

2020 WORKSHOP: We Oughtta pRopose aKronymS aHead Of Ptime

Produced by Jacob Reed, Alex Damisch, Adam S. Fine, Will Holub-Moorman, Olivia Lamberti, Olivia Murton, Jakob Myers, and Kevin Wang

Packet 14

Tossups

1. **During this observance, Indonesians often eat a fruity shaved ice called *es campur* and a dessert made of palm sugar, coconut milk, and *pandan* leaf, called *kolak*. In parts of Southeast Asia, the *kentongan* slit drum replaces the use of a *mesaharati* during this observance. Supposedly, during this observance, demons are chained up and the gates of Hell are locked. The main part of this observance begins when one can tell apart (*) white and black threads. Three dates are traditionally eaten to start one meal during this observance, during which many recite the extra *tarawih* prayers. The main meals of this observance are the predawn *suhur* and the evening *iftar*. The end of this period is marked by ‘Eid al-Fitr. The Islamic pillar of *sawm* requires fasting during—for 10 points—what month?**

ANSWER: **Ramadan** [or **Ramzan**; prompt on fasting by asking “When?”; accept sawm until mentioned; accept iftar until mentioned] <GH>

2. **A neo-Western from this country stars Udo Kier as the leader of a militia that kills inhabitants of the title town, garnering comparisons to an earlier film from this country titled *How Tasty Was My Little Frenchman*. In this country, a firestorm was sparked by the political activism of the cast and director during the release of the 2016 film *Aquarius*. A musician from this country frequently plays diegetic [die-uh-JEH-tik] David Bowie covers in Wes Anderson’s *The Life Aquatic*. A film from this country opens with a man chasing a chicken into a standoff between gang members and police, before he decides to publish a (*) photo of a dead teenager in the newspaper. The Runts kill Li'l Zé in the title neighborhood in a 2006 film from this country. *City of God* is set in the *favelas* of—for 10 points—what South American country?**

ANSWER: Federative Republic of **Brazil** [or República Federativa do **Brasil**] (The leadin refers to *Bacurau*.) <ES>

3. **In one part of this book, the protagonist witnesses two green angels drive away a serpent attacking a flowery valley, after which he meets a figure seated on the top of three steps. The protagonist of this book meets people who are so emaciated, their faces look like they say “OMO.” Near the end of this book, the protagonist passes through intense flames populated by souls calling the names Pasiphaë and Sodom, after which he is bathed by (*) Matilda. This poem, which begins on Easter Sunday, is a continuation of a journey that begins on Maundy Thursday. Seven Ps appear on the protagonist’s forehead in this poem and are slowly erased as he scales a mountain with seven cornices representing the seven deadly sins. For 10 points, name this epic poem, the second part of the *Divine Comedy* by Dante.**

ANSWER: **Purgatorio** [or **Purgatory**; prompt on Divine Comedy until read] <EA>

4. **The group named for this quantity is defined such that there exists a short exact sequence from Z^2 to this group to $SO(n)$. On femtosecond time scales, heat transfer between an electron bath, a lattice bath, and a bath named for this quantity can be observed in an excited ferromagnetic thin film. Objects named for this quantity aren’t invariant under 360-degree (*) rotation, but are under 720-degree rotation. Fine and hyperfine structure arise from the fact that electrons and nuclei have nonzero values for this quantity that couples to a particle’s orbit. This quantity is the “intrinsic” angular momentum of particles, since all particles have either an integer or half-integer value for it. For 10 points, name this quantity that can either be one-half or minus-one-half for electrons.**

ANSWER: **spin** [accept **spinors**; accept **spin group**; prompt on angular momentum before mentioned] <VD>

5. **This leader attacked a system that issued “Persil cards” to citizens of his country who passed a questionnaire for entry to civil service jobs. This leader’s “West Binding” policy made him one of the top recipients of American aid. During this man’s administration, federal minister of defense Franz Joseph Strauss accused a magazine of treason after it published a memo detailing the unpreparedness of the army in the (*) *Der Spiegel* affair. This man formed a coalition with the Free Democratic Party, whose leader, Ludwig Erhard, designed the “social market economy”, resulting in a rapid economic recovery. For 10 points, name this Christian Democrat, the first post World War II chancellor of West Germany.**

ANSWER: Konrad Adenauer <KRA>

6. **In 2014, this city converted the area between two traffic islands into a public art installation created by Kim Abeles that commemorates prominent figures in the Civil Rights movement. This city is home to an annual event in honor of Martin Luther King Jr. called the Kingdom Day Parade. It’s not New Orleans, but that event takes place in this city’s Crenshaw district, where Coliseum Street became home to a large post-World War II (*) Japanese-American community. Protests in this city after the police shooting of Ezell Ford were centered in a predominantly black and Latino area formerly called “South-Central,” which contains the neighborhoods of Exposition Park and Watts. For 10 points, name this Southern California city that is home to Hollywood.**

ANSWER: Los Angeles [or L.A.] <WG>

7. *Note to moderator: Read the whole answerline before judging an answer.*

Description acceptable. **State of the art results for this task were achieved in a 2018 Google AI Perception paper using a CLDNN architecture trained with Bézier [BEH-zee-ay] curves on the IAM-OnDB dataset. Training a neural network for this task on the MNIST [“M”-nist] dataset is often used as an introduction to TensorFlow. Inputs to this task are deskewed and resized before passing them to the programs CuneiForm or Tesseract. Advanced systems for this task preserve layout in the output, and constraining the output with a (*) dictionary improves the accuracy of this task. Human input assists algorithms that perform this task in the re-CAPTCHA system, and the original CAPTCHA took advantage of the difficulty of this task. This task is done to scanned books to create eBooks. For 10 points, name this task that converts images of text into text files.**

ANSWER: optical character recognition [or OCR; accept answers indicating the recognition of words, numbers, characters, or handwriting; prompt on computer vision; prompt on recognition of gestures, patterns, or images with “What is being recognized?”; prompt on classification with “What is being classified?”] <JS>

8. **At a facility for people with this condition, a man recommends reading *The Call of the Wild* after mentioning that Jack London used to live nearby. That character is Frank Martin, who runs a facility for people with this condition. In a novel, the death of one character with this condition in an apt location leads to his wife marrying the Conte di Minghetti. While in France, a woman wonders what (*) Abe North’s wife thinks of him having this condition. In that novel, a character develops this condition after becoming the partial owner of a facility in Switzerland. That psychiatrist with this condition pines after the young actress Rosemary Hoyt and is married to Nicole. For 10 points, name this condition that leads to the demise of Dick Diver’s marriage in F. Scott Fitzgerald’s novel *Tender is the Night*.**

ANSWER: alcoholism [accept drunkness; accept obvious equivalents] (the first clues are from “Where I’m Calling From”) <CM>

9. A suite by this composer was first recorded in its original orchestration by Charles Mackerras in 1959. This composer wrote a set of variations whose theme begins with the notes [read slowly] “E, G-sharp, F-sharp, high-B.” Two French horns prominently feature in an F-major orchestral suite by this composer that’s collected with a trumpet-heavy suite in D and a flute-heavy suite in G. Like Corelli, this composer’s Opus 6 is a set of twelve (*) concerti grossi. A suite by this composer calls for 12 bassoons and 24 oboes. This composer of “The Arrival of the Queen of Sheba” and “The Harmonious Blacksmith” included an “alla hornpipe” in a piece that premiered on a barge on the River Thames. For 10 points, name this Baroque composer of *Music for the Royal Fireworks* and *Water Music*.

ANSWER: George Frideric Handel <EL>

10. According to one legend, this figure covered Rome’s Esquiline Hill with snow in August in order to signal that a church should be built there. In another legend, the blossoming of a rod that was brought to the Temple indicated this figure’s future spouse. A text attributed to this figure declares “He hath shewed strength with his arm: he hath scattered the proud in the imagination of their hearts.” That canticle attributed to this figure is paired with the (*) *Nunc Dimittis* during evening offices. In Luke 1, this figure declares “My soul doth magnify the Lord,” who “hath regarded the lowliness of his handmaiden.” A popular prayer describes this daughter of Saints Joachim and Anne as “full of grace.” For 10 points, name this mother of Jesus.

ANSWER: Virgin Mary [accept either; accept Our Lady of the Snows] <MB>

11. This city’s women-only Zenana Park is named for areas of women’s seclusion at its medieval court. Immediately after leaving this city with a large caravan of gifts, Ibn Battuta was robbed and held prisoner in a cave, only escaping by bribing guards with his clothes. One queen who ruled from this city failed to suppress a rebellion by marrying the rebel leader, Malik Altunia. That leader who ruled from this city wore men’s clothes to legitimize her rule after succeeding her father, (*) Iltumish. During a famine in 1877, one ruler organized a massive “durbar” in it to celebrate her accession to the throne. Dynasties like the Burji and Khilji ruled from, for 10 points, what city where Queen Victoria was declared an Empress and Razia Sultana ruled a medieval Turkic sultanate that controlled most of Northern India?

ANSWER: Delhi <JM>

12. The Italian city of Venafrum was famous for producing this good, and the island of Olynthus introduced a major innovation in its processing. Machines used to extract this good included the *trapetum* and the *prelum*, and before its final form it was processed into a mixture called *amurca*. An instrument called a *strigil* was used in conjunction with this good at ancient (*) gymnasia. Massive amounts of this good were used to reward the winners of the Panathenaic Games. Thales of Miletus once bought out every producer of this good in his home city to corner the market. Olympic athletes used baths in this good to prepare themselves for competition. For 10 points, name this good made by pressing a fruit that comes in varieties like *kalamata*.

ANSWER: olive oil [accept *elaio*, *oleum*] <JM>

13. In one painting, these objects appear just above inscriptions like “VITA SINE MORTE IN CAPITE” on the hem of a red robe. These objects decorate the word “Sabaoth” [sah-BAY-oth] and a Greek inscription that translates to “King of Kings, and Lord of Lords” in the upper central panel of the *Ghent Altarpiece*. In a 1664 painting, a woman in a yellow fur coat looks out the window while holding up an object made of these things. The same artist unusually used a (*) near-black background for a *tronie* [TROH-nee] painting titled for one of these things, which shows a red-lipped woman who wears a white-collared yellow shirt and a blue turban with a yellow-and-blue tassel, as well as one of these things. A girl in a Vermeer painting wears a large earring made of—for 10 points—what precious object?

ANSWER: pearls [prompt on necklaces or earrings by asking “What’s it made of?”; prompt on jewelry, gems, stones and similar answers] (The 1664 painting is *Woman with a Pearl Necklace*.) <WG>

14. A work in this tradition tells the story of a frustrated artist flinging a sponge at a painting of a horse. The final book of Hume's *Enquiry* distinguishes between several types of this philosophical tradition. Thinkers in this tradition often invoke the Agrippan trilemma, by which arguments lead to circularity, infinite regress, or dogmatic axioms. Edmund Husserl borrowed a term for "bracketing off," or (*) *epoché*, from this tradition. Carneades founded an "Academic" branch of this tradition. Like the Epicureans and Stoics, this school advocated suspending judgment to achieve *ataraxia*. Ten "modes" of this tradition were given in the *Outlines of Pyrrhonism* of Sextus Empiricus. For 10 points, name this school that doubts the possibility of certain knowledge.

ANSWER: skepticism [accept Academic skepticism; accept Pyrrhonism until mentioned] <VS>

15. This author wrote about Beatrice poisoning her abusive husband Eugene in a novel narrated by their daughter, Kambili. At the end of a novel by this author, a man who is deported before he finishes arranging his green-card marriage with Cleotilde is told "Ceiling, come in" when he shows up on the protagonist's doorstep. Several chapters of a novel by this author end with excerpts from *The World Was Silent When we Died*, a history by its protagonist's (*) houseboy. In another novel by this author, a Princeton fellow dumps her boyfriend Blaine and quits running her blog "Raceteenth." In a novel by this author of *We Should All Be Feminists*, Ifemelu reunites with Obinze after moving back to Lagos. For 10 points, name this Nigerian author of *Purple Hibiscus*, *Half of a Yellow Sun*, and *Americanah*.

ANSWER: Chimamanda Ngozi Adichie <CMA>

16. When analyzing a series of reactions, this quantity is decomposed into a constant term and a variable term that's proportional to the difference between the temperature and the "iso-equilibrium" temperature beta. Plotting the acidity of benzoic acid derivatives against the substituents' sigma parameters exemplifies a family of relationships named for this quantity. This quantity can be computed by performing (*) *two* Legendre transforms on the internal energy. The Hammett plot is an example of linear relationships named for this quantity. This thermodynamic potential's natural variables are temperature and pressure, making it convenient for chemical applications. For 10 points, name this quantity whose sign determines the spontaneity of reactions, symbolized G.

ANSWER: Gibbs free energy [prompt on potential energy with "What thermodynamic potential is most often used to analyze these situations?"; prompt on G until mentioned; do NOT accept or prompt on Helmholtz free energy] <VD>

17. Kimura and Weiss modeled this behavior on a lattice of "stones" to simplify the calculation of the gametic kinship chain using the probability of this behavior. The Argos system collects data from PSATs after they pop up to study this process. Observations of the deep scattering layer throughout the day led to the discovery that one form of this behavior occurs within the water column. Malecot described the decrease in (*) kinship coefficient due to this behavior, which Sewall Wright believed promoted genetic isolation by increasing geographical distance. Changes in rainfall drive a famous circular form of this behavior in the Serengeti and Masai Mara. Loss of stopover habitats is threatening birds undergoing—for 10 points—what long-distance animal movement?

ANSWER: migration [accept diel or diurnal vertical migration; prompt on movement or stepping; do NOT accept or prompt on "immigration" or "emigration"] <JS>

18. **One of Greenbury L. Fort's two bills to limit access to this resource was pocket vetoed by Ulysses S. Grant in 1874. Grand Duke Alexis of Russia celebrated his birthday in America by collecting this resource. The Battle of Massacre Canyon was fought over access to this resource, which was collected at places called "deep blood kettles." Theodore Roosevelt commissioned a design for the (*) nickel depicting this resource and established a reserve in the Wichita Mountains close to where soldiers from Fort Hays would collect it. The Cree surname "Poundmaker" derives from a method of collecting this resource, which was collected by driving it off cliffs called "pishkun" and was then often processed into pemmican. For 10 points, name this animal, the national mammal of the United States.**

ANSWER: **bison** [accept bison **bison**, prompt on **buffalo** alone, accept **American buffalo**, accept answers relating to the **pelt** or **fur** or **meat** of any of the above, prompt on **pelt** or **fur** or **meat**] <GE>

19. **One of this poet's speakers grows "as weary hearted as that hollow moon" after he "[talks] of poetry" with a "beautiful mild woman." Another of this poet's speakers remarks that his love "taught to ignorant men most violent ways" before asking "Was there another Troy for her to burn?" This poet of "Adam's Curse" "[numbers] in song" a (*) "drunken, vain-glorious lout" who "has resigned his part/In the casual comedy." In that poem, this writer mentions a woman who spent "nights in argument/until her voice grew shrill" after saying "polite meaningless words." This poet mourns the death of John MacBride and James Connolly in that poem which repeats the line "A terrible beauty is born." For 10 points, name this unrequited lover of Maud Gonne, an Irish poet who wrote "Easter, 1916."**

ANSWER: William Butler **Yeats** <ES>

20. **A recent book whose subtitle contains *this* two-word concept incorporates an analysis of the novel *Danny Dunn and the Homework Machine*. That book analyzing this concept on the "making of millennials" is *Kids These Days* by Malcolm Harris. A regression equation developed by Jacob Mincer determines rates of return for this concept. Paul Romer divided this concept into three categories: (*) physical, educational, and scientific, all of which are incorporated into the total production function. According to the 1964 book by Gary Becker that popularized this two-word concept, examples of it include vitamin consumption, medical care, and on-the-job training, which are all forms of investment that "embed" resources in people. For 10 points, name this two-word concept that refers to the value of the skills and knowledge gained by workers through education.**

ANSWER: **human capital** [prompt on **capital**; do not accept "social capital" or "cultural capital"] <GE>

2020 WORKSHOP

Packet 14

Bonuses

1. Courts called swainmotes presided over these places, several of which had their extents reduced by a series of Perambulations in the late 13th and early 14th centuries. For 10 points each:

[10] Name these places, of which only Dean, Epping, and New survive today. The aforementioned charter named for these places was frequently paired with the Magna Carta as “the charters of liberties”.

ANSWER: Royal **Forests** [accept **Kingswoods**]

[10] Along with many other forests in Northern Europe, English forests were frequently cut down to provide timber for a late medieval boom in this Adriatic Sea city-state’s ship production.

ANSWER: Republic of **Venice** [accept Serenissima Repubblica di **Venezia**]

[10] This 17th century English jurist and author of the Petition of Right, with his 18th-century successor William Blackstone, was largely responsible for reinterpreting the Forest Charter as part of a tradition of English liberty.

ANSWER: Sir Edward **Coke** <JM>

2. Users of this framework can append an “x” to their file extensions to use an XML-like markup language as part of their code. For 10 points each:

[10] Name this framework maintained by Facebook. Props are passed into components in this framework’s document object model, which are then displayed by calling render methods.

ANSWER: **React** [accept **React DOM** or **React Native**; accept, but do not reveal, **React.js**]

[10] React is a common framework for this language, which is used with HTML and CSS to create web interfaces. This language was intentionally named similarly to a Sun Microsystems language to try to piggyback on its success.

ANSWER: **Javascript** [or **JS**; do NOT accept or prompt on “Java”]

[10] Though designed to make UI easier, React doesn’t change how developers deal with this similar concept. This concept describes how an interface feels to use, rather than how it looks.

ANSWER: **UX** [or **user experience**; accept **user experience design** or **UXD**] <KW>

3. The island of Mbamu sits in the middle of this body of water, which is the northern terminus of a railroad to the ports of Matadi and Pointe-Noire because of rapids downstream from it. For 10 points each:

[10] Name this lake-like expansion of a river that separates the two closest-together capital cities in the world.

ANSWER: **Malebo Pool** [accept **Lake Nkunda**, **Stanley Pool**]

[10] These TWO cities are those close-together capitals. One of them was formerly named for King Leopold II of Belgium, while another is named for an Italian explorer who claimed the region for France. Name *both* cities.

ANSWER: **Kinshasa** and **Brazzaville** [accept in either order]

[10] Kinshasa and Brazzaville are separated by this river, the namesake of the two countries that Kinshasa and Brazzaville serve as capitals for.

ANSWER: **Congo** River <JM>

4. Many of this city's postwar hotels were built in a namesake "Modern" style that adds "playful" color and ornaments to the International Style. For 10 points each:

[10] Name this city where a Spanish Renaissance Revival style was used for the white-and-yellow Freedom Tower. Its more recent buildings include a high-rise condo called One Thousand Museum.

ANSWER: **Miami** [accept **Miami Modern** or **MiMo**]

[10] One Thousand Museum was one of the last projects designed by *this* architect, who died in 2016. This architect also designed the MAXXI Museum in Rome and the Aquatics Center built for the 2012 London Olympics.

ANSWER: Zaha (Mohammad) **Hadid**

[10] Hadid also designed an opera house in the south of *this* country. For the 2008 Olympics, a stadium called the "Bird's Nest" was designed for this country's capital by a team including Ài Wèiwèi.

ANSWER: People's Republic of **China** [or **PRC**; or **Zhōngguó Rénmín Gònghéguó**; do not accept or prompt on "Republic of China"] <WG>

5. While at this location, the speaker of a poem tells a stranger to commit "no fraud upon the dead" and instructs them to observe things like "an aged elm" and "the swelling turf." For 10 points each:

[10] Name this location where, according to that same poem, "Reason's self shall bow the knee / To shadows and delusions."

ANSWER: the **Indian burying ground** [prompt on cemetery or graveyard]

[10] "The Indian Burying Ground" is a poem by this American writer, who described a flower "that dost so comely grow" and gets attacked by "unpitying frosts and Autumn's power" in his poem "The Wild Honeysuckle."

ANSWER: Philip (Morin) **Freneau**

[10] Freneau is often called the poet of this war. In a poem by Freneau set during this war, the narrator calls the British empire a "selfish race from the world disjoin'd" while stuck on the Delaware River aboard a prison ship.

ANSWER: American **Revolutionary** War [or American War for **Independence**] <EA>

6. These things have a "dignitary" category that has been mostly abolished in the US legal system and includes "criminal conversation", a euphemism for adulterous sex. For 10 points each:

[10] Name these legal injuries, other examples of which include conversion, defamation, and nuisance.

ANSWER: **torts**

[10] A 1928 holding by the Supreme Court ruled that this company was not liable for a tort of negligence against Helen Palsgraf, because the harm its employees caused her was unforeseeable.

ANSWER: **Long Island Railroad** Company [accept **LIRR**, *Palsgraf v. Long Island Railroad Co.*]

[10] Along with property law and contract law, tort law is a component of this broad area of the common law which refers to all non-criminal law.

ANSWER: **civil** law <CS>

7. This protein is produced by astroglia and microglia in the central nervous system, where it serves as the primary cholesterol carrier. For 10 points:

[10] Name this protein that interacts with the LDL receptor to regulate lipid transport. Isoform 3 of this protein is considered to have normal function.

ANSWER: **ApoE** [or **apolipoprotein E**; accept **ApoE3** or **ApoE4**; prompt on apolipoprotein or apo]

[10] ApoE4 is the largest known risk factor for the late-onset sporadic variant of this neurodegenerative disorder. This disease is responsible for most cases of dementia and results in beta-amyloid plaques and tau tangles.

ANSWER: **Alzheimer's** disease

[10] Huntington's disease, another neurodegenerative disorder, occurs when mutations expand the number of *these* structures in the HTT gene, forming a polyglutamine tract. Similar duplications can result in fragile X syndrome.

ANSWER: **trinucleotide** repeat expansion [or **triplet** repeat expansion; accept **trinucleotide repeat disorder**] <AR>

8. In one painting, this figure's outstretched arms imitate early images of the Madonna. For 10 points each:

[10] Name this allegorical figure, who kneels on a pile of rubble with a hand sticking out of it in that painting.

ANSWER: **Greece** [or **Hellas**; or **Hellenic Republic**; accept **Greece** (*Expiring*) on the *Ruins of Missolonghi* or *La Grèce sur les ruines de Missolonghi*]

[10] This French Romantic painter of *Greece on the Ruins of Missolonghi* also painted *Liberty Leading the People*.

ANSWER: (Ferdinand Victor) Eugène **Delacroix** [deh-lah-KWAH]

[10] This early Delacroix painting also depicts "current events" in Greece. It draws on Géricault's *Raft of the Medusa* to depict a white horse atop one of its two "human pyramids" of suffering civilians.

ANSWER: *The Massacre at Chios* [or *The Massacre of Chios*; or *Scène des massacres de Scio*] <EF>

9. Richard Blanco, a gay poet born in this country, read "One Today" at Barack Obama's 2013 inauguration. For 10 points each:

[10] Name this country. Blanco opened his poem "Next Horizon" with a quote from *Versos Sencillos*, a collection by fellow poet from this country Jose Martí.

ANSWER: **Cuba**

[10] Reinaldo Arenas, another gay Cuban poet, wrote this memoir about life under Fidel Castro and life with AIDS. In it, he describes his favorite childhood pastimes: eating dirt and listening to soap operas.

ANSWER: ***Before Night Falls***

[10] Reinaldo Arenas asked whether *this* author is "¿Esbirro o es burro?" (i.e. "is he a henchman or an ass?") in a criticism of his friendship with Castro. In one of this author's novellas, the possibly gay man Bayardo San Roman chooses not to wed the deflowered Angela.

ANSWER: Gabriel **García Márquez**

10. At the Meschianza, a party given in honor of George III in this city, a group of drunken loyalists stood on glass tables to joust each other with burning irons. For 10 points each:

[10] Name this city captured by William Howe in September 1777. Aaron Sullivan's book, *The Disaffected*, focuses on a neutral family in this city during its 7-month occupation by the British.

ANSWER: **Philadelphia**, Pennsylvania

[10] An area of Philadelphia named for people of this ethnicity, many of whom had immigrated from the Palatinate of the Rhine or Westphalia, was the site of a battle at which George Washington failed to dislodge the occupiers.

ANSWER: **German**-Americans [accept **Germantown**]

[10] This British spy served as the master of ceremonies at the Meschianza. This spy conspired with a turncoat American general to seize West Point, and therefore was hanged after a trial presided over by Nathanael Greene.

ANSWER: Major John **Andre** <ZF>

11. Doris Tsao and her colleagues at Caltech used single-neuron recording in macaques to discover how this process unfolds in namesake "patches" of the brain. For 10 points each:

[10] Name or describe this process that makes use of specialized areas like one discovered by Nancy Kanwisher in the fusiform gyrus.

ANSWER: **facial perception** [or **facial recognition**; accept descriptive answers like **recognizing a face**; prompt on **visual perception**]

[10] The Fusiform Face Area is located in this lobe of the human brain located on the sides of the head. This lobe is involved in processing auditory information and memory encoding.

ANSWER: **temporal** lobe

[10] Research suggests that people with this non-prosopagnosia condition experience decreased activity in the Fusiform Face Area, and more generally do not process faces holistically, instead focusing on individual features.

ANSWER: **autism** spectrum disorder [accept **ASD**, **Asperger's Syndrome**] <WHM>

12. This piece unusually requires two mandolins as well as two choirs, and it opens with an E-flat major chord on the organ. For 10 points each:

[10] Name this 1910 symphony, which begins with a setting of the hymn *Veni Creator Spiritus* and ends by setting the closing scene of Goethe's *Faust*.

ANSWER: Symphony No. **8** [or "**Symphony of a Thousand**"]

[10] This composer of the "Symphony of a Thousand" also wrote symphonies nicknamed "Titan" and "Resurrection."

ANSWER: Gustav **Mahler**

[10] This 1909 work by Mahler uses woodwind trills and flutter-tonguing to depict drunkenness in its opening movement. Almost half of its length is taken up by the sixth and final movement, "Der Abschied" [day-uh AHP-sheet].

ANSWER: *Das **Lied von der Erde*** [or *The **Song of the Earth***] <MJ>

13. The speaker of a poem in this collection claims that "when the sky is stained red with sunset, / Then it is good for dreamers to come down from their tenement." For 10 points each:

[10] Name this Symbolist poet, whose first collection includes sections like "Melancholia" and "Sad Landscapes," as well as the poems "Chanson d'automne" [shaw-saw doh-TUM] and "Mon rêve familier" [maw "rev" fah-meel-YAY].

ANSWER: Paul **Verlaine** (The collection is *Poèmes Saturniens*.)

[10] The speaker tells the "dismal Seine" to "wheel on in sluggish waves" in an early Verlaine poem titled for *this* genre. Elegies to the circumcised and the saudades are part of a Leopold Senghor collection titled for this genre.

ANSWER: **nocturnes** [accept "Parisian **Nocturne**" or "**Nocturne** parisien"]

[10] This poet's "Common Nocturne" describes how "Rotten rooftops reel—hearths are surrendered." This French poet and onetime lover of Verlaine wrote "The Drunken Boat" before he stopped writing at the age of 19.

ANSWER: Arthur **Rimbaud** [or Jean Nicolas Arthur **Rimbaud**] <CMA>

14. This philosopher likened the historical progression of humanity to a human lifespan, claiming that at each stage of life an individual's "center of happiness [is] within itself". For ten points each:

[10] Name this German counter-Enlightenment philosopher, who espoused an early form of cultural relativism in works like *Ideas upon Philosophy and the History of Mankind*. He collected songs to promote his notion of the *Volk*.

ANSWER: Johann Gottfried **Herder**

[10] Herder is possibly most famous for coining *this* term. According to this ideology, a cultural and ethnic group should form its own country in its geographic "homeland."

ANSWER: **nationalism** [or *Nationalismus*; accept **ethnonationalism**]

[10] In an 1882 lecture, *this* French thinker emphasized the importance of forgetfulness to nation-building, and sardonically described a nation as a "daily referendum."

ANSWER: (Joseph) Ernst **Renan** <CS>

15. One method for predicting these quantities combines an approach based on the contribution of functional groups with an extension of Guggenheim's quasi-chemical theory by Abrams and Prausnitz. For 10 points each:

[10] Name these quantities. A method for calculating these quantities for single ions that is valid at high concentrations uses a correction equal to a sum over ions of an interaction parameter times molality.

ANSWER: **activity coefficients** [do **NOT** accept or prompt on partial answer] (The first clue refers to UNIFAC, while the second refers to SIT)

[10] The difference in this quantity for ideal and non-ideal mixtures is equal to the ideal gas constant times temperature times the log of activity. At equilibrium, the sum over all species of this quantity times dN equals zero.

ANSWER: **chemical potential** [or **mu**; do not accept "chemical potential energy"; do **NOT** accept or prompt on partial answers]

[10] The " dN " multiplying chemical potential refers to the differential of *this quantity*. This quantity is equal to 6.022 times ten-to-the-twenty-third for one mole of a substance.

ANSWER: **number** of particles [accept **number** of atoms; accept **number** of molecules; accept **number** of ions] <JS>

16. This institution was led until 2017 by Beverly McLaughlin, who defined her role as one that requires "conscious objectivity." For 10 points each:

[10] Name this institution whose function was transformed during the so-called "Charter Revolution" that followed a 1982 piece of legislation.

ANSWER: **Supreme Court of Canada** [accept **Cour suprême du Canada**, accept **SCC**, prompt on **Supreme Court**]

[10] By law, the Supreme Court of Canada must have three justices from this province to represent its civil law tradition, which was once safeguarded by British colonial authorities in a namesake "intolerable" act.

ANSWER: **Québec** [accept **Quebec Act**]

[10] The landmark Supreme Court of Canada case *Delgamuukw v. British Columbia* provided the first Canadian account of this Common Law right of indigenous peoples to specific pieces of territory.

ANSWER: aboriginal **title** (or indigenous **title**, original Indian **title**, native **title**, customary **title**) <CS>

17. This nobleman assumed a royal title indicating that he was the successor of the last Inca Emperor; that title was in turn the nickname of a leftist guerrilla group in Cold War-era Uruguay. For 10 points each:

[10] Name this leader of the Great Andean Revolt of 1780-82, which is sometimes named for him.

ANSWER: **Tupac Amaru II** [accept **Tupamaros**]

[10] Another attempt at reviving the Inca Empire came with the "Inca Plan," which would've created a constitutional monarchy led by an Inca royal descendant. This Argentine general and rival of Simon Bolivar endorsed the plan before withdrawing from politics after the Guayaquil Conference.

ANSWER: Jose de **San Martin**

[10] The Inca Plan was the brainchild of this other general, who commanded the Army of the North during the wars of independence and created the Argentine flag.

ANSWER: Manuel **Belgrano** <AK>

18. Many traditions hold that the Creation of Adam and the Binding of Isaac took place at *this* spot. For 10 points each:

[10] Name this object around which the First and Second Temples were built. Since Muslims believe that Muhammad ascended to heaven from it, this object is now covered by a namesake shrine.

ANSWER: **Foundation Stone** [or *Even ha-Shityya*; or *Selā*; or *al-Sakhrāh al-Musharrafah*; accept **Noble Rock**]

[10] The Foundation Stone was likely located in *this* innermost part of the Jewish Temple, which was hidden by a curtain. When he entered this location on Yom Kippur, the High Priest had a rope tied around his ankle so his body could be removed if he died inside, since everyone else was forbidden from entering.

ANSWER: **Holy of Holies** [or *Kodesh haKodashim*; prompt on Most Holy Place]

[10] This chest containing the Ten Commandments was kept in the Holy of Holies until it was lost during the Babylonian destruction of the First Temple.

ANSWER: **Ark** of the Covenant [or *Arōn Ha'brēt*; accept **Ark** of the Testimony or **Ark** of God] <GH>

19. One character in this story claims another “deserved all he got” for trying to teach German irregular verbs to elephants. For 10 points each:

[10] Name this story in which Cornelius Appin teaches the title cat how to talk.

ANSWER: “**Tobermory**”

[10] In this other story by the author of “Tobermory,” a boy named Conradin forms a cult around a ferret, who eventually eats Conradin’s guardian Mrs. De Ropp.

ANSWER: “**Sredni Vashtar**”

[10] “Tobermory” and “Sredni Vashtar” are by this author. This writer is more famous for a story in which Framton Nuttall flees from the supposed ghosts of Mrs. Sappleton’s family, “The Open Window”.

ANSWER: **Saki** [or Hector Hugh **Munro**] <RV>

20. This scientist derived an equation that relates the mean anomaly, the eccentric anomaly, and the eccentricity. For 10 points each:

[10] Name this scientist who also formulated a law relating the cube of the semi-major axis of orbit to the square of the orbital period as part of his three laws of planetary motion.

ANSWER: Johannes **Kepler**

[10] Barker’s equation is used instead of Kepler’s equation to calculate the anomalies of orbits of *this* shape. Escape trajectories have this shape, since orbits with this shape have eccentricity of one and zero specific orbital energy.

ANSWER: **parabolas** [accept **parabolic** orbits/trajectories]

[10] The specific orbital energy equals this function of big G, total mass M, and the semi-major axis of orbit a, under the convention that a is positive for ellipses, infinity for parabolas, and negative for hyperbolas.

ANSWER: **negative GM** over **two a** [accept answers containing “divided by” instead of over] <AF>

The 2020 WORKSHOP Team

Subject Editors

Adam Fine (Chemistry, Physics) <AF>
Will Holub-Moorman (Social Science, Other Academic) <WHM>
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Jacob Reed (Arts, Religion, Philosophy) <JR>
Kevin Wang (Biology, Other Science, Legends) <KW>

Other Set Production

Will Grossman, Olivia Murton, Alex Damisch

Writers

Ethan Ashbrook <EA>
Mitch Baron <MB>
Michael Borecki <MBo>
Gus Carvell <GC>
Vincent Du <VD>
Ganon Evans <GE>
Eve Fleisig <EF>
Kevin Fan <KF>
Vincent Fan <VF>
Zachary Foster <ZF>
William Grossman <WG>
Gerhardt Hinkle <GH>
Boyang Hou <BH>
Montagu James <MJ>
Abhinav Karthikeyan <AK>
Zachary Knecht <ZK>
Suttree de Lorge <SDL>
Eric Lu <EL>
Caroline Mao <CMA>
Juliet Mayer <JMA>
Connor Mayers <CM>
Robert Muñoz <RM>
Pedro Juan Orduz <PJO>
Kiran Rachamalla <KRA>
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