocked country, which calls itself a “Plurinational State”, annually celebrates a “Dia del Mar” mourning the fact that it lost access to the sea when it lost the port of Antofagasta in a war.

ANSWER: Plurinational State of **Bolivia** [or Estado Plurinacional de **Bolivia**] <Edited>

4. "the healing," declares that "other women's bodies / are not our battlegrounds." For 10 points each:
[10] Name this best-selling poetry collection originally self-published in 2014 by social media phenom Rupi Kaur, which she now sporadically posts page-by-page onto Instagram.

ANSWER: **Milk and Honey**

[10] This other poet wrote, "You fit into me / like a hook into an eye / a fish hook / an open eye" in a poem from her *Power Politics*. This author of a 2016 reworking of *The Tempest* titled *Hag-Seed* also wrote about the painter Elaine Risley in another novel.

ANSWER: Margaret **Atwood** [or Margaret Eleanor **Atwood**] (*Cat's Eye*)

[10] Atwood wrote a poem about a stripper comparing herself to this mythical woman while "doing countertop dancing." This woman launched a thousand ships when she eloped to Troy with Paris in *The Iliad*.

ANSWER: **Helen of Troy** [accept "**Helen of Troy** Does Countertop Dancing"]

5. In this field, the Bremer support, or the decay index, quantifies the difference in the number of steps between different MPTs. For 10 points each:

[10] Name this field of biology, broadly similar to cladistics and taxonomy, that plots the evolutionary histories and relationships between groups of organisms or populations in trees.

ANSWER: **phylogenetics** [or **phylogeny**; or other word forms]

[10] This adjective describes populations or lineages inferred to exist through statistical phylogenetic methods, but with no fossil record.

ANSWER: **ghost** populations [or **ghost** lineages]

[10] An alternative to molecular phylogeny in identifying unknown species is to look for these conserved genetic markers in their DNA. Common examples of these markers include the mitochondrial gene cytochrome c oxidase I for animals.

ANSWER: DNA **barcodes** [or DNA **barcoding**]

6. At a 1773 meeting of this body, a member bared his chest, blocked the exits, and called on its members to murder him instead of his country. For 10 points each:

[10] Name this legislative body that, in 1773, held a "confederated" session in which its practice of *liberum veto*, which allowed any member to nullify legislation, no longer applied.

ANSWER: **Sejm** ("same") [prompt on **parliament** of **Poland**-Lithuania]

[10] That session of the Sejm confirmed the partition of Poland between Prussia, Austria, and this empire, whose tsars Nicholas I and Alexander II suppressed Polish uprisings.

ANSWER: **Russian** Empire

[10] A supposedly autonomous province of Prussia created after the partition was named after this western Polish city. Many early rulers of the Piast Dynasty are buried in this city's cathedral.

ANSWER: **Poznań** [or **Posen**] <Edited>

7. The Saltigues are the high priests of these people, who believe in ancestral spirits called *pangool*. For 10 points each:

[10] Name this west African ethnic group, in whose religion these ancestral spirits coexist with the supreme deity Roog.

ANSWER: **Serer** [or **Kegueme**]

[10] The *pangool* are represented by these animals. In the Holiness Movement, a ritual involving these animals was inspired by passages from Mark 16 and Luke 10.

ANSWER: **snakes** [or **serpents**]

[10] It has been hypothesized that the name Roog is related to the name of this Egyptian sun god, who was identified with Amun.

ANSWER: **Ra** <Edited>

8. The wavefunction of the rigid rotor consists of only these functions. For 10 points each:

[10] Name these functions, the solution to the angular portion of Laplace's equation, which are incremented based on "l" and "m" quantum numbers in some systems.

ANSWER: **spherical harmonics** [prompt on Ylm]

[10] This other set of functions is the solution of the differential equation "x y double prime plus quantity 1 minus x y prime close quantity times y prime plus n y." Their Rodrigues formula has a derivative of "e to the minus x" unlike the Hermite polynomials whose Rodrigues formula has a derivative of "e to the minus x squared"

ANSWER: **Laguerre** polynomials

[10] Spherical harmonics and Laguerre polynomials comprise the solution of the Schrodinger equation for this atomic system, whose ground state energy is -13.6 electron volts.

ANSWER: **hydrogen** atom [or **H**]

9. The Soai reaction may be used as a workaround in "crypto" compounds for which this property is unmeasurable. For 10 points each:

[10] Name this quantity, denoted by alpha in brackets, which is calculated by dividing the observed value by the product of concentration and length. It is positive for "dextro" compounds and negative for "levo" compounds.

ANSWER: **specific rotation** [prompt on rotation]

[10] A non-zero specific rotation when exposed to plane-polarized light shows that a molecule has this property, whose name means "handedness." Molecules with this property cannot be superimposed onto their mirror images.

ANSWER: **chirality**

[10] D-Glucose exhibits this phenomenon in aqueous solution, the equilibration of alpha and beta anomers which causes change in specific rotation.

ANSWER: **mutarotation**

10. This collection includes a weirdly sexual poem about the author bathing in a sauna with his whole family, called "The Bath." For 10 points each:

[10] Name this Pulitzer-winning 1974 poetry collection which espouses ideas the author expressed in his essay "Four Changes." Its name refers to the North American continent.

ANSWER: **Turtle Island**

[10] Turtle Island is by this environmentalist poet, the inspiration for Japhy Ryder in Jack Kerouac's *The Dharma Bums*.

ANSWER: Gary **Snyder**

[10] Snyder and Kerouac were members of this literary movement, whose touchstones include Burroughs' *Naked Lunch* and Ginsberg's "Howl."

ANSWER: the **Beat** Generation

11. Louis Armstrong's teacher, whose Creole Jazz Band performed the song "Dippermouth Blues," had this nickname. For 10 points each:

[10] Identify this nickname given to Joe Oliver. Another musician with this nickname sang songs like "Straighten Up and Fly Right" with his trio, which also recorded a popular version of "Sweet Lorraine."

ANSWER: **King** [the other musician is Nat "King" Cole]

[10] Another "king," Buddy Bolden, recorded a possibly flatulence-inspired song with an early use of this adjective. Herbie Hancock and the Headhunters had a hit song called "God Make Me [this adjective]."

ANSWER: **funky** [the Buddy Bolden song is "Funky Butt"]

[10] This scat singer was nicknamed "the Queen of Jazz" and "the First Lady of Song." She is famous for her recordings of "A-Tisket, A-Tasket" and "It Don't Mean a Thing (If It Ain't Got That Swing)."

ANSWER: Ella (Jane) **Fitzgerald** <Edited>

12. Two of these instruments unusually pitched in G are designated in the score as “flauti d’echo” in fourth *Brandenburg Concerto*. For 10 points each:

[10] Name this duct flute whose popularity peaked during the Baroque era. Today, this instrument is mainly used for children’s music education purposes, because its head works like a whistle, making it easy to play.

ANSWER: recorder

[10] Recorders engage in a dialogue with a string band at the start of the third act “Sommeil,” in which the goddess Cybele puts the title character to sleep, in this *tragedie en musique* by Jean-Baptiste Lully.

ANSWER: Atys

[10] This composer’s F major flute concerto *The Storm at Sea*, which is distinct from his violin concerto with the same title, is often performed as a recorder concerto. His five actual recorder concerti are catalogued as RV 441-445.

ANSWER: Antonio Vivaldi [or Antonio Lucio Vivaldi]

13. According to a 2015 expedition by UCLA, a mysterious mile-long “Band of Holes” in this country may have been part of a *colca*, or storage facility. For 10 points each:

[10] Name this country where part of the Nazca Lines was permanently damaged by Greenpeace activists in 2014.

ANSWER: Republic of Peru [or República del Perú]

[10] Both the Paracas and the Nazca intentionally deformed these objects. The Chinook, Choctaw, and some peasant communities near Toulouse changed the shape of these objects in children with boards.

ANSWER: skulls [prompt on heads]

[10] Some of the earliest examples of deformed skulls were found in Shanidar Cave in this country, where ten Neanderthals were also found. Other archaeological sites in this country include Bash Tapi Castle and the city of Hatra, which was once the capital of Khvarvaran.

ANSWER: (Republic of) Iraq <Edited>

14. Answer the following about a certain literary movement, for 10 points each:

[10] This novel whose main plot concerns Bartlebooth, whose sudden blindness makes it more difficult to solve the increasingly difficult 750-piece jigsaw puzzles that Gaspard Winckler makes out of Bartlebooth’s watercolors.

ANSWER: Life a User’s Manual [or La Vie mode d’Emploi]

[10] This author constructed the chapter order of *Life a User’s Manual* to follow a “knight’s tour,” a mathematical standard of the Oulipo literary movement to which he belonged. Gilbert Adair impressively managed to translate this author’s *A Void* while maintaining its lack of the letter “e.”

ANSWER: Georges Perec

[10] Another Oulipo member, Raymond Queneau, wrote 99 retellings of the same story about a man with a weird hat in a book titled *Exercises In* this subject. Strunk and White authored a seminal text on this subject in writing, titled *Elements of* [it].

ANSWER: style [or *Exercises in* Style or *Exercises de* Style or *Elements of* Style]

15. These creatures are sometimes said to be married to *kikimory*, who cause sleep paralysis by sitting on the chest of sleeping people. For 10 points each:

[10] Name these house spirits from Russian mythology. When one of them gets angry, it becomes a poltergeist-like being called a *barabashka*.

ANSWER: **domovoi** [or **domovye**]

[10] Domovye are similar to the lares and penates, tutelary deities in the religion of this civilization, whose gods included Jupiter and Janus.

ANSWER: ancient **Rome**

[10] The household spirit Hinzelmann is an example of one of these goblin-like sprites from Germanic mythology. One of the transition metals is named after them.

ANSWER: **kobolds** <Edited>

16. The first copper coins circulated in the Thirteen Colonies featured a portrait of this man. For 10 points each:

[10] Name this Catholic proprietor of the colony of Maryland, after whom the largest city in the state of Maryland is named.

ANSWER: Cecil **Calvert**, 2nd Baron **Baltimore** [accept either underlined name]

[10] Calvert briefly was proprietor of a colony of this name in modern-day Newfoundland, which his father bought from Welsh investor William Vaughan. Gerald of Wales wrote of the 1191 finding of a wooden coffin that caused locals to believe an abbey was the ancient location of this place in what was probably a publicity stunt by the abbot.

ANSWER: (Province of) **Avalon** [accept the **Fortunate Isles**; prompt on **Glastonbury**]

[10] Calvert's son became involved in a boundary dispute with this man, who authored *No Cross, No Crown* and signed a successful treaty with the Lenape people.

ANSWER: William **Penn**

17. A member of this profession named Harry Trench is disturbed to discover that Sartorius makes money by exploiting the poor in the play *Widowers' Houses*. For 10 points each:

[10] Name this profession satirized in plays like *Too True to Be Good*. A real-life practitioner of this profession, Almroth Wright, was the basis for the character of Colenso Ridgeon in a play about his *Dilemma*.

ANSWER: **doctors** [accept clear equivalents, like **medicine**]

[10] This playwright laid out his thoughts on the medical profession in the aforementioned plays. He also wrote *Arms and the Man* and *Pygmalion*.

ANSWER: George Bernard **Shaw**

[10] In this Shaw play, Ellie Dunn attends a dinner party hosted by Hesione Hushabye, during which a man who pretends to be a burglar in order to get payouts from those he is pretending to rob turns out to be a former employee of the inventor Captain Shotover.

ANSWER: **Heartbreak House**

18. Max Ernst used this technique to create mathematically inspired figures in paintings like *Young Man Intrigued by the Flight of a Non-Euclidean Fly*. For 10 points each:

[10] Name this technique, which may have been invented by Janet Sobel. A more famous painter used this technique for paintings like *Autumn Rhythm*.

ANSWER: **drip** painting [prompt on action painting]

[10] The aforementioned drip painter is this American, nicknamed "Jack the Dripper."

ANSWER: (Paul) Jackson **Pollock**

[10] The fantastically named Ted Dragon was flabbergasted when his partner, Alfonso Ossorio, bought this 1948 Pollock painting. It was damaged before it arrived at Ossorio, so Pollock reworked it, and in 2006, David Geffen sold it to an undisclosed buyer for \$140 million.

ANSWER: **No. 5, 1948** <Edited>

19. This action is the central subject of Saskia Sassen's book *Guests and Aliens*. For 10 points each:

[10] Identify this action, which is often performed for reasons of family unification, or to work in order to send remittances to one's family.

ANSWER: **immigration** [accept word forms]

[10] A book by Catherine Lee about immigration based on family reunification is somewhat misleadingly titled for the "fictive" form of this concept from anthropology. The study of this concept was introduced by Lewis Henry Morgan, who identified patterns of it in six Native American cultures.

ANSWER: **kinship**

[10] A 2006 study called "Compassion and Repression" profiles a shift in this country's asylum policies from political to humanitarian objectives. A filmmaking anthropologist from this country pioneered "ethnofiction" using a method of "shared anthropology" in order to create films for the Museum of Man.

ANSWER: **France** [or **French Republic**; or **Republique Francaise**] <Edited>

20. The bottom level of these structures is linked together to allow fast in-order traversal. For 10 points each:

[10] Name these hierarchical data structures with a large number of children for each node. Except for the root, the number of children of a node in this structure must be at least half the branching factor.

ANSWER: **B+ tree** [prompt on B-tree; prompt on tree]

[10] B+ trees are often used in the implementation of systems for managing these things which are stored in directories. Extensions like 'txt' and 'pdf' can indicate their function or contents

ANSWER: **files** [or **file** systems]

[10] Unlike NTFS, its replacement, this Microsoft file system doesn't use B+ trees. It stores files in clusters whose location is stored in a table. Looking up a file requires traversing this table.

ANSWER: **FAT** [or **File Allocation Table**; accept more specific variants like **FAT16**, **exFAT**, **VFAT**, etc.]

EXTRA BONUSSES

1. The leader of this event rode through a city on his motorcycle throwing pro-war pamphlets at random civilians before shooting himself. For 10 points each:

[10] Name this event in which rebels led by Kenji Hatanaka attempted to seize the Japanese Imperial Palace and the NHK, Japan's national broadcasting corporation.

ANSWER: the **Kyūjō** incident

[10] The Kyūjō incident attempted to assassinate this emperor, who announced Japan's acceptance of the Potsdam declaration via the Jewel Voice Broadcast on NHK radio the next day.

ANSWER: **Hirohito** [or Emperor **Shōwa**]

[10] This name was given to the female narrators of NHK's English broadcasts meant to demoralize Allied troops. Upon her return from Japan to the US, Iva Toguri was charged with treason for her association with this persona on *The Zero Hour* radio show.

ANSWER: "**Tokyo Rose**"