

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

Editors: Will Alston, Joey Goldman, James Lasker, Jason Cheng, Naveed Chowdhury, and Jonathan Luck, with writing assistance from Athena Kern and Shan Kothari.

Packet by Bentley and ADR et al

TOSSUPS

1. **An aria for this character begins with the two phrases B-flat-D-F-low A, C-E-flat-D-B-flat; that aria for this character includes a lamentful G-minor *Andante* middle section and involves a dramatic appearance after three characters sing "Sie kommt! Sie kommt!" A rhythmic pattern repeated by this character consists of a grace note into four legato sixteenth notes, eight staccato eighth notes, and a half note. This character makes This character sings the highest part in the quintet "Nur Stille Stille" with the (*) Three Ladies. This operatic character sets the plot in action by showing Tamino a picture of her daughter which Tamino then must save. In one appearance by this character, she tells her daughter that she will disown her unless she kills Sarastro. This character must hit a high F6 note in both of her arias, "O Zittre Nicht" and "Der Holle Rache." For 10 points, name this primary villain of *The Magic Flute*.
ANSWER: Queen of the Night or [Königin der Nacht] <Edited>**

2. **Some facilities built to perform this task would be improved via the squeezed light called for in the A+ proposals. A shack on the University of Maryland golf course with some three thousand pound bells was built to perform this task. A calculated value of inflationary r of 0.2 claimed to indirectly accomplish this task but was disproved upon the release of the Planck dust maps. A recent NASA(*) pathfinder is testing the ability to perform this task in orbit around L1 for the LISA mission. The BICEP2 team and Joseph Weber claimed to have performed this task, which Rainer Weiss's brainchildren in Livingston, Louisiana and Hanford, Washington did perform on September 14, 2015 using laser interferometers. For 10 points, name this task, an important test of general relativity, whose first instance was the observation of radiation from merging black holes at LIGO.
ANSWER: detecting a gravitational wave [accept synonyms for "detecting"; prompt on detecting B modes in the CMB; grudgingly accept gravity waves for gravitational waves but remind the respondent that they are technically incorrect.]**

3. **A character created by this author describes the lesson of Joyce's *Ulysses* to her former elementary school teacher as "that we want only to eat, drink, fuck." A character created by this author gets a grueling job in a pastrami factory from Bruno, the friend of a student she had an affair with while on a summer vacation in Iskia. This author described growing up as the child of a seamstress in the memoir *Frantumaglia*. All of the English translations of this author's novels were done by *New Yorker* editor Ann Goldstein. A piece of investigative reporting in the (*) *New York Review of Books* by Claudio Gatti revealed that this author may be Anita Raja, a Rome-based translator. This author's best known works center on the relationship between the narrator and Lila. For 10 points, name this pseudonymous author of *My Brilliant Friend*, the first of her *Neapolitan* novels.
ANSWER: Elena Ferrante**

4. **A man also nicknamed for being one of these people, the early 19th century boxer "Fighting Jack Cooper," was sentenced to transportation. They're not child laborers, but improving the lot of these people was the goal of one of their self-styled "kings," George Smith. Masters of woodcraft among these people would produce elaborate *vardo* for transportation. In England, many of these people lived at Wandsworth Common. These people were called (*) "tinkers" in Scotland and other regions of Western Europe where they were known for their metalwork. These people, who received their primary English name for a false story about their origins in Egypt, were traditionally called Travellers in Britain. Both linguistically and genetically, these people are most closely related to the Jats of Northern India. For 10 points, name these people who often lived in wagons, a nomadic European group.**

ANSWER: Romani [or gypsies; or Rom; accept Travellers until it is read] <Edited>

5. In an extension of this paradigm, Mary Main et al subjected adults to an interview that classified subjects into autonomous, dismissive or preoccupied categories. de Wolff et al have challenged a hypothesis that, according to this framework, sensitivity differences should have a large impact on whether individuals are classified into A, B, or C styles. The four phases of this paradigm proceed from Indiscriminate Social Responsiveness to Goal-Corrected Partnerships, the latter happening at between (*) 24 and 40 months. A test of this framework involves subjects decreasing exploration behavior when they are placed into different environments, the hands of unfamiliar women or other "strange situations" before reuniting them with their primary caregiver; that experiment was conducted by Mary Ainsworth. For 10 points, name this theory proposed by John Bowlby about how parental interactions with infants influence development.

ANSWER: attachment theory <Edited>

[MODERATOR NOTE: Please read the prompt line before reading the tossup]

6. A technique used in this specific field was improved to reduce errors in the accumulator through Fernandes and Oliveira's KHT method. Richard Szeliski wrote the standard textbook for this field. Shi and Malik developed an algorithm useful in this field which uses normalized cuts in order to perform segmentation. Dana Ballard generalized a voting-based technique in this field, the Hough transform. In 2015, researchers at Baidu were caught cheating at the ILSVRC, an annual competition in this field. A (*) mask or kernel might be applied to make one task in this field easier. Features for classification problems in this field often are constructed by using edge and blob detection. Researchers in this field often make use of the ImageNet database and the OpenCV libraries. For 10 points, name this AI task that can involve detecting objects in a video or image.

ANSWER: computer vision [or image recognition or image segmentation or image analysis until ImageNet is mentioned; accept edge detection and feature detection until mentioned; prompt on machine learning or artificial intelligence or image processing]

7. *Description acceptable.* An author searches for this person by "[scudding] through the woods and fern with hark'ning ear" in one poem. That poem is often paired with one in which the poet asks "Phoebus make haste, the day's too long, be gone" to deliver a message to this person. The speaker declares, "Docile I watched. My wreckt chest hurts when [this man] pales" in a poem that urges this man to "listen while you read a song." The author asks "how stayest you there whilst I at Ipswitch lye?" in a poem addressed to "[this man] (*) Absent Upon Publick Employment." The speaker asks, "moved you not restless, waiting for him?" in a John Berryman "Homage" to this man's wife. This man's wife tells him to "compare with me ye women if you can" after noting "if ever two were one, then surely we" in one of her poems. For 10 points, name this man described in a poem from *The Tenth Muse Lately Sprung Up In America* as "Dear And Loving."

ANSWER: Simon Bradstreet [accept "Anne Bradstreet's husband" or "To My Dear And Loving Husband"; prompt on Bradstreet]

8. This man, who described himself as a "stand-up philosopher," spent some time as a virtual prisoner of the Swiss arm dealer Michel Hauchard and undertook a bizarre speaking tour with G. Gordon Liddy. He supervised an experiment which tried to determine whether certain factors reduced recidivism, an experiment known as the Concord Prison Experiment. John Lennon wrote the song "Come Together" for this man's campaign to defeat Ronald Reagan as Governor of California. He is the alphabetically middle author of a book subtitled "A Manual Based on the Tibetan Book of the Dead." This man, whom Richard (*) Nixon once called "the most dangerous man in America," formed a group at Harvard after first experiencing psilocybin, which subsequently got him kicked out of that university. His experiences led him to work with Metzner and Alpert to write *The Psychedelic Experience*. For 10 points, name this LSD superfan who coined the phrase "turn on, tune in, drop out."

ANSWER: Timothy Leary [or Timothy Francis Leary] <Edited>

9. Different messages sent between Vienna *and this country* with the same encoding settings enabled John Tiltman to partly decode the Tunny encryption system. The film *Ill Met by Moonlight* popularized an inaccurate tale of how Patrick Leigh Fermor kidnapped Nazi Heinrich Kreipe in this country, where troops from Australia, New Zealand, and Poland were stationed by Operation Lustre. Collaborationists in this country called the Security Battalions were opposed by the ELAS, the military wing of the Communist (*) KKE party. Operation Marita was launched to take over this country after a failed invasion, which came after its Prime Minister simply said "no" to a request to surrender to Italy. During its German occupation in WWII, this country was governed in exile from Cairo by King George II. In the 1930s, this country erected the defensive Metaxas Line. For 10 points, name this country where the Nazis raised flags over the Acropolis.

ANSWER: Greece [or Greek theater of World War II; or Hellas; or Hellenic Republic] <Edited>

10. In a tradition that spilled over from Rogationtide, English people celebrating the feast for this event would throw water on any passerby who didn't offer a coin as part of the tradition of beating the bounds. On the feast day celebrating this holy event, the Bucentaur was employed to allow the Doge of Venice to conduct the Marriage of the Sea. The 1607 Congregation of Rites decreed that the Paschal candle stay lit until the feast celebrating this event. Jesus warns (*) "do not hold me" because this action has not taken place yet in John 20:17. This event is described in the Gospel of Luke and again at the beginning of Acts of the Apostles, albeit at an apparently different time. This event, which took place on the Mount of Olives, is celebrated on the fortieth day of Easter, Holy Thursday. For 10 points, name this event where Jesus left Earth and entered Heaven.

ANSWER: Ascension of Jesus [accept equivalents involving Jesus going to heaven until "Jesus" is read; accept Holy Thursday before mentioned] <Edited>

11. This author described a certain type of work in *Stepping Stones* as giving "the high of finishing something you don't have to start." In one translation by this author the speaker sees "two soldered in a frozen hole / On top of other, one's skull capping the other's" and is meant to parallel events of Gerry Adams' life. This poet's collections include the punningly titled book *The Midnight Verdict*, which translates poems by Merriman. One translation by this poet emphasizes the "four-squariness of the utterance" of its title character. That translation by this poet employed a style called (*) "Scullionspeak," and opens with "So" in place of "HWÆT", before describing "The Spear-Danes in days gone by". The most famous of translation by this man is his *Beowulf*. For 10 points, name this translator, who also wrote the collection *The Death of a Naturalist*.

ANSWER: Seamus Heaney

12. Despite receiving a golden medal from the emperor of Austria, this man wrote letters to the New York *Observer* claiming that the Leopoldine Society promoted mass immigration from Austria to undermine American institutions; those letters were written while this man's brother Sidney edited the newspaper. This man turned his ideas into a viable business with the help of the author of *Elements of Chemistry*, Leonard Gale, and by giving a 25 percent share in profits to the manufacturer Alfred Vail. This man unsuccessfully ran for Mayor of New York in 1836 on an (*) anti-Catholic platform as part of the Nativist party. A more expensive rival to the device that made this man famous was developed in England by William Cooke and Charles Wheatstone. For a public demonstration of his invention at the Supreme Court, Annie Ellsworth chose the phrase, "What hath God wrought." For 10 points, name this telegraph pioneer.

ANSWER: Samuel Morse [or Samuel Finley Breese Morse] <Edited>

13. A class of cells in these structures have an attenuated cytoplasm between 50 to 100 microns wide, generally lack organelles, and are very thin and long with a flattened nucleus. Unlike in other adult mammals, the holes between these things in humans tend to increase with age and are known as the Pores of Kohn. The A and D types of a substance produced in these structures opsonize pathogens. At 24 weeks of gestation, cells in these structures start secreting a substance that doesn't appear in adequate quantity until 35 weeks, creating a risk for (*) IRDS. The primary component of one substance produced by these structures is abbreviated DPPC. Macrophages in these structures protect against agents such as *Mycobacterium tuberculosis*. Type II cells of the walls of these structures secrete pulmonary surfactant. For 10 points, name these numerous small cavities in the lungs where gas exchange happens. ANSWER: pulmonary alveoli [or pulmonary alveolus; prompt on lungs before "Pores"]

14. Harry Sandbach dismissed this thinker as being a "spare-time amateur philosopher", and Thomas Macaulay said "reading [this man] is like dining on nothing but anchovy sauce." This man foresaw the claim that he was only "in his books, a philosopher" by admitting that "the wise man does not love wealth, but prefers it." The primary evidence of this philosopher's impact on sixth century thought are two precises addressed to King Miro; those works are *On Anger* and *Formula for an Honest Life* by Martin of Braga. Early Christians admired fake letters written between this man and Paul. Actual letters by him, such as (*) "On the supreme good" and "On the happy life" were written to Lucilius. This author argued that the title quality is essential to rule in his tract *On Mercy*. For 10 points, name this Stoic philosopher, who committed suicide during the Pisonian conspiracy on the orders of his student, Emperor Nero. ANSWER: Seneca the Younger [or Lucius Annaeus Seneca the Younger]

15. Similarly to Grainne, a character of this name bursts into laughter when she's splashed with water since the water touched her higher on her thigh than her husband ever did. In a story, a character of this name is briefly pledged to a warrior named Gandin. The priest of a woman of this name is so taken by the music of a man disguised as Tantris that he brings Tantris to her court. A character of this name, known as the woman (*) "of the white hand," lies about the color of the sails on the ship that bear another woman with the same name. In a seminal text by Gottfried von Strassburg, a woman of this name is told that "you have drunk your death!" by Brangane. The lover of a woman of this name makes one of his characteristic great leaps to escape being sent to the stake, and gained her affection thanks a love potion intended for King Mark. For 10 points, name this lover of Tristan. ANSWER: Iseult [or Isolde; or Isolt; or Yseult] <Edited>

16. In a work by this author, a man uses the story of a mouse who renounces bait to escape a trap to justify his desire for his son to flee an executioner. In another work by this author, a woman is forced into marrying a one-eyed man after losing a wager on a battle between women armed with plum and cherry branches. In 1961, four major works of this author were published in translation by Donald Keene. While hiding under his lover's robes, a character created by this author learns of a plan of a plan to possess that lover from an (*) oil merchant who swindled him out of two pieces of silver. A play by this author has a title that ambiguously refers to buying out a courtesan or to the play's central New Year's festivities. This author of *The Uprooted Pine* wrote a play about Tokubei and Ohatsu, who kill themselves in Tenjin forest. For 10 points, name this author of *The Love Suicides At Sonezaki*, a *bunraku* playwright. ANSWER: Chikamatsu Monzaemon [or Sugimori Nobumori]

17. This period was prompted by a lawsuit over electoral malpractice which disqualified a candidate for six years and rendered an election in Raebareli null and void. This period began after a proclamation by a President who later died performing *namaz* during it, Fakhruddin Ali Ahmed. The son of the Prime Minister during this period implemented implemented a five-point plan which included a limit of two children per family, which was enforced with (*) mandatory vasectomies and other forms of forced sterilization. The primary political opposition during this period was provided by the paramilitary RSS. This period ended with the landslide victory of the Janata Party in the 1977 election, and was characterized by rule by decree. For 10 points, name this period in Indian history during which Indira Gandhi suspended democracy.

ANSWER: The Emergency [prompt on any descriptive answer involving Indira Gandhi and/or her tenure as Prime Minister] <Edited>

18. In the late 1940s, John and Richard Finlayson did a haphazard restoration job on this work. A REMIX of this work by Darren Waterston is titled after a painting showing the man who commissioned this work at a piano playing a piece subtitled "Frlthy Lucre." The artist of this work gained access to its original home to amend it by painting a scene that shows silver shillings on the floor, symbolising Frederick Leyland's refusal to pay in full. One part of this larger collection of works, which includes *Art and Money*, features a woman holding a (*) fan and standing in front of a screen. The Freer Gallery in Washington, D.C., holds this artwork, which contains *The Princess from the Land of Porcelain*. The creatures that lend their name to this work can be seen on its gilded shutters. For 10 points, name this Oriental-themed room designed by James McNeill Whistler, named for a type of bird.

ANSWER: The Peacock Room [or Harmony in Blue and Gold: The Peacock Room] <Edited>

19. This composer's use of other composers' works include expanding a *Kyrie* from Johann Christoph Pez and adding a *Christe eleison* to a work of Francesco Durante. During a passage in one movement of work by this composer, the word "omnes" is passed between the five-voice choir with each entry being one semitone higher than other. The choral soprano part for one work by this composer begins with arpeggiated E-minor chord on the word "Kommt." This composer revamped an earlier work by removing (*) Christmas interpolations from its original text and moving the key from E-flat major to D-major; that work uses sustained notes by the orchestra to create a "halo effect" around speech. The "Gratias aginus tibi" movement from one of this composer's works is identical to the "Donna nobis pacem" movement that ends that work, whose name comes from its key. For 10 points, name this composer of a *Mass in B-minor* and the *St. Matthew's Passion*.

ANSWER: Johann Sebastian Bach [prompt on "Bach"]

20. An inefficient way to produce this compound using a lot of steam with a tin and titanium vanadate catalyst was developed by Huls and improved by Bayer to reduce the amount of tar produced. This compound is the food additive E260 and is used to treat fungal and bacterial ear infections in the Vosol ear-drops. This compound is the active ingredient in photographic stop baths as well as the non-sulfite ingredient in rapid fixers. In a flash-tank, catalysts producing this compound can precipitate their tri-iodate form when they lose (*) carbon monoxide ligands. One method for producing this compound under high pressures and temperatures using a rhodium catalyst was improved by switching to an Iridium catalyst. This compound is synthesized by carbonylating methanol in the Cativa and Monsanto processes. For 10 points, name this carboxylic acid, the primary component of vinegar.

ANSWER: acetic acid [or ethanoic acid]

TIEBREAKER/EXTRA TOSSUPS

1. Namesake "cirrus clouds" in the interstellar medium were observed in this region of the spectrum. Both the cepheid P-L relation and the Tully-Fisher relation show the smallest scatter in this region of the spectrum since effects of dust are minimized. J, H, and K are commonly used filters in this part of the spectrum. Indium antimonide and (*) mercury cadmium telluride detectors are sensitive to this region of the spectrum. The bars on the Milky way's spirals were first observed by WISE, which observed this part of the spectrum. Ground -based detectors of this spectral region typically have incredibly high sky noise since the Earth's spectrum peaks in this band. This is the spectral band that is observed by the Hershel and Spitzer telescopes. For 10 points, name this spectral region between microwaves and visible light.

ANSWER: infrared or IR astronomy

BONUSES

1. A man most famous for being in this profession, Astylos of Croton, controversially moved to Syracuse. For 10 points each:

[10] Identify this profession. People who excelled in this profession, who might take part in commemorative "Pythian" events held at Delphi, often received a lifelong pension called a *sitesis*.

ANSWER: **athlete** [accept Olympic **athlete** or Pythian **athlete**]

[10] Another Greek athlete to switch citizenship was Sotades of Crete, who received a large payment in exchange for competing for this polis. Croesus sponsored the reconstruction of a magnificent temple in this city after he captured it.

ANSWER: **Ephesus** [or **Ephesos**] (the temple is the Temple of Artemis)

[10] The Olympics are traditionally held to have ended when this Roman Emperor banned them in 392 CE, although he was more interested in stamping out pagan practices in general than the games per se. This emperor was the last to rule both the Eastern and Western empires.

ANSWER: **Theodosius I** [or **Theodosius the Great**; prompt on **Theodosius**] <Edited>

2. Answer the following about vacuum tubes in physics for 10 points each:

[10] This experiment accelerated electrons through mercury vapor in a vacuum tube, showing a drop in the collected current at each 4.9 Volt interval of accelerating voltage. It provided evidence for the Bohr model of the atom.

ANSWER: **Franck-Hertz** experiment

[10] Perhaps the most kind of vacuum tube is this one which was used in computer monitors. It evolved out of Crookes tubes and consists of negative electrodes firing electrons at a phosphorescent screen.

ANSWER: **cathode ray tube** [or **CRT**]

[10] Stanford's Russell Varian realized a Hansen rumbatron could be used to modulate the speed of the electrons in these devices after he had a dream about cars moving on a freeway. These devices, whose name comes from the Greek for waves hitting the shore, were the first practical way to produce microwave radiation.

ANSWER: **klystron**

3. In this author's story "Bezhi Lea," Pavlusha drives away what may be a pack of wolves, but it's later revealed that he has died after falling off a horse. For 10 points each:

[10] Name this author who collected anti-serfdom impressions of the countryside in *A Sportsman's Sketches*. He wrote *Fathers and Sons*.

ANSWER: Ivan **Turgenev**

[10] The title character of one of the *Sportsman's Sketches*, "Kasyan from the Beautiful Lands" is one of these people who spends his days catching nightingales. One of these people titles a Swedish novel where he strangles a rival named Jehosophat to become the only person of his kind at the Prince's court.

ANSWER: a **dwarf**

[10] This author's essay "Turgenev and the Liberal Predicament" clarifies the role of social consciousness in Turgenev's writings, emphasizing the influence of Vissarion Belinsky. This author's collection *Against the Current* profiles Alexander Herzen among other dissenting figures.

ANSWER: Isaiah **Berlin**

4. Iskandar Jalil revivalist art in this medium in his home country after returning from Tajimi, Japan, which is known for producing Oribe and Seto style works. For 10 points each:

[10] Identify this type of material, examples of which that are used for pottery include porcelain and terracotta.

ANSWER: **ceramics**

[10] Bernard Leach, a major figure in British studio pottery, founded his namesake Pottery with Shoji Hamada. The Leach Pottery is in this British county, which is also home to the now defunct Troika Pottery.

ANSWER: **Cornwall**

[10] Ancient Greek vase painting primarily used these two colors to depict the figures and background. During the 3rd century BC, which of these two colours was usually used to show figures and which was used to depict the backgrounds swapped. Vases that show the figures in both of these colours are called bilingual.

ANSWER: **red** and **black** <Edited>

5. A section of this book describes how a "male and female, heterosexual and homosexual" Mick Jagger "could enter everyone's dreams." For 10 points each:

[10] Name this polemic by Allan Bloom, which opens with a profile of rock music-loving students "who populate the twenty or thirty best universities" in the country.

ANSWER: *The **Closing of the American Mind**: How Higher Education Has Failed Democracy and Impoverished the Souls of Today's Students*

[10] This man wrote an introduction to *The Closing of the American Mind* and his son Adam co-edited a collection of 16 recent essays responding to it. This Nobel winner based his character of *Ravelstein* on Bloom.

ANSWER: Saul **Bellow** [or Solomon **Bellows**]

[10] A chapter in *The Closing of the American Mind* traces the evolution of philosophy from Socrates' *Apology* to an inaugural speech by this philosopher given at Freiburg University that asserts, "science must become the power that shapes the body of the German university."

ANSWER: Martin **Heidegger** [the speech is Heidegger's "Rektorsrede"] <Edited>

6. Adam Kirsch asked "has there ever been a statelier elegy for Christianity than [this poem]"? For 10 points each:

[10] Identify this poem about a woman who, during the title time period, hears "a voice that cries, 'The tomb in Palestine / Is not the porch of spirits lingering. It is the grave of Jesus, where he lay'".

ANSWER: "**Sunday Morning**"

[10] "Sunday Morning" was written by this American poet of "Peter Quince at the Clavier" and "The Emperor of Ice Cream."

ANSWER: Wallace **Stevens**

[10] Thanks to Wallace's landlady, one of the few drafts of his poems which survives is for "The Comedian as Letter C." The second section of that poem is titled for thunderstorms in *this* place and contains the line, "How greatly had he grown in his demesne, / This auditor of insects!"

ANSWER: the **Yucatan**

7. Features produced when the continental variety of these bodies plow over mounds of sediment are called drumlins. For 10 points each:

[10] Identify these features, which form when accumulation of snow exceeds ablation and which push piles of sediment after them known as terminal moraines.

ANSWER: (continental) **glaciers**

[10] When continental glaciers calve over the sea they form icebergs, but when they calve on land they form these holes. When the ice melts they can become lakes or bogs with the same name.

ANSWER: **kettle** hole [or **kettle** lake; or **kettle** bog]

[10] Mountain peaks or parts of rock formations that stick above the surface of the ice are known by this Inuit-derived term.

ANSWER: **nunatak**

8. Hitler banned this script in 1941 for supposedly being "Jewish" and because the people he conquered had trouble reading documents printed in it. For 10 points each:

[10] Identify this script, sometimes referred to as "Gothic." In the nineteenth and early twentieth centuries, German speakers debated the merits of this script, known for its broken letters, relative to the Antiqua script.

ANSWER: **Fraktur** [prompt on **blackletter** or **gebrochene Schrift**]

[10] This German used a script related to Fraktur in his namesake Bibles, the first books to be mass-produced by the printing press that he invented.

ANSWER: Johannes **Gutenberg**

[10] Fraktur and other blackletter fonts used the "long" form of this letter, which resembles an f without the bar, everywhere except at the end of words. In German, a special glyph is sometimes used when this letter is doubled.

ANSWER: **S** <Edited>

9. Identify the following about the Leclerc Expedition, for 10 points each.

[10] Charles Victor Emmanuel Leclerc was dispatched by Napoleon to suppress a rebellion led by Toussaint L'Ouverture in this modern-day country, known at the time as Saint-Domingue.

ANSWER: **Haiti**

[10] One of Leclerc's lieutenants in the campaign was a French soldier with this surname who allegedly unleashed his war dogs on rebels. A Frenchman with this surname led troops to victory after marching south from White Plains and was supported by countryman Admiral de Grasse.

ANSWER: **Rochambeau**

[10] Leclerc, like most of his men, ultimately succumbed to yellow fever. In a fit of depression, this wife of Leclerc cut off her hair and placed it in the coffin. She'd remarry Prince Camillo of the Borghese family in 1803.

ANSWER: **Pauline** Bonaparte [or **Pauline** Borghese; or Maria **Paola** Buonaparte] <Edited>

10. The ritual of *ṭawāf*, which takes place during the Hajj, consists of walking in a circle inside this building. For 10 points each:

[10] Provide the Arabic name for the grand mosque of Mecca, the largest mosque in the world.

ANSWER: al-Masjid al-**Harām**

[10] Within the Masjid al-Ḥarām, pilgrims circle around this black, cubic building, which contains the Black Stone. When performing ritual prayer, Muslims face the *qibla*, the direction of this holiest site in Islam.

ANSWER: **Kaaba**

[10] The Masjid al-Ḥarām also contains these two hills. Pilgrims commemorate Hagar's search for water by walking between these two hills seven times. Name either.

ANSWER: aṣ-**Safā** OR al-**Marwah** <Edited>

11. Regular cells can be transformed into pluripotent types of these cells by the expression of certain transcription factors, first discovered by Shinya Yamanaka. For 10 points each:

[10] Name these cells with the capability of differentiating into multiple different cell types. The "potency" of these cells determines the range of cell types. The use of the "embryonic" type of these cells from humans is still controversial.

ANSWER: **stem** cell [accept pluripotent **stem** cells or embryonic **stem** cells]

[10] This Yamanaka factor used to reprogram cells into pluripotent stem cells is an oncogene found in many cancers. It was first discovered along the chromosome 8/14 translocation found in Burkitt's Lymphoma.

ANSWER: c-**Myc**

[10] The pluripotency of stem cells is largely controlled by this RNA-binding protein and inhibitor of let-7. This protein uniquely has both a cold shock domain and a CCHC zinc knuckle domain.

ANSWER: **Lin28**

12. This man described how he broke from Communism when he was feeding his infant daughter porridge and realized that her ear had to have been created by someone. For 10 points each:

[10] Identify this man, the first person profiled in Daniel Oppenheimer's book, *Exit Right: The People Who Left the Left and Reshaped the American Century*. As a witness, he presented the Pumpkin Papers to HUAC.

ANSWER: Whittaker **Chambers** [or Jay Vivian **Chambers**; or Jay David Whittaker **Chambers**]

[10] Whittaker Chambers was a star witness in the trial of this man, who was accused of being a Soviet spy. This man, whom Joan Brady called "America's Dreyfus" in a recent biography, ultimately went to jail on perjury charges.

ANSWER: Alger **Hiss**

[10] One of this British-born journalist's earliest books was a profile of the trial of Alger Hiss. This journalist, the host of PBS's *Masterpiece Theater* for 22 years, hosted *Letter from America* on the BBC until his death.

ANSWER: Alistair **Cooke** <Edited>

13. In this play, a man lies about the title character being sick with smallpox after forbidding her from attending a play. For 10 points each:

[10] Identify this comedy by William Wycherley in which Mr. Horner pretends that he's impotent in order to make a cuckold of men such as Sir Jasper Fidget.

ANSWER: The *Country Wife*

[10] Wycherley's *The Country Wife* is an archetypal example of the comedy produced during this period of English history. John Dryden's *Marriage a la Mode* is another play from this period.

ANSWER: the English Restoration of Charles II

[10] One of the more successful dramas to emerge from the Restoration was this blank verse play by Thomas Otway. At a critical point in this play, Pierre convinces his former friend Jaffier to stab him.

ANSWER: *Venice Preserv'd*

14. When the author of this philosophical text was asked if he ever read novels he replied "Oh yes. All six, every year," and this text's most famous notion was explored in Ofra Magidor's book *Category Mistakes*. For 10 points each:

[10] Identify this text, which introduced the idea of category-mistakes. This text also developed its author's earlier notion of the distinction between "knowing how" and "knowing that."

ANSWER: The *Concept of Mind*

[10] In *The Concept of Mind*, Gilbert Ryle attacked this philosopher's idea of mind-body dualism, which Ryle characterized as "the ghost in the machine." This philosopher described an evil demon in his *Meditations*.

ANSWER: Rene Descartes

[10] In *The Concept of Mind*, Ryle targeted a view derived from Cartesian dualism that he gave this name. Ryle called an offshoot of this view the "Intellectualist Legend", which asserts that to distinguish perceptually similar acts requires making the category-error of the addition of non-perceptual features.

ANSWER: the Official Doctrine

15. Wolfgang Kemp called this a "post-history" painting, and it was supposedly the most popular painting in Victorian England, inspiring a play of the same name by Casimir Delavigne. For 10 points each:

[10] Identify this Paul Delaroche painting where the title children wait nervously as a menacing shadow can be seen from underneath the door. It's set during the Wars of the Roses.

ANSWER: The *Princes in the Tower* [or the *Children of Edward* or *Edward V and the Duke of York in the Tower*]

[10] One of these animals stares at the door in *The Princes in the Tower*. Another of these animals, representing fidelity, is at the feet of the title couple in *The Arnolfini Wedding*.

ANSWER: a dog

[10] When a Delaroche painting of this woman was first exhibited at the 1834, it attracted so much attention it nearly caused a riot. In Delaroche's painting, this woman has a white blindfold over her eyes, and the executioner, with his axe resting on the floor, looks impatiently on from the right of the scene.

ANSWER: Lady Jane Grey <Edited>

16. Although he works as an insurance agent by day, at night this “libertarian hedonist” orders his second wife Dona Lucrecia to enter erotic role playing scenarios inspired by paintings by Boucher and Titian. For 10 points each:

[10] Identify this title character of a 1997 erotic novel, which follows up on a novel published ten years earlier under the title *In Praise of the Stepmother*.

ANSWER: Don **Rigoberto**

[10] *The Notebooks of Don Rigoberto* was written by this Peruvian Nobel laureate of *Aunt Julia and the Scriptwriter*.

ANSWER: Mario **Vargas Llosa**

[10] This character from *Aunt Julia and the Scriptwriter* wins over the audiences of Lima with his repetitive soap operas in which most of the villains turn out to be Argentinians. This character is committed to an insane asylum after killing off all of his creations.

ANSWER: **Pedro** Camacho [or Pedro **Camacho**]

17. This dynasty took increasing interest in the Western Regions, or Xiyu [shee-yoo], during its wars with the Xiongnu [shung-noo] people. For 10 points each:

[10] Name this Chinese dynasty whose emperor Wudi sent a military expedition to the west in search of “blood-sweating” heavenly horses.

ANSWER: **Han**

[10] Emperor Wu first heard of the “blood-sweating” horses of Dayuan through the words of this explorer, who traveled along the Silk Road and recorded interactions with diverse peoples such as the Greeks and Yuezhi.

ANSWER: **Zhang** Qian [or Explorer **Zhang**; VOWELS MATTER on this question, as you should NOT accept “Zhong” or “Zheng” or “Zheng He” as those are completely wrong answers - if necessary, ask the player to give the Pinyin or common English spelling of the answer]

[10] Zhang gave the name “Anxi” to this western empire, which is probably his transliteration of the name of its ruling dynasty, the Arsacids.

ANSWER: **Parthian** empire [or **Parthava**; prompt on Persians due to ambiguity] <Edited>

18. This man proposed a “cognitive infiltration” of extremist groups in a 2008 article co-written with Adrian Vermeule analyzing conspiracy theories. For 10 points each:

[10] Name this “regulatory czar” under Barack Obama, who co-wrote *Nudge: Improving Decisions About Health, Wealth, and Happiness* with Richard H. Thaler.

ANSWER: Cass **Sunstein** [or Cass Robert **Sunstein**]

[10] The concepts of Reflective vs. Automation System that humans use to make decisions are expounded as System 1 and System 2 in this popular 2011 book by Daniel Kahneman. Its chapter “Linda: Less is More” gives an example of how people were more likely to think that bank teller Linda was a feminist.

ANSWER: ***Thinking, Fast and Slow***

[10] Kahneman is a pioneer in this branch of economics, which examines the roles of framing and heuristics used by decision-makers.

ANSWER: **behavioral** economics <Edited>

19. The addition of carbenes to alkenes can occur in two different mechanisms due varying values of this quantity, with one species being stereospecific and the other being stereoselective. For 10 points each, [10] Name this quantity which is the number of possible orientations of the spin angular momentum of a system which is generally equal to $2S + 1$.

ANSWER: spin **multiplicity** [do NOT accept or prompt on **spin**]

[10] According to this rule, the lowest energy electron configuration is the one with the highest multiplicity. This rule, discovered by a German, is used in conjunction with the Aufbau rule to predict electronic configuration of atoms.

ANSWER: **Hund's** rule

[10] The filling of atomic orbitals can be visualized using this spiral version of the periodic table. The circular center represents the s and p orbitals and there are two rectangular extensions for the d and f orbitals.

ANSWER: **Benfey's** spiral periodic table

20. This composer, who fought in the Abraham Lincoln Brigade in the Spanish Civil War, received a MacArthur award in 1982, granting him such publicity that he actually started composing for conventional instruments. For 10 points each:

[10] Identify this composer of the *Boogie-Woogie Suite*. Many of his works experimented with changing around the tempo/

ANSWER: Conlon **Nancarrow** [or Samuel Conlon **Nancarrow**]

[10] Nancarrow fled to this country in 1940. Carlos Chavez, a composer from this country, used Yaqui instruments for his *Sinfonia india*. Mariachi music originated here.

ANSWER: **Mexico**

[10] In part because he couldn't find skilled musicians to play his compositions in Mexico, Nancarrow composed about fifty studies for this instrument. Nancarrow's works for this instrument use eccentric tempos such as 2 against the square root of 2.

ANSWER: **player piano** [or **piano rolls**; prompt on **piano**]

EXTRA BONUSES

1. A book titled for this class of people laid out the author's intent "to rescue the poor stockinger, the Luddite cropper" and others "from the enormous condescension of posterity". For 10 points each:

[10] Identify this group of people. Historian E. P. Thompson wrote a book about the "Making" of these people.

ANSWER: English **Working** Class

[10] Contrary to historians who followed the teachings of this man, Thompson did not believe that it was not inevitable that the English working class would improve their social conditions in the 19th century.

This German wrote the so-called "Bible of the working class", *Das Kapital*.

ANSWER: Karl **Marx**

[10] *The Making of the English Working Class* profiles followers of this prophetess, who left behind a namesake box which could only be opened in the presence of all 24 bishops of the Church of England during national emergencies.

ANSWER: Joanna **Southcott** <Edited>

2. This structure was influenced by Roman Baths and contained a statue of its designer, the brother of Mary Cassatt. For 10 points each:

[10] Name this structure demolished and redesigned in 1963, a beaux-arts style transportation hub designed by McKim, Mead and White Architects.

ANSWER: **Pennsylvania Station**

[10] McKim, Mead and White Architects' Pennsylvania Station was located in this city, also home to the Eero Saarinen-designed TWA flight terminal.

ANSWER: **New York** City

[10] Terminal 8 at New York's JFK airport was designed by an American architect with this surname, in conjunction with Robert Jacobs. Another architect with this last name, who designed the Yale Art Gallery, used reinforced concrete to create massive circles on the upper levels of the atrium of the Phillips Exeter Academy Library.

ANSWER: **Kahn** (Ely and Louis) <Edited>