

### Chicago Open 2018: The spice must flow

Edited by Auroni Gupta, Jacob Reed, Will Holub-Moorman, Jordan Brownstein, Seth Teitler, Eliza Grames, and Joey Goldman, with contributions by Stephen Eltinge, Matt Jackson, JinAh Kim, Raynor Kuang, Dennis Loo, Rohith Nagari, Sriram Pendyala, and Victor Prieto

Packet by American Eagle (Marvel Comics) (Olivia Lamberti, Akshay Govindan, Ethan Strombeck, and William Golden); and by A Dead Meme Isn't Art (Andrew Wang, John Lawrence, Ike Jose, and Jakob Myers)

### Tossups

1. Because he has a crush on Mirabel, a boy in this novel gives her preacher father a frog as a gift to ask for her hand in marriage, after which he is banned from the Baptist church for witchcraft. Two boys in this novel name the losing snail in a snail race, along with everything else they think is stupid, "Richard." During an Easter church service, a character in this novel sings about how a "Dove has failed" in reference to a girl who spilled two drops of water and was beaten. Because that song in this novel is sung in (\*) Twi, it prompts Aku to adopt Kojo after a man called the Devil beats Ness and hangs her husband Sam for running away. Baaba gives a character in this novel a black stone pendant, telling her that her own mother lit her village on fire. In this novel, Akosua refuses to shake the hand of James Richard Collins at the funeral of his grandfather, an Asante chief, because his family are slave traders. This novel ends with Marjorie and Marcus visiting the female dungeons at the Castle. The descendants of Maame's daughters Effia and Esi are the subject of, for 10 points, what novel by the Ghanaian-American author Yaa Gyasi?

ANSWER: Homegoing

<Long Fiction>

2. As part of his campaign against the use of this language, Bishop Wiching of Nitra forged a papal letter and sold 200 students into slavery. The reading of liturgy in this language was supported by Prince Kocel and legitimized by John VIII's letter *Industriae tuae*. The use of "marks and notches" for divination before this language was written down is controversially mentioned in the black-robed monk Hrabar's treatise championing this language's writing system, *On the Letters*. The standardizer of this language earned the moniker (\*) "Constantine the Philosopher" while working at Magnaura university under Michael III. In Bulgaria, literary cultures in this language developed at the Pliska and Ohrid schools. The project of translating the Bible into this language was carried out under the patronage of Prince Ratislav of Great Moravia by Cyril and Methodius. For 10 points, the Glagolitic script was used for what first literary and religious Slavic language?

ANSWER: Old Church Slavonic [or Old Church Slavic; accept Church Slavonic or Church Slavic; accept Old or Church after "Slavic"; accept Old Bulgarian until "Bulgaria"; do not accept or prompt on "Slavic" or "Bulgarian"]

<European History>

3. Dexamethasone increases the transcription of the three chromosome 4 genes encoding the chains of this protein, whose expression is coordinated in an as-yet unknown manner. A namesake purpura may form in a condition in which this protein precipitates when chilled to near freezing conditions. A common mutation causing hereditary renal amyloidosis occurs in a precursor to this protein in the alpha, or A alpha chain. DICs are diagnosed by high levels of (\*) D-dimers and this protein's namesake "degradation products" from the breakdown of a structure containing this protein, which is complemented by a high PT/INR. Aminocaproic acid and tranexamic acid inhibit the breakdown of structures mostly formed of this compound, which is labelled with radioiodine in an outdated method for detecting DVTs. Plasmin cleaves a structure formed mostly from this compound after its zymogen is activated by thrombin, making it insoluble. For 10 points, name this protein that forms blood clots.

ANSWER: fibrins [or fibrinogen; or Factor 1a]

<Biology>

4. This thinker generalized a model created by Wittman to a multidimensional policy space, naming a scenario in which an equilibrium among opportunists, militants, and reformers does not change in response to an opposing party's policy. That concept of "party-unanimity Nash equilibrium," or PUNE, was introduced in this thinker's book *Political Competition*. This thinker discussed a situation in which Group A is made better off by the existence of Group B, but Group B is made worse off by the existence of Group A, in his (\*) "property-relations approach" to modifying Marx's notion of exploitation. This thinker rebutted Ronald Dworkin's "insurance market" model of resource egalitarianism, arguing for transfers from people with "good brute luck" to people with "bad brute luck" in order to "level the playing field." This member of the September Group wrote *A General Theory of Exploitation and Class*. For 10 points, name this Yale political economist, an analytical Marxist who wrote *Equality of Opportunity* and *Theories of Distributive Justice*.

ANSWER: John E. Roemer

<Social Science>

5. Dantchev and Rudnick defined interactions of this type as those for which the  $n$ th moment of the potential diverges for sufficiently large  $n$ . Interactions of this type have an upper critical dimension of "two sigma," where sigma is a parameter added to the dimension  $d$  in the Hamiltonian. The Sherrington–Kirkpatrick spin glass model generalizes the Edwards–Anderson model by including interactions of this type. The Yukawa potential acquires this property as its mass goes to zero. Interactions with this property are mediated by (\*) massless gauge bosons; for instance, the electromagnetic interaction has this property because it is mediated by the massless photon. Many interactions of this type have a power-law dependence on distance, while exponentially decaying phenomena fall into the opposite category to this one. The bare Coulomb interaction is of this type, but the screened Coulomb interaction is in the opposite category because its strength decays on a characteristic length scale. For 10 points, give this term for interactions that are felt over a large distance.

ANSWER: long-range [accept infinite-range; accept power law before "power-law"; accept algebraic decay; anti-prompt on answers indicating a specific reciprocal power like one over r or inverse square]

<Physics>

6. This politician was arrested after meeting with Peter Magubane, a photographer for *DRUM* Magazine. After criticizing the government for excessive spending after a visit from Queen Elizabeth, this politician was removed from the office of Deputy Minister of Arts, Culture, Science, and Technology. In a 1985 speech, this person controversially remarked that "with our boxes of matches and our necklaces we shall liberate this country." This woman was convicted of kidnapping after her bodyguards, known as her (\*) "United Football Club," murdered the 14-year-old activist Stompie Seipei. She was exiled to the town of Brandfort after being blamed for student unrest against a "medium decree." This woman's husband divorced her and married Samora Machel's widow Graça a few years after they were photographed giving the Black Power salute upon his release from Robben Island. For 10 points, name this late anti-apartheid activist, the second wife of Nelson Mandela.

ANSWER: Winnie Mandela (or Winnie Madikizela-Mandela; or Nkosikazi Nobandle Nomzamo Madikizela; or Nomzamo Winifred Zanyiwe Madikizela-Mandela; prompt on Mandela)

<World History>

7. A painting titled for this event includes three black goats next to a sewer-pipe-like network of veins, above a sea of eyes with blue whites. An artwork created in the months before this event shows a man and a woman from the back, in two separate phone booths, with a red telephone underneath the red cross on a mirror between them. This event was recalled by the first photograph in the series *Study in Perspective*, in which the artist sticks his (\*) middle finger out at various tourist sites. Four months before this event, the art installation *Dialogue* was shot at by its own artist. A 2014 diorama depicting this event was covered by its artist in raw ground pork. During this event, the papier mâché statue *Goddess of Democracy* was photographed by Jeff Widener. This event was commemorated in the painting *89.6!!!!* For 10 points, name this event, during which a man holding grocery bags was depicted in the photograph *Tank Man*.

ANSWER: Tiānānmén massacre [accept obvious equivalents indicating protests or mass slaughter at Tiananmen Square; accept June Fourth Incident or Liù Sì Shì jiàn]

<Visual Arts>

8. This author wrote a poem wherein he sequentially observes that “The rose / announces on earth the kingdom / of gravity. A bird cancels it. / My eyelids cancel the bird. Anything / might cancel my eyes: distance, time, war.” He wrote a poem that jumps from a childhood memory of having a splinter extracted from his palm to him performing the same favor for his wife, whom this author described in another poem lying naked with him “in the yard, dewy and shivering / with crickets.” In his 2018 collection *The Undressing*, this author of “Arise, Go Down” and “The Gift” reckoned with being born to a family’s flight from racist sentiment in (\*) Indonesia. In his best-known poem, this author recounted giving his nearly-blind father food which “swelled, heavy as sadness, / and sweet as love.” This author began that poem by recalling how in sixth grade, he was reprimanded for “not knowing the difference” between “precision” and the word for the title fruits. For 10 points, name this Chinese-born American poet who wrote “Persimmons.”

ANSWER: Li-Young Lee

<Poetry>

9. The *pianissimo* final chord of this one-movement piece includes no strings, and is slightly destabilized by the timpani, which plays a roll on the fifth of B, instead of on the root. In his biography of this piece’s composer, R. Larry Todd hypothesized that its main theme was inspired by the “Mermaid’s Song” from Carl Maria von Weber’s final opera, which premiered earlier that year. This piece represents one figure by repeating a quick leap of a major ninth down from D-sharp to C-sharp. This piece opens with the quiet major third “E, G-sharp” for two (\*) flutes, followed by the long chords [read slowly] “B major. A minor. E major,” for more and more winds. This piece then uses *pianissimo* divided violins playing quick, “scampering” eighth notes to depict fairies, a style its composer had invented the year before in the Scherzo of his string octet. A 17-year-old Felix Mendelssohn wrote—for 10 points—what orchestral work that depicts characters like Titania, Oberon, and Bottom?

ANSWER: Overture to *A Midsummer Night’s Dream* [prompt on partial answer; accept *Ein Sommernachtstraum* Overture; do not accept or prompt on answers describing “incidental music”] (Weber’s last opera is *Oberon*.)

<Auditory Arts>

10. A book by James Bartlett claims that a bartender who died at *this* place, Loren Tate, reportedly still serves some of its patrons at its Hat & Hare Pub. Visitors to this location can listen to piano music played by a ghost named Invisible Irma, and newcomers here are asked to say “open sesame” to a gold-plated owl. A coffin diorama used to prove the concept behind a ballroom dance scene for a Disneyland ride is housed in this near-duplicate of the Kimberly Crest house. The entertainer Dai (\*) Vernon spent much of his later life at this location, which was where a stage assistant named Bess would hold annual séances to contact the ghost of her husband Harry Houdini. An incredibly strict dress code is enforced at this location, which bills itself as the “most unusual private club in the world.” In the 1960s, William and Milton Larsen opened—for 10 points—what Hollywood social club in which entertainers perform mentalism and acts of legerdemain?

ANSWER: Magic Castle

<Other Academic>

11. In Dionyse Settle’s account of finding one of *these* real-life objects, a group breaks it open and puts spiders inside to test its properties. According to an Austrian legend, Charles V relieved his debt to the Margrave of Bayreuth [“buy”-ROYT] by giving him two of these real-life objects. A character describes how “Black Letter” told him that the explorer Martin Frobisher gave one of these real-life objects to Queen Elizabeth I, who supposedly kept it with the crown jewels in Windsor Castle. Ole Worm [OH-luh VORM] proved that these objects were real and demonstrated their supposed healing powers by crushing them up and feeding them to some pets had he poisoned. Three silver lions guard an item purportedly made out of (\*) alicorns, but really made of these objects; that’s the royal throne of Denmark. These objects were first created by a woman who braided her hair into one while being drowned by her stepson, according to Inuit mythology. For 10 points, name this distinctive body part of an Arctic sea creature that early Europeans believed belonged to unicorns.

ANSWER: narwhal tusks [accept horn or tooth for “tusk”; prompt on partial answer]

<Mythology/Geography/CE>

12. A speech on the fourth day of this event was delayed for 40 minutes as listeners drowned it out with battery-powered fire sirens. Speakers at a massive Fourth of July picnic in New Jersey denounced this contemporaneous event with anti-Semitic slogans and burned one of its attendees in effigy. Thomas Taggart’s plans to secure Samuel Ralston’s success at this event failed due to the latter’s ill health. A March 2018 *Washington Post* article traced a false claim in the first sentence of this event’s Wikipedia page to its origin in a 2000 *New York Daily News* piece. Lena Springs became the first woman to receive (\*) nominating votes for vice president at this event, at which Oscar Underwood was unable to pass a resolution condemning an organization that attended it. Delegates to this event deadlocked for more than a week until William Gibbs McAdoo and Al Smith jointly withdrew. For 10 points, name this political event that newspapers didn’t actually call the “Klanbake,” which lasted 103 ballots before nominating John W. Davis to challenge incumbent Calvin Coolidge.

ANSWER: 1924 Democratic National Convention [or 1924 DNC; prompt on election of 1924 or Democratic National Convention or DNC]

<American History>

13. *Description acceptable.* **This character gradually exchanges roles with the male protagonist according to a feminist reinterpretation by Nina Pelikan Straus titled for “Transforming” the work she appears in. In an early scene in the work in which she appears, the protagonist hears this character weeping through a wall, and wonders why she doesn’t come out of her room. The last sentence of a novella describes this character springing to her feet and stretching her young body after a journey on an electric tram. In one scene, this character needs to cover her hands with a rag while carrying out an (\*) unconsumed bowl of milk and bread, and replacing it with a selection of old vegetables, bones, and cheese. This character’s violin playing draws the protagonist out of his room, causing him to frighten the lodgers staying with their family, leading her to deliver a tirade saying that the protagonist must die. For 10 points, name this family member who progresses from sympathy to hostility towards the protagonist of Kafka’s *The Metamorphosis*.**

ANSWER: **Grete** Samsa [or **Gregor’s sister**; or the **sister** in *The Metamorphosis*; prompt on **Samsa**]

<Short Fiction>

14. **An essay by Ian Hacking claims that J.G. Hamann was the first philosopher to make *this* phenomenon “go public.” A 2016 book splits historical theories of this phenomenon into the schools “HHH” and “HLC.” One thinker described a child recognizing a sheep by its bleat to suggest that this phenomenon develops from hearing more than from sight. That man claimed that the “inward emergence” of this phenomenon resulted from “human awareness,” or *Besonnenheit* [buh-ZOH-nun-“height”]. Johann Peter Süssmilch’s claim that this phenomenon was God-given was refuted in an essay by Johann Gottfried Herder, whose theories on it were discussed in a 2016 book by Charles Taylor. Another thinker bemoaned that the rationalizing tendencies of ancient Greece caused this phenomenon to be used to (\*) convince rather than to move, in a work that opens by contrasting “gesture” and “voice.” That man claimed that this phenomenon began with a more passionate and musical Southern variety, before migrating north. Derrida’s *Of Grammatology* attacks Rousseau’s *Essay on the Origin of—*for 10 points—what cultural phenomenon?**

ANSWER: **languages** [accept **origin of languages**; accept *The Language Animal*; anti-prompt on “**speech**”; do not accept or prompt on “writing,” since every thinker here until Derrida is specifically claiming that language is not writing]

<Philosophy>

15. **In a novel dramatizing this status, an amber merchant delivers a postcard made of iron to Cyane containing her husband’s two-word dying wish: “Fare well.” J. J. Hartman ignited an intense debate in the 1930s among Dutch academics with his thesis that references to this situation are meant to be interpreted as creative fiction and that it never actually happened. In Christoph Ransmayr’s novel *The Last World*, this situation is investigated by a man named Cotta, who in real life had sent a letter passing along news of Celsus’s death that the recipient had wettened with his tears. The (\*) indignity about this situation prompted an exceptionally bitter curse poem modeled after Callimachus, titled *Ibis*. The person affected by this status attributed it to *carmen et error*, meaning “a poem and a mistake,” which is usually taken to refer to some affront against Augustus and the publication of the *Ars Amatoria*. For 10 points, the *Tristia* was written in the modern-day town of Tomis on the Black Sea because of what political status affecting a Roman poet?**

ANSWER: the **exile** of Publius **Ovidius** Naso [or the **banishment** of **Ovid**; accept **Naso** instead of **Ovid**; prompt on **exile** or **banishment** by asking “whose exile?” or “whose banishment?”]

<Miscellaneous Lit>

16. An extremely upfield or downfield frequency is applied to produce a series of these entities in an attached proton test known as SFORD. These entities may be simplified by irradiating at a frequency corresponding to a particular proton, causing one of these entities to collapse into a simpler variety in HOMODEC, which is easily done on varian devices. Applying an irradiation which coincides exactly with the frequency of a single transition when all couplings are smaller than the chemical shift differences causes all connected transitions to split into symmetrical examples of these entities with equal intensities, a phenomenon underpinning spin (\*) tickling. In ESR, hyperfine splitting produces these entities analogously to how they are formed by J-coupling. In  $H_1$  NMR the size of these entities is dependent on the number of identical hydrogens, which induces splitting to form these entities with  $n$ -plus-1 peaks whose intensities are determined by Pascal's triangle. For 10 points, name these series of multiple peaks which appear in NMR.

ANSWER: multiplets [prompt on NMR peaks]

<Chemistry>

17. With the engineer Humphrey Bradley, this man made use of plans drawn up by Leonardo da Vinci to plan a massive system of canals, of which only the Briare Canal was completed. Charlotte Lennox translated his book of memoirs *Royal Economies*, in which he outlined his vision of a tariff-free union of the European states under a "High Christian Republic," a plan called the "Grand Design." Those memoirs also describe how he carried a prayer-book around in order to escape an attack on his (\*) religious group. This man made government posts heritable by introducing the paulette tax, thus creating the Nobility of the Robe, while serving as Superintendent of Finances. This minister resigned his posts after Francois Ravailac assassinated his king, whom this man had earlier influenced to take the "perilous leap" of conversion to Catholicism. For 10 points, name this chief minister of King Henry IV of France.

ANSWER: Maximilien de Béthune, Duke of Sully [accept either name]

<European/Other History>

18. In the '60s and '70s, a pair of studies on the worship of this figure were written by George Eaton Simpson and William Bascom. Along with Old Testament figures like Moses and Ezekiel, this figure was appropriated as a *zombi* in Kumina. This figure's name is given to a polished stone that's worshipped in St. Lucian *kele*, and he names a cult that's particularly prominent in Recife. Priests of this figure traditionally dress with red and white necklaces in patterns of four and six beads. Worship of this figure, who names a traditional religion of Grenada, has been combined with Spiritual Baptists practices in (\*) Trinidad. This former Oyo king is the figure most commonly worshiped using an asymmetrical hourglass drum called Batá. This figure is often invoked after dismissing Eshu and invoking Ogun. A double-headed axe symbolizes—for 10 points—what most popular Orisha, who represents thunder and lightning?

ANSWER: Shango [accept Sango, Chango, or Xango; accept Jakuta or Badé]

<Religion>

19. In the finale of one work by this choreographer, two lines of couples run across the stage from opposite ends of the same "S" curve, before forming three concentric circles that revolve in alternating directions. In the finale of another work by this choreographer, the two leads, alone onstage, repeatedly stop dancing around each other to french-kiss and whisper in each others' ears. To promote the works of new choreographers, this man and Mikhail Baryshnikov founded the (\*) White Oak Project. This choreographer included a dancing life-sized robot and a life-size Barbie doll in his reimagining of *The Nutcracker*, which is called *The Hard Nut*. This man, known for his insistence on live music and his "unisexual" casting, based his longest work on the two Milton sections of a Handel oratorio. For 10 points, name this contemporary choreographer of *L'Allegro, Il Penseroso ed il Moderato*, known for his "musicality" and for using dancers that look like regular people.

ANSWER: Mark (William) Morris

<Other Fine Arts>

20. **When this function is dependent upon unknown parameters, the Richardson–Lucy algorithm cannot be used to clean up its effects. The variation of this function with angle is measured by a system’s isoplanatism. In practice, the “wings” of this system-dependent impulse response function are often fit better by a Moffat profile than a Gaussian or Lorentzian profile. The convolution of the irradiance on the object plane with this function gives the irradiance on the (\*) image plane.** Changes in this function due to component deformation may be prevented by active optics, while adaptive optics seeks to correct for atmospheric turbulence, which turns this function into a speckle pattern. For a well-corrected system using circular components, this function equals a multiplicative constant times an Airy pattern centered on the image point. For 10 points, name this function that gives the image that a system produces from an infinitesimal object, often abbreviated “PSF.”

ANSWER: **point-spread** functions [accept **point-profiles**; prompt on PSFs before “PSF”; prompt on optical transfer functions or dirty beams]

<Other Science>



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### Bonuses

1. This system was replaced by the *hacienda* system due to the rise of agriculture and a reduction in population of the subjected people. For 10 points each:

[10] Name this economic system in which indigenous people were forced to do labor in exchange for Spanish protection.

ANSWER: encomienda system

[10] Laws named for this Castilian city curbed mistreatment the natives under the *encomienda* system, but also affirmed the right to subjugate them. Bartolomé de las Casas advocated replacing those laws with the New Laws.

ANSWER: Burgos

[10] Las Casas also opposed the use of this bizarre document appended to the Laws of Burgos by a 1513 emendation. This declaration was read aloud in Spanish to Native Americans to inform them that they were legally at fault for their impending conquest, as when Friar Valverde recited it to Atahualpa.

ANSWER: Spanish Requirement of 1513 [or Requerimiento]

<European History>

2. For 10 points each—answer the following about music theory... Classical Turkish music theory:

[10] Turkish music theory divides the octave into 53 of *these* intervals. In Western music theory, this term refers to the micro-interval between two different tunings of the same pitch, such as the “Pythagorean” one produced by going around a full circle of justly-tuned perfect fifths.

ANSWER: commas [or koma]

[10] Turkish and Arabic music theory sometimes measure intervals using the strings of an *oud* [ood], a member of *this* family of pear-shaped string instruments, which include the Chinese *pipá*. Unlike guitars, they have rounded backs.

ANSWER: lutes

[10] Dave Brubeck’s “Blue Rondo à la Turk” is based on a Turkish rhythmic pattern called *aksak*, which divides nine beats into *this* grouping, as opposed to the conventional Western way of grouping nine beats as 3 plus 3 plus 3.

ANSWER: 2 plus 2 plus 2 plus 3 [accept any answer giving that string of numbers, but the 3 has to be at the end]

<Auditory Arts>

3. The narrator refers to these four words as “the supreme surrender of the name” and the utterer’s “tribute to [her] devotion.” For 10 points each:

[10] Name this four-word phrase uttered by Miles before he dies in Henry James’s *The Turn of the Screw*. Critics debate whether the last two words are addressed to a ghost or to the governess herself.

ANSWER: “**Peter Quint—you devil!**”

[10] The “non-apparitionist” view that the governess is imagining the ghosts was popularized by this author in his 1934 essay “Ambiguity in Henry James,” which was later collected in his volume *The Triple Thinkers*.

ANSWER: Edmund **Wilson**

[10] In *The Rhetoric of Fiction*, Wayne Booth discusses the governess’ role in the *The Turn of the Screw* shortly after coining this two-word term for a speaker whose recounting of facts is not fully trustworthy.

ANSWER: **unreliable narrator**

<Miscellaneous Lit>

4. This cytopathic effect may be seen soon after initial rounding by light microscopy, but must later be probed with electron microscopy to determine its composition. For 10 points each:

[10] Identify this generic term for stable cytoplasmic and nuclear aggregates, typically proteins, which are often found at the sites of viral infection.

ANSWER: **inclusion** bodies

[10] In a “storage disease” called type II mucopolipidosis, insoluble fats, pigments, carbohydrates, aggregate in this acidic organelle instead of being broken down, forming “inclusion cells.”

ANSWER: **lysosomes**

[10] In 2008, Daniel Kaganovich reported that eukaryotic cells sort misfolded proteins into two inclusion bodies, one that localizes to the nucleus and the other to the cytoplasm. Name either body.

ANSWER: **JUNO** OR **IPOD** [accept either answer; accept either **juxtannuclear quality control** compartment or **insoluble protein deposit**]

<Biology>

5. This poet wrote a number of riddles taking the form of three-line stanzas, in which the last line is a double entendre that answers both of the preceding questions. For 10 points each:

[10] Identify this “parrot of India,” a 13th-century Persian and Urdu language poet credited with introducing Sufi music and ghazals to the subcontinent.

ANSWER: Amir **Khusro** [or Amir **Khusrau**; or Ab'ul Hasan Yamīn ud-Dīn Khusrau; or Amir **Khusrow** Dehlavī]

[10] An oft-quoted couplet by Amir Khusrau declares that “if there is” this kind of place on “earth, / it is this, it is this, it is this.” A well-known quatrain from the *Rubaiyat* exclaims: “Ah wilderness” were this kind of place “enow!”

ANSWER: **paradise** [or **heaven**]

[10] In emulation of Nizami, Khusrow composed romances about Layla and Majnun and Alexander the Great in *this* poetic form consisting of rhyming couplets. This is the Persian name for the form that titles Rumi’s major collection, which is typically translated as *Spiritual Couplets*.

ANSWER: **masnavi** [or **mathnavi**]

<Poetry>

6. Although this film's soundtrack was set to be by Pink Floyd, it starred Mick Jagger alongside Orson Welles. For 10 points each:

[10] Name this film whose production woes were the subject of a 2013 documentary by Frank Pavich. This film supposedly had a 14-hour script by mid-1976.

ANSWER: Alejandro **Jodorowsky**'s adaptation of *Dune* [accept reasonable equivalents; prompt on partial answer]

[10] After Jodorowsky's failed attempt at adapting *Dune* for the screen, *this* American director completed his own version in 1984. Naomi Watts stars as both Betty and Diane in this man's film *Mulholland Drive*.

ANSWER: David (Keith) **Lynch**

[10] When this man was cast as the Emperor in Jodorowsky's *Dune*, he demanded \$100,000 per hour for his part. Jodorowsky then filmed all of this actor's scenes in an hour and used a dummy model for the remaining Emperor scenes. In an earlier role, this man played a priest who's dragged across a room along with a pair of grand pianos.

ANSWER: Salvador **Dalí**

<Other Fine Arts>

7. The tetrathia derivative of the prototypical compound of this type forms unusual "segregated stacks" in charge transfer complexes, resulting in exceptionally high conductivity. For 10 points each:

For 10 points each:

[10] Name this unstable class of compounds consisting of two rings cross-conjugated by a double bond.

ANSWER: **fulvalenes** [do not accept or prompt on "fulvenes"]

[10] This prototypical example of a sandwich compound was discovered while attempting to synthesize a fulvalene.

ANSWER: **ferrocene**

[10] Whether the lowest excited state of an planar structure such as a fulvalene may be aromatic can be determined by Baird's rule, which is effectively a reversed Hückel's rule as only this many pi electrons, expressed as a function of  $n$ , is needed to provide aromaticity to an excited state.

ANSWER: **4n**

<Chemistry>

8. Although the numbering of these events is highly disputed, it's usually deduced that the second or third of them resulted in a schism with the *Sthavira nikāya*. For 10 points each:

[10] Name these events, the most recent one of which occurred in the 1950s in Yangon. Maha Kashyapa convened the first of these events in Rajagrha around 400 BC.

ANSWER: **Buddhist Councils** [or **sangiti**; prompt on partial answer, but don't accept synonyms]

[10] The first Buddhist council is usually credited with codifying the *Vinaya*, which forms the first section of this massive set of texts. This set of texts includes the *Dhammapada* within its *Khuddaka Nikaya* subdivision.

ANSWER: **Tripitaka** [or **Tipitaka**; accept **Pali Canon**]

[10] For the vast majority of scholars, the standard modern edition of the *Tripitaka* is *this* Japanese edition begun in 1924. This edition also includes about 20 volumes of commentaries and other East Asian Buddhist literature.

ANSWER: **Taishō** Tripitaka [accept any answer including the word **Taishō**, e.g. **Taishō Canon**]

<Religion>

9. An article by Robert Mondi claims that this figure's depiction in *The Odyssey* is a conflation of the folklore of a man-eating ogre and a source by Hesiod. For 10 points each:

[10] Name this Cyclops who is depicted in Book IX of *The Odyssey*.

ANSWER: **Polyphemus**

[10] The conflation of Polyphemus with a man-eating ogre lends credence to *this* hypothesis, which a pair of Harvard scholars advanced after studying Serbo-Croat poetry in Yugoslavia. Either the name of both scholars or a description of this theory is acceptable.

ANSWER: **Parry-Lord** hypothesis [or **oral**-formulaic composition of Homer's epics; or **Oralism**; accept answers indicating it was proposed by Milman **Parry** and Albert **Lord**; in either order; prompt partial answer]

[10] This scholar argued that the repartee between Odysseus and Polyphemus was derived from accounts of shamanic negotiations in which a master of animals releases his animals. His books include the comprehensive study *Greek Religion*.

ANSWER: Walter **Burkert**

<Mythology/Geography/Current Events>

10. For 10 points each—answer the following about scholarly disputes centering on early Chinese historical texts:

[10] The location of this leader's realm is hotly debated in Japan due to ambiguous directions in the *History of Wèi* that could lead to either central Honshu or northern Kyushu. This sorceress queen apparently received 100 bronze mirrors and seals after paying tribute to the Kingdom of Cáo Wèi [tsao way].

ANSWER: Queen **Himiko** [accept **Bimigu** or **Pimiku**]

[10] The history of this dynasty contains the only extant sentence of the Jié [j'YEH] people's language, provoking decades of debate on whether that language was Turkic, Indo-European, or even Yeniseian [yen-ih-SAY-in]. This dynasty drove the Liáo dynasty west and conquered Kāifēng [kye-fung] in 1127.

ANSWER: **Jin** dynasty [accept Great **Jin** or Jurchen **Jin**; prompt on **Jurchen** dynasty]

[10] Also in dispute is the reason why this author of *Records of the Grand Historian* and Hàn Dynasty court historian was castrated rather than executed after losing the emperor's favor.

ANSWER: **Sīmǎ Qiān** [or **Ssu-Ma Chien**, prompt on **Sima** or **Ssu-Ma**, do not accept "Sima Yi"]

<World History>

11. In Jasper Fforde's Thursday Next series, the villainous Lord Volescamper plans to release the text of this play to sway an election. For 10 points each:

[10] Name this now-lost play, which is titled for a character from *Don Quixote* who roams the wilderness in his underwear in grief at his childhood friend Lucinda marrying Don Fernando instead of him.

ANSWER: **Cardenio**

[10] *Cardenio* was not included in this landmark 1623 collection of all but three of Shakespeare's existing plays.

ANSWER: **First Folio**

[10] In his book on *Cardenio*, Roger Chartier suggests that this author's play *Double Falsehood* derived some of its text from the play. He sparked a literary feud by "correcting" several errors in a rival's edition of Shakespeare by publishing his own, titled *Shakespeare Restored*.

ANSWER: Lewis **Theobald**

<Drama>

12. Like AES and SIMS, this technique analyzes surfaces to a depth of about 10 nm. For 10 points each:

[10] Name this method of analyzing the elemental composition of surfaces by irradiating with high-energy photons and then measuring the number and energy of ejected electrons. Kai Siegbahn earned a share of the 1981 Nobel in Physics for his work on this technique, which is sometimes called XPS.

ANSWER: **x-ray photoelectron spectroscopy** [accept **ESCA** or **electron spectroscopy for chemical analysis**]

[10] The broadness of peaks in XPS is often measured using this standard, which is similar to the half-power point used in signal processing. It is the distance between points at 50 percent of the peak height.

ANSWER: **full width** at **half maximum** [or **FWHM**]

[10] Elements lighter than this one are nearly impossible to detect with XPS because they do not have core electrons.

ANSWER: **lithium**

<Physics>

13. This distinction titles a collection edited by Bonnie Steinbock and James Norcross, which includes papers by Philippa Foot and Daniel Dinello that are also titled for this distinction. For 10 points each:

[10] Give this common-language distinction in ethics that contrasts causing death through deliberate action with causing death through deliberate inaction.

ANSWER: **killing** vs. **letting die** [accept in either order]

[10] This American philosopher used different scenarios involving drowning one's cousin in a bathtub to argue against the killing / letting die distinction in his paper "Active and Passive Euthanasia." He wrote the first four editions of the textbook *The Elements of Moral Philosophy*, which has since been edited by his son Stuart.

ANSWER: James W. **Rachels**

[10] The different ways that a woman can die from drinking cleaning fluid are contemplated in this philosopher's paper, "Killing, Letting Die, and the Trolley Problem." This philosopher's most famous paper defends a medical procedure by imagining a woman hooked up to a violinist.

ANSWER: Judith Jarvis **Thomson**

<Philosophy>

14. This woman traveled with her daughter Lily across the isthmus of Panama to settle in San Francisco during the Gold Rush. For 10 points each:

[10] Name this woman who petitioned Abraham Lincoln for reinforcements for a department her husband commanded in St. Louis. She helped her husband gain fame by ghostwriting accounts of his expeditions.

ANSWER: **Jessie** Benton **Fremont** [or Jessie **Benton**; or **Jessie** Ann Benton **Fremont**; prompt on **Fremont**]

[10] The slogan "Fremont and Jessie Too" was used when John C. Fremont ran for president during this election year, making him the first presidential nominee from the Republican Party.

ANSWER: **1856**

[10] Jessie Fremont wrote *A Year of American Travel* while John C. Fremont was governor of this territory.

Fremont's former guide Kit Carson forced Native Americans to *leave* this territory in the Long Walk to Bosque Redondo.

ANSWER: **Arizona** Territory

<American History>

15. In *The Satyricon*, Trimalchio's feast features a dish in which these animals are rolled in honey and poppy-seed, and supported on little bridges soldered to a plate. For 10 points each:

[10] Name these animals which were often stored in dark containers so that they would hibernate and be fattened for the slaughter. These small mammals were a Roman delicacy.

ANSWER: **dormouse** [or **dormice**; or **glis** or **glires**; prompt on mouse or mice]

[10] The Roman cookbook *Apicius* gives a recipe for a type of these food items called *lucanicae*, which are spiced with bay berries, fish sauce, and rue. Better-known foods of this type include *merguez*, *kielbasa*, and *longaniza*.

ANSWER: **sausages**

[10] The *Apicius* also details the preparation of *this* common Roman condiment, which involves taking fish meat and bones, storing them in a jar, and burying it in sand to let it ferment.

ANSWER: **garum**

<Other Academic>

16. Within this larger style, the Marwar School focused on depictions of nobles on horseback. For 10 points each:

[10] Identify this style of Indian painting that flourished from the 16th to 19th centuries. This regionally-defined style included the Bundi school of painting, which was used to decorate the Ummed Mahal of Carh Palace.

ANSWER: **Rajput** Painting [accept **Rajasthani** Painting]

[10] Rajput paintings frequently depicted scenes from *this* literary work, including episodes such as *The Gods are Born as Monkeys* and *Mithila is Besieged by Sita's Disappointed Suitors*.

ANSWER: **Ramayana**

[10] The Bundi school of Rajput painting often specialized in producing *this* kind of work, which were collected in Persian *Muraqqas*. The vast majority of Mughal paintings were in this genre.

ANSWER: **miniature** paintings [or **miniatures**; prompt on illustrations or illuminations]

<Visual Arts>

17. Superclusters are typically found in these structures. For 10 points each:

[10] Name these large structures that are often linear, but may also be planar in form, as with the CfA2 Great Wall.

ANSWER: galactic **filaments** [accept galactic **sheets**; prompt on supercluster complexes]

[10] Galactic filaments can be found in survey data using a friends-of-friends algorithm or an algorithm to generate one of these structures. For a connected, undirected graph, this is the set of edges that connects all vertices with no cycles and with the smallest total edge weight.

ANSWER: **minimal spanning tree** [or **MST**]

[10] It's not the Millenium project, but this undertaking is currently using up to 30 billion particles to simulate the large-scale evolution of the universe. Its code, Arepo, utilizes a moving, unstructured mesh based on Voronoi tessellation.

ANSWER: **Illustris** project

<Other Science>

18. In a beloved 1906 children's novel, the slums of this city are a battleground between gangs of children named the Redshirts and the Paul Street Boys. For 10 points each:

[10] Identify this European city, which shares its name with an upscale neighborhood where, in a Caine Prize-winning story, a group of children including Darling, Bastard, Godknows, and Chipso go to raid guavas and upon returning, discover the hanged corpse of a woman.

ANSWER: **Budapest** [the novel is Ferenc Molnar's *The Paul Street Boys* and the story is "Hitting **Budapest**"]

[10] "Hitting Budapest" is the first chapter of this author's novel about Darling's escape from Mugabe's Zimbabwe, *We Need New Names*.

ANSWER: NoViolet **Bulawayo**

[10] The setting of *We Need New Names* later shifts to this American city, where Darling marvels at the snow and watches internet pornography with her friends. In Céline's *Journey to the End of the Night*, Ferdinand Bardamu moves to a suburb of this city to work for the Ford Motor Company.

ANSWER: **Detroit**

<Long Fiction>

19. These people founded the colony of Gades, the future city of Cadiz, in the eighth century B.C. For 10 points each:

[10] Name these people who used their colony of Carteia in the Bay of Gibraltar for collecting murex snails, which they more famously used to produce purple dye in Tyre.

ANSWER: **Phoenicians**

[10] In Iberia, the Phoenicians traded at this harbor city, whose residents may have created the Treasure of El Carambolo and wrote their namesake language in the Southwest script. This city's apparent loss to flooding and proverbial remoteness has led it to be identified with both Atlantis and the Biblical Tarshish.

ANSWER: **Tartessos**

[10] Herodotus claimed that a king of Tartessos whose name derives from his wealth in this commodity commissioned the first Greeks in Iberia to build a wall for his city. Athenian "owls" made of this material originated from Laurium.

ANSWER: **silver**

<European History>

20. In a 1972 paper, this thinker argued against the stance that acquisition of linguistic competence is independent of sociocultural factors. For 10 points each:

[10] Name this author of "On Communicative Competence," a sociolinguist who also developed the SPEAKING model for identifying components beyond grammar and vocabulary that are needed to properly speak a language.

ANSWER: Dell (Hathaway) **Hymes**

[10] Hymes' notion of "communicative competence" was a critique of this linguist's concept of "linguistic competence," a key component of his theory of "generative grammar."

ANSWER: (Avram) Noam **Chomsky**

[10] Hymes' work in ethnopoetics, which attempts to capture the performative elements of oral narrative, was influenced by the ideas advanced by *this* American literary theorist in essays such as "Semantic and Poetic Meaning." He also authored *Language as Symbolic Action*.

ANSWER: Kenneth (Duva) **Burke**

<Social Science>