

Chicago Open 2018: The spice must flow

Edited by Auron 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 the Editors (4)

Tossups

1. The author of a text of this type promoted it through a coffeehouse debate society called the Rota Club. A brief text of this sort thought to be by Gabriel Platte was once attributed to Samuel Hartlib, whose Antilia fellowship was inspired by a text of this type by Johannes Valentinus Andreae. In New Spain, the community units that Bishop Vasco de Quiroga introduced to his “hospital towns” were inspired by the description of Syphogrants and Philarchs in a text of this type. After May Claypole convinced her father, Oliver Cromwell, to reverse his (*) censorship of a text of this genre in which he appears as “Olphaus Megaletor,” Cromwell was made the dedicatee of that book by James Harrington. The Royal Society was inspired by the House of Solomon described in a book of this genre by Francis Bacon. For 10 points, name this genre exemplified by *Oceana*, *New Atlantis*, and a namesake book by Thomas More.

ANSWER: **utopian** literature [accept any answers mentioning **utopia**; prompt on political theory or legal philosophy]

<European History>

2. This artist’s choice of materials has made works like the variable-width sculpture *Expanded Expansion* too fragile to exhibit. Late in life, this artist used cheesecloth to make a set of eight banner-like sculptures. This artist was told to “learn to say ‘fuck you’ to the world once in a while,” and “Stop it and just DO!” in a lengthy letter from Sol LeWitt. This sculptor achieved a breakthrough by hanging a long loop of steel tube from the frame of a white canvas, and later made a series of open-top steel boxes whose insides bristle with rubber medical tubes. This sculptor of (*) *Contingent*, *Hang-Up*, and *Accession* made a set of nineteen irregular, translucent, hollow cylinders and a number of works consisting of andom-looking tangles of rope, string, and wire dangling from the ceiling in the years before she died at the age of 34. For 10 points, name this post-minimalist German–American sculptor who used industrial materials like fiberglass and latex in works like *Repetition Nineteen III*.

ANSWER: Eva **Hesse**

<Visual Arts>

3. To sum up his motivation for writing in his *Paris Review* interview, the author of this story quoted a line from it declaring: “I want to rise so high... that when I shit I won’t miss anybody.” This story lists the businesses, physical features, and social clubs of the town in which it is set, in sections titled “Vital Data,” “More Vital Data,” and “Final Vital Data.” The narrator of this story confesses that “You are alive, alive exactly, and it means nothing to you—much to me” to Mr. Tick, the cat lying asleep on his lap. In this story, the schoolteacher Miss (*) Jakes punishes Cheryl Pipes for stealing a quarter from a pocketbook, and the narrator’s nearly-blind neighbor Billy Holsclaw gathers piles wood and coal near his house to keep warm. This story ends on an evening the week of Christmas in which its narrator listens to “Joy to the World” streaming from the speaker of a water tower as snow blankets the vacant town square of B, Indiana. For 10 points, name this episodic story written by William Gass in homage to the Midwest.

ANSWER: “**In the Heart of the Heart of the Country**”

<Short Fiction>

4. In some circles, this ritual practice is circumvented by using apple juice to create goods in the related category of *mezonot*. In the Passover Seder, this ritual is immediately preceded by *rachtzah*, and its central object was the subject of *yachatz*. This rite includes a reference to “One who brings forth,” unlike the related categories of *shehakol*, *haEitz*, *haAdama*, and (*) *haGafen*. Talking is forbidden between the ritual of *Netilat Yadayim* and this ritual. This rite is required just before events that end with the *Birkat Hamazon*. Just prior to this ritual, one washes each hand three times. Halachically [ha-LAH-khic-“ly”], this ritual takes precedence over the *Kiddush*, which is why its central object must be covered with a cloth on Shabbat. This practice ends with the words “*haMotzi lechem min ha’aretz*.” For 10 points, name this verbal practice that’s done before eating *challah*.

ANSWER: saying the **blessing** for **bread** [accept answers involving “ **haMotzi** lechem min ha’aretz” until it’s mentioned; accept **Motzi Matzah** until “haMotzi”]; prompt on **blessing** food by asking “Which food?”; prompt on **eating** or **breaking** bread by asking “What’s a preliminary step to doing that?”; anti-prompt on **eating matzah** or **blessing matzah**]

<Religion>

5. Like a related, purely instrumental style, this music usually includes a tambourine-like instrument playing a four-sixteenth note pattern with the second note slightly delayed, which creates an almost three-against-two-like “swinging” effect. This style was first recorded in the 1917 song “Pelo Telefone,” and it’s traditionally accompanied by a battery of percussion including a large *surdo*. A 1939 song in this style was titled for a “watercolor” of its home country. (*) *Pagode* is a subgenre of this style, which is performed by “schools” during an annual parade. This style partly derives from the musical accompaniment to Candomblé dancing. This style is often contrasted with the more uptempo, instrumental style of *choro*, and it was infused with jazz to create bossa nova. Carmen Miranda performed in—for 10 points—what national music and dance style of Brazil?

ANSWER: **samba** [accept **escola de samba**]

<Auditory Arts>

6. The major product of the condensation un-templated reactions between glycouril and formaldehyde is the cucurbituril formed of this many monomers. This is the smallest ring size for which endo-trig cyclizations are favored, according to Baldwin’s rules. For a polymer modelled as a freely-jointed chain, the expectation value for the square of the radius of gyration is equal to the expectation value of the end-to-end distance squared over this number. Stryker’s reagent is a triphenylphosphine copper hydride complex containing this many copper atoms. The stereochemistry of addition reactions to unsaturated rings with this many members is described by the (*) Furst–Plattner rule. The thermally averaged potential energy of two gas-phase dipoles falls off as one over distance to this power. Each metal atom in the layered semiconductor molybdenum disulfide has this coordination number, and a trigonal prismatic geometry. This is the maximum number of electrons which can occupy the t_{2g} [“T sub 2 G”] set of molecular orbitals. For 10 points, give this number of ligands in an octahedral complex.

ANSWER: **6**

<Chemistry>

7. The limits of this philosopher's knowledge of Aristotle can be seen in his description of the text *On Length and Shortness of Life*, which just explains that it's "about the length and shortness of life." Peter Pormann translated all this philosopher's output into English with Peter Adamson. This philosopher argued that the Eternal is not an infinite body, because any process of division and recombination of an infinite body leads to a contradiction. This philosopher drew on John Philoponus to develop an argument for the *ex nihilo* creation of the world. Three consecutive Mu'tazilite caliphs, including al-Mu'tasim, patronised this philosopher's circle of (*) translators, which rendered Greek texts into Arabic. This ninth-century thinker is often credited with the development of frequency analysis in his book *On Decrypted Encrypted Correspondence*. This philosopher defended the notion that God was a "true One" in *On First Philosophy*. For 10 points, name this the first major Arabic philosopher.

ANSWER: Abu Yūsuf Ya'qūb ibn 'Ishāq aṣ-Ṣabbāḥ al-Kindī

<Philosophy>

8. In this year, a law requiring schools to teach the "positive effects" of colonialism was hastily withdrawn due to protests. During this year, Frits Bolkestein's remark about his difficulties in finding a good handyman for his house in France led Philippe de Villiers to rail against the figure of the "Polish Plumber." Events in this year inspired an unpopular amendment introduced the next year that would have made it easier for employers to fire temporary employees, the First Employment Contract. During this year, referendums in the Netherlands and (*) France killed a treaty intended to establish a European Constitution, many parts of which were salvaged for the Treaty of Lisbon. Some 9,000 cars were torched during unrest in this year that began after three Muslim youths were electrocuted while hiding from police in a power station in one of the banlieue suburbs. For 10 points, name this year during which president Jacques Chirac declared a state of emergency over those riots and responded to the 7/7 bombings in London.

ANSWER: 2005

<European History>

9. *Warning: specific answer required.* A 2016 article discusses this system's use of "rollback segments" and buffer pools, and contrasts it with a different system that uses "ctid"s [C-T-I-D's] for on-disk tracking; that article also mentions building a "Schemaless" [SKEE-muh-liss] layer on top of this system. A bug in this system in which certain triggers are not executed has spawned a thread that includes several people wishing the bug happy birthday, due to its decade-plus lifespan. Compared to other options, this system is notably only ACID [acid] compliant when using (*) InnoDB, though prior to InnoDB MyISAM [my-EYE-sam] had been the default storage engine until 2010. A 2016 article by an Uber engineer discussed switching to this system from Postgres [POST-gress]. MariaDB was an open-source fork of this system formed after it was privatized. Web stacks like the one used by Wordpress often combine this system with Linux, Apache, and PHP, forming the "LAMP" stack. Sun, and then Oracle have acquired—for 10 points—what most widely used database system in the world, frequently compared to other options like SQLite [S-Q-light]?

ANSWER: MySQL [do not accept or prompt on just "SQL"; anti-prompt on "InnoDB" until "happy birthday" is read]

<Other Science>

10. The two-part *Prelude* describes a form of this concept “more active even than ‘best society,’” alluding to Adam’s speech in Book IX of *Paradise Lost*. In *A Defense of Poetry*, Shelley deems the poet “a nightingale, who sits in darkness and sings to cheer” this feeling “with sweet sounds.” In a sonnet, Keats tells this feeling that “if I must with thee dwell, / Let it not be among the jumbled heap / Of murky buildings.” The speaker asks: “And what were thou, and earth, and stars, and / sea, / If to the human mind’s imaginings / (*) Silence and [this feeling] were vacancy?” at the end of the poem “Mont Blanc.” Coleridge’s “Frost at Midnight” describes a form of this mental state “which suits / Abstruser musings.” In “I Wandered Lonely as a Cloud,” the daffodils are said to “flash upon that inward eye / Which is the bliss of” this feeling. Percy Bysshe Shelley allegorized his poetic muse as Alastor, or the Spirit of, for 10 points, what state of mind evoked by a “reaper” in a Wordsworth poem?

ANSWER: solitude [or the state of being solitary]

<Poetry>

11. A song from this album describes a foot coming “through the line” after picking up a payphone whose ring “just about blew my mind.” Another song from this album describes “human gods” that “aim for their mark” and “make everything from toy guns that spark / to flesh-colored Christs that glow in the dark.” That song from this album warns: “he not busy being born / is busy dying.” This album includes a false start with the line “I was riding on the (*) *Mayflower* when I thought I spied some land” followed by a long burst of hysterical laughter. Pete Seeger supposedly commented that he wanted to use an ax at a live performance of this album’s track “Maggie’s Farm.” This album, which includes the original versions of “Subterranean Homesick Blues” and “Mr. Tambourine Man,” is divided into electric and acoustic sides, and its cover features a circular lens blur. For 10 points, name this first electric Bob Dylan album, which was followed by *Highway 61 Revisited*.

ANSWER: *Bringing It All Back Home*

<Other Academic>

12. *Description acceptable*. In order to join this institution, the protagonist of an 18th-century play imagines disguising herself as a man and marrying three other women, but it turns out to all be a dream. A component of this institution was described as a means of suppressing social mobility in a 2000 “Cultural History” by Benjamin Elman. After being discovered by the government, a group of “tax defaulters” from the early 1660s were denied access to this institution. Access to this institution was made easier by a hereditary “protection” that translates as (*) “shadow privilege.” An 18th-century author who finally qualified for this institution at the age of 71 mocked its corruption in his *Strange Stories*. By the 19th century, joining this institution required writing an “eight-legged essay.” This three-tiered system was mocked in the novel *Unofficial History of the Scholars* by Wú Jingzǐ. For 10 points, name this governing institution, whose candidates were tested on their knowledge of the Confucian Classics in an Imperial Exam.

ANSWER: Chinese civil service [or gōngwù yuán; accept any reasonable description of the Chinese bureaucracy; prompt on more general answers about the Chinese government; accept more specific answers about the civil service examination or kējǔ; prompt on answers describing the Chinese education system or schools] (The play in the leadin is Wáng Yún’s *A Dream of Glory*.)

<World History>

13. *Description acceptable.* **This building's central hall is divided into three long aisles that are separated by rows of Corinthian columns and horseshoe arches; unusually for the time, it's cut across by a transept. An octagonal structure enclosed by this building sits atop eight repurposed Corinthian columns and is decorated with green and gold depictions of palm fronds and acanthus leaves. It's not Diocletian's Palace, but this building was originally a Temple of Jupiter, which was converted to a Cathedral of Saint John the Baptist before being transformed into this building. The marble grills over this building's windows were the first to use the interlocking geometric patterns that came to dominate (*) Islamic decoration, and it included the first *maqsurah* over its *mihrab*. Byzantine artisans created the verdant, "garden" mosaics that decorate this building and its Dome of the Treasury. Saladin's tomb was placed directly next to this mosque, which was completed in A.D. 715. Many Muslims believe that Jesus will reappear at—for 10 points—what mosque built in the capital of an early caliphate?**

ANSWER: Great Mosque of Damascus [or Umayyad Mosque]

<Other Fine Arts>

14. **This scientist developed a method that attaches "supercharged" GFP to other proteins enhance their delivery into cells. Another method developed by this scientist uses oligonucleotide annealing to increase the effective molarity of attached reactant molecules. One method developed in this scientist's laboratory involves flowing E. coli cells through a vessel known as a lagoon. That method, which relies on production of the coat protein pIII [p-three] on M13 is an improved version of directed evolution known as (*) Phage-Assisted Continuous Evolution. This scientist developed a method of enclosing Cas9 in cationic lipids to transiently nucleofect into cell nuclei, in order to prevent off-target cleavages. He's not Feng Zhang, but in 2016 and 2017 this scientist published two papers which detailed the use of evolved deaminase enzymes attached to Cas9 proteins to interconvert of DNA bases. For 10 points, name this Harvard scientist who recently developed a non-cleaving DNA single base editor.**

ANSWER: David Liu

<Biology>

15. **A resident of this place says he does not need a beard to be wise because if beards caused wisdom goats and sheep would be smarter than humans. Veikko Vaananen compiled the most complete original text about this location, which is described in the first of the Kildare poems. Residents of this location who sleep until noon earn the most money but cannot use it to buy anything. Women in this location have equal rights and are encouraged to (*) sleep with men they like in the middle of the street. When residents of this location refuse to stop flying, a man beats a maiden's bare ass like a drum until they land. To reach this island west of Spain you must walk through pig shit for seven years. The Fountain of Youth in this location only works for people who are at least thirty years old. Monks kidnap skinny-dipping nuns in this location where Lent happens every twenty years but Christmas and Mardi Gras are celebrated four times a year. A river of half red wine, half white wine flows through this location where walls are made of fish and roofs are bacon. For 10 points, name this land of plenty from Medieval myth.**

ANSWER: Cockaigne [or Cockayne or Cockaengen; do not accept or prompt on "utopia" or "paradise"]

<Mythology>

16. An essay by this author considers the inclusion of a lively assemblage of fake plants in an exhibit otherwise showcasing the personal pain of the artist Thornton Dial as an example of how art can help achieve a “more complete, complex understanding of happiness.” In a story by this author, a man attends an opera fearing at any moment that an aria could be sung at the resonant frequency of his wife’s glass body, shattering it. In a collection by this author, an essay praising the BET show *Girlfriend* for being a better representation of girlhood than Lena Dunham’s *Girls* comes immediately after an itemized list of “How to Be Friends With Another (*) Woman.” A memoir by this author relates how after she was gang-raped at the age of twelve, she overate and gained hundreds of pounds. This author of *Difficult Women* is best known for a book of essays arguing that her enjoyment of Robin Thicke’s “Blurred Lines” and the color pink does not invalidate her commitment to female empowerment. For 10 points, name this Haitian–American author of *Hunger* and *Bad Feminist*.

ANSWER: Roxane Gay
<Miscellaneous Lit>

17. *Specific term required.* In *A Theory of Capitalist Regulation*, Michel Aglietta argues that a new, “intensive” form of this process was characterized by the permanent presence of “creeping inflation” after 1929. One work criticizes David Ricardo for failing to recognize that, in hastening this process, foreign trade “has become its own product,” arguing that this process arises from the same causes as overpopulation. The rate of TFP in the Solow–Swan model is the residual that emerges after accounting for this process. David Harvey has argued that the geographic expansion of markets is used to mitigate an excess of this process in a so-called (*) “spatial fix”; elsewhere he has analyzed a specifically neoliberal form of this process that occurs through “dispossession.” analyzed a specifically neoliberal form of this process that occurs through “dispossession.” Karl Marx disagreed with Adam Smith’s notion of a “previous” form of this process, instead characterizing the expropriation of direct producers as its “primitive” form. For 10 points, name this process of reinvesting surplus value into capital.

ANSWER: accumulation of capital [accept overaccumulation, intensive accumulation, accumulation through dispossession, previous accumulation, or primitive accumulation; prompt on growth or the tendency of the profit rate to fall]
<Social Science>

18. The “half-wave” value for this quantity is an important characteristic of Pockels cells and other modulators. Electron gun performance is often described in terms of the current over the $3/2$ power of this quantity, a ratio known as the perveance [pur-VAY-anss]. Active Matrix-addressed LCDs respond to the instantaneous peak value of this quantity, improving performance over Passive Matrix-addressed LCDs that respond to the time-averaged value of this quantity. This quantity has equal values at the first and third apertures, and a different value at the middle aperture, in an einzel [rhymes with “pint sell”] lens used to focus (*) ion beams. Thermocouples measure a temperature-dependent value for this quantity at a junction of dissimilar metals that arises from the Seebeck effect. The rate of Joule heating equals this quantity times the current. For 10 points, resistance times current gives what quantity’s change across a resistor?

ANSWER: voltage [or electric potential difference; or scalar potential difference; or emf or electromotive force]
<Physics>

19. An author from this country wrote “Mickey’s ghost walks / in this tropical rain / she swings in the fig trees” at the end of a book that opens with a Basho haiku. In a novel from this country, two men are buried in the same grave but when it is dug up for construction, only the doctor is moved to a new grave and the other man’s bones are eaten by dogs. While investigating the death of the aspiring poet Mickey, Jill Fitzpatrick is seduced by Mickey’s professor Diana in an erotic lesbian detective verse novel by (*) Dorothy Porter, an author from this country. After the elderly Gillbu doesn’t want to marry her, Maude becomes pregnant with Thomas Craig’s daughter in a novel from this country. Bobby portrays the arrival of white colonists like Dr. Cross and Sergeant Killam in *That Deadman Dance* by Kim Scott, a member of this country’s Noongar people. Three muda-muda girls are taken to school at the Moore River Settlement by Constable Riggs but escape and follow the title structure back to Jigalong in a novel set in this country. For 10 points, name this home country of Doris Pilkington Garimara, the author of *Follow the Rabbit-Proof Fence*.

ANSWER: Commonwealth of Australia

<Long Fiction>

20. A socialist political cartoonist with this last name is best-known for his satirical works in *Appeal to Reason* depicting an anti-union worker named Henry Dubb. An economist with this last name refuted the “wages fund” doctrine in the 1870s before arguing for the bimetallist position that land speculation was not responsible for rising rents in an extended debate with Henry George. In 1830, several southern states passed “quarantine laws” to prevent black sailors from distributing a pamphlet by a Bostonian (*) abolitionist with this last name, who noted repeatedly how slaves had mixed their “blood and tears” with the American land in that work, *An Appeal to the Coloured Citizens of the World*. This was the last name of a businesswoman who changed her name from Sarah Breedlove before starting a line of hair and cosmetic products aimed at African-Americans. The entrepreneur Madam C.J. had—for 10 points—what last name, which a Secretary of the Treasury lent to an incredibly low tariff passed during the presidency of James Polk?

ANSWER: Walker [accept Ryan Walker, Francis Amasa Walker, David Walker, Robert Walker, or Madam C. J. Walker; or Walker tariff]

<American History>

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 the Editors (4)

Bonuses

1. Answer the following about various forms of momentum, for 10 points each:

[10] Generalized momenta and generalized position coordinates are used in this approach to mechanics, which is equivalent to Newtonian and Lagrangian mechanics. Its namesake function is the sum of the kinetic energy and potential energy.

ANSWER: **Hamiltonian** mechanics

[10] Crystal momentum equals \hbar times this quantity. Reciprocal space is sometimes named for this quantity.

ANSWER: **wave vector** [accept **k**-space]

[10] Using SI units, a charged particle moving in an electromagnetic field has a canonical momentum equal to the momentum plus this expression. The total time derivative of this expression yields the Lorentz force.

ANSWER: **charge times vector potential** [accept **qA** or **eA**]

<Physics>

2. On one of these objects, an author crossed out the word “trough” in the middle of a scribbled fragment that reads: “A not admitting / of the Wound / Until it grew so / wide / That all my / Life had entered it / And there / were troughs / beside.” For 10 points each:

[10] In 2013, New Directions published *Gorgeous Nothings*, a set of transcriptions made by Marta L. Werner and Jen Bervin of a set of poems unusually handwritten on what objects?

ANSWER: **envelopes**

[10] This author of the “envelope poems” was known for producing manuscripts with exaggerated triangular handwritten capital letter Ts, which are especially prominent in lines such as “How public — like a Frog — / To tell one's name — the / livelong June — / To an admiring Bog!”

ANSWER: Emily **Dickinson**

[10] A decade before writing her envelope poems, Dickinson stacked sheets of stationery on which she had hand-copied poems, then stabbed holes which she threaded through with string, to create homemade manuscript books that her editor Mabel Loomis Todd gave this name.

ANSWER: **fascicles**

<Poetry>

3. For 10 points each—answer the following about the anthropology of sovereignty:

[10] This Berkeley anthropologist has written extensively about how the notion of “neoliberalism as exception” has led to the institution of “graduated sovereignty” in countries seeking to enter global markets. She examined the effects of globalization on “transnational” Chinese citizens in *Flexible Citizenship*.

ANSWER: Aihwa **Ong**

[10] Australian anthropologist Patrick Wolfe has argued that *this* form of colonialism is built on a “logic of elimination” of indigenous sovereignty. This form of colonialism involves replacing, rather than ruling, native populations.

ANSWER: **settler** colonialism

[10] This anthropologist answered the question “What is a state if it is not a sovereign?” in a 2003 work, describing a certain set of contemporary states as “the institutional projection of an ongoing politics.” He had earlier described nineteenth-century Bali as a “theater state,” and discussed the Balinese cockfight in the essay “Deep Play.”

ANSWER: Clifford (James) **Geertz**

<Social Science>

4. Emerita Augusta, which became modern-day Mérida, Spain, and the Algerian city of Timgad were among the *colonia* founded for these people. For 10 points each:

[10] Identify these people whose resettlement was a perennial problem in the Roman Empire. Sulla foisted them onto lands taken from Social War rebels and into his “Colony of Venus” at Pompeii.

ANSWER: Roman **veterans** [or obvious equivalents of **ex-soldiers**; prompt on **soldiers** and specific types thereof]

[10] In Roman Britain, the Iceni tribe’s resentment of the seizure of their land for the veteran’s colony at Camulodunum led it to be the first target of this queen’s revolt.

ANSWER: **Boudica**

[10] Landowners disgruntled with the Second Triumvirate’s land grants to veterans provided support for the rebellion this woman led against Octavian, the Perusine War.

ANSWER: **Fulvia**

<European History>

5. Lauren Berlant uses this adjective to name a form of “death” that describes the “deterioration of people” as a “defining condition of their experience.” For 10 points each:

[10] Name this adjective, which Rob Nixon used to describe the unsensational kind of “violence” wrought by natural disasters, which has inspired a new “environmentalism of the poor.”

ANSWER: **slow** [accept **slow death** or **slow violence**]

[10] A key influence on Nixon’s theory of “slow violence” was this thinker, who claimed that humans were inviting “death-by-indirection” through environmental carelessness in a 1962 book that called attention to the adverse effects of DDT on birds.

ANSWER: Rachel (Louise) **Carson** (The book is *Silent Spring*.)

[10] Nixon was also involved in the campaign to free *this* Nigerian environmental activist, who led protests against Royal Dutch Shell as the head of the Movement for the Survival of the Ogoni People before his 1995 execution.

ANSWER: Ken **Saro-Wiwa** [or Kenule Beeson **Saro-Wiwa**]

<Other Academic>

6. Anthony Burgess suggested that this feature should be read aloud as a “grunt or a snore.” For 10 points each:

[10] Identify this typographical feature that follows the question “where?” in most editions of a certain novel, and is usually thought to indicate the main character’s place of rest after a day of wandering.

ANSWER: the large black **dot** in *Ulysses* [or the big **spot** in *Ulysses*; prompt on **dot** or **spot** alone; accept “point” or “mark” in place of “dot”]

[10] The dot concludes the penultimate “Ithaca” episode of *Ulysses*, which is followed by the “Penelope” episode, or the “soliloquy” of this wife of Leopold Bloom.

ANSWER: **Molly** Bloom

[10] The dot has been also interpreted as a visual depiction of this object, which Leopold had kissed just a few pages earlier. This object is said to have a “mellow yellow furrow, with obscure prolonged provocative melon-smellous osculation.”

ANSWER: **Molly** Bloom’s **ass** [or **her rump**; prompt on **ass** or other answers that don’t indicate whose ass it is; grudgingly prompt on **Molly** and heavily chide the team for objectifying women; accept clear knowledge synonyms for “ass,” such as “**butt**”]

<Long Fiction>

7. These organisms are turned into zombies by the neurological weapon DCPV which causes them to flail around to protect cocoons attached to their bellies. For 10 points each:

[10] Name these beetles parasitized by the wasp *Dinocampus coccinellae*, which lays eggs in their body.

ANSWER: **ladybugs** [or **lady beetles**]

[10] Ladybugs eat these sap-sucking bugs that are common crop pests. These small bugs are “farmed” by ants for their nectar.

ANSWER: **aphids**

[10] When attacked by ants farming aphids, ladybugs engage in this behavior using the tibiofemoral articulations to excrete alkaloid toxins. This behavior is also done by the European grass snake when playing dead.

ANSWER: **autohemorrhaging** [or **reflex bleeding**; prompt on equivalents of **making yourself bleed**; prompt on **bleeding**]

<Biology>

8. Because he lost a contest to create humans, this god threw a fit and seduced the first man’s wife, invented poison, and created death so he got banished to the depths of the ocean. For 10 points each:

[10] Name this counterpart to Kāne [KAH-nay], the ruler of the underworld who takes the form of an evil squid in the ocean but is a banana on land.

ANSWER: **Kanaloa** [or **Milu** or **Ka-he‘e-hauna-wela**]

[10] Women are prohibited from eating bananas because they are sacred to Kanaloa and Kane in this system due to their phallic shape. Wakea instituted this system in order to woo his daughter and spend less time with his wife.

ANSWER: **kapu** [accept **tabu** or **taboo**]

[10] Kanaloa is invoked as an aumakua by people engaging in this activity, which Maui was doing with his brothers when he pulled up the Hawaiian islands with his hook.

ANSWER: **fishing**

<Mythology>

9. Eduard von Flottwell was an early implementer of this policy, which was opposed by a wave of school strikes in 1906. For 10 points each:

[10] Identify this policy that was pushed by a ultra-nationalist society popularly called “Hakata” and by a Settlement Commission established by Bismarck to target the Province of Posen.

ANSWER: **Germanization** of Poles [accept word forms such as **Germanification**]

[10] Germanization of the Polish-speaking people of Posen was an official part of this campaign of Bismarck’s, which included the May Laws instituted by Adalbert Falk.

ANSWER: **Kulturkampf**

[10] This Polish ethnic group targeted by the Germanization program was later one of the few labeled as capable of Germanization by the Nazis, an effort they did little to comply with; nonetheless, many members of this ethnic group centered in Pomerania were expelled along with the Germans after the war.

ANSWER: **Kashubians** [accept variants like **Kashubs**]

<European History>

10. For this company, Christopher Wheeldon recently choreographed a new *Nutcracker* set at a Worlds’ Fair. For 10 points each:

[10] Name this ballet company co-founded by Gerald Arpino. Millicent Hodson and Kenneth Archer reconstructed the original choreography of *The Rite of Spring* for this company.

ANSWER: **Joffrey** Ballet

[10] The Joffrey is based in this Midwestern American city. Maria Callas made her American debut in a 1954 production of *Norma* at the grand opening of this city’s Lyric Opera.

ANSWER: **Chicago**

[10] This American lyric-coloratura soprano made her American debut as Mimi at the Lyric in 1957. Due to a heavy workload from TV and film appearances, this famously beautiful soprano, who was best-known for her Violetta, notoriously bombed during a 1969 Met broadcast of *Lucia di Lammermoor*.

ANSWER: Anna **Moffo**

<Other Fine Arts>

11. A function named for these *two* mathematicians gives the maximum possible average value for a function on a ball surrounding a given point. For 10 points each:

[10] Name these *two* mathematicians who name a “maximal” function and inequality used in Lebesgue differentiation, as well as in the proof of Fatou’s theorem.

ANSWER: G. H. **Hardy** [or Godfrey Harold **Hardy**] and John Edensor **Littlewood**

[10] Independently of Hardy, Littlewood coined three “principles” that apply to functions and sets with *this* property. Functions must have this property to be Lebesgue integrable, while subsets of the real line *without* this property include the Vitali set.

ANSWER: Lebesgue **measurable**

[10] Like Hardy, Littlewood worked with this self-taught Indian mathematician, who made many proofs involving continued fractions. While dying, this man identified the number 1729 as the smallest number that’s the sum of two different pairs of cubes.

ANSWER: Srinivasa **Ramanujan**

<Other Science>

12. This author wrote: “You looked like a hamburger fried in a donut. You were hairy and large” in an essay addressed to a creative writing professor with whom she had an affair. For 10 points each:

[10] Name this First Nation author who recalled her sexual abuse by her alcoholic father on the Seabird Island reservation, and her subsequent diagnosis with PTSD and bipolar disorder in her 2018 memoir, *Heart Berries*.

ANSWER: Terese (Marie) **Mailhot**

[10] This author mentored Mailhot throughout the process of writing *Heart Berries*. In interviews, Mailhot described feeling betrayed after Elissa Washuta, Erika Wurth, and several other female native writers came forward with sexual harassment allegations against this author of *The Lone Ranger and Tonto Fistfight in Heaven*.

ANSWER: Sherman **Alexie**

[10] Even before the allegations broke, Alexie’s fiction has been criticized for implicitly reinforcing American Indian stereotypes, such as in this story in which Victor, Junior, and Thomas-Builds-The-Fire take magic mushrooms and imagine dancing the white people back to Europe.

ANSWER: “A **Drug Called Tradition**”

<Short Fiction>

13. According to a 1990 book, the use of this device as a model of visual perception was subverted when Goethe conducted an experiment by closing this device’s aperture. For 10 points each:

[10] Name this apparatus that uses a pinhole to project an image onto the wall of a dark room. It’s often been thought that painters like Vermeer used these devices to copy fine details.

ANSWER: **camera obscura** [or **camerac obscurae**; do not accept or prompt on partial answer]

[10] This art historian attacked the received idea that the camera obscura simply developed directly into the modern photographic camera in his landmark book *Techniques of the Observer*. This editor of Zone Books gave a history of the modern commodification of attention in *Suspensions of Perception*.

ANSWER: Jonathan **Crary**

[10] W.J.T. Mitchell gave a detailed critique of Crary’s *Techniques of the Observer* at the beginning of *Picture Theory*, which also discussed this man’s photo of “Annie Mae Gudger,” part of a series by this man that was printed separately from a “fully collaborative” text in the same volume.

ANSWER: Walker **Evans** (The book is *Let Us Now Praise Famous Men*.)

<Visual Arts>

14. The Ōmi Code was the first statement of this system, which established the two castes of “good citizens” and “low citizens.” For 10 points each:

[10] Name this legal system that established central power in an elaborately-structured aristocracy. This legal regime was officially swept away Kamakura period after it had decayed into a manorial system based around shōen estates.

ANSWER: **ritsuryō** system

[10] The *ritsuryō* legal regime grew out of this series of reforms implemented by the Emperor Kōtoku during the Asuka period.

ANSWER: **Taika** Reforms

[10] The bureaucratic ranking system of *ritsuryō* was prefigured by the China-inspired twelve-level cap-rank system established by this prince. A seventeen-article constitution is also credited to this prince, and the Taika reforms were written shortly after his death.

ANSWER: Prince **Shōtoku**

<World History>

15. A canonical example of this reaction involves the addition of base to a substituted decalin-ol to form a ten-membered ring containing a cis or trans double-bond. For 10 points each:

[10] Name this type of heterolytic elimination reaction where an electrofuge at the beginning of a chain of five atoms pushes electrons into the nucleofuge at the end of the chain, forming three total products and a double bond between atoms three and four of the chain.

ANSWER: **Grob fragmentation**

[10] Molecular ions in mass spectrometry undergo fragmentation reactions, sometimes with rearrangement. In this reaction, a ketyl radical undergoes beta-cleavage, reacting with a gamma-hydrogen atom to fragment into an enol radical and an alkene.

ANSWER: **McLafferty** rearrangement

[10] In mass spectrometry, aliphatic amine radical cations undergo alpha-cleavage, fragmenting into an aliphatic radical and this functional group containing a carbon double-bonded to a nitrogen. This functional group is formed in the first step of a reductive amination.

ANSWER: **imines** [do not accept or prompt on "amine"]

<Chemistry>

16. An influential 2002 paper by Dan Sperber and Deirdre Wilson argued that the Gricean ["Grice"-ean] version of pragmatic interpretation is "ultimately an exercise in [this action]." For 10 points each:

[10] Name this action, whose performance is better explained by "simulation theory" rather than "theory theory," according to a 1998 collaboration between Alvin Goldman and Vittorio Gallese.

ANSWER: **mind-reading** [or **theory of mind**; prompt on **folk psychology**]

[10] In his 1999 book about *Knowledge in a Social World*, Goldman claimed that knowledge plays a privileged role in the "special domains" of science, law, democracy and education. Goldman has also proposed a causal theory of knowledge, which he distinguishes from definitions of knowledge as "belief" characterized by *these* two adjectives.

ANSWER: **justified** AND **true** [accept **justified true belief** or **JTB**]

[10] In "Discrimination and Perceptual Knowledge," Goldman abandoned his causal theory of knowledge due to a thought experiment in which a county is filled with fake façades of *these* buildings.

ANSWER: **barns**

<Philosophy>

17. This essay notes that using words such as "shadow," "drum," "sun," or "bygone" in subtitles is helpful in the title activity. For 10 points each:

[10] Name this satirical essay by Binyavanga Wainaina that recommends an "*I-expected-so-much*" tone and a closing quote about "rainbows or renaissances" by Nelson Mandela to those doing the title action.

ANSWER: "**How to Write About Africa**"

[10] "How to Write About Africa" was originally written as a letter of complaint to this British literary magazine, where it was later published. This magazine was re-launched under the editorship of Bill Buford in 1979 after originally being founded by Cambridge students in the nineteenth century.

ANSWER: **Granta**

[10] This author's short story "Beethoven Was One-Sixteenth Black" appeared alongside "How to Write About Africa" in a 2005 issue of *Granta*. That same year, this author published a novel about the environmental activist Paul Bannerman titled *Get a Life*.

ANSWER: Nadine **Gordimer**

<Miscellaneous Lit>

18. After its opening trumpets-and-drums fanfare, this piece continues with a sequence, with the baseline in the unison bassoons and a chain of suspensions in the horns. For 10 points each:

[10] Name this piano concerto, its composer's first to use clarinets. Unusually for its composer at the time, it wasn't written as part of a pair or group of three, instead being composed almost 8 months after a pair of concertos in D minor and C major.

ANSWER: Piano Concerto No. **22** in E-flat major [or Köchel **482**]

[10] Robert Levin and Kristen Bezuidenhout [buh-TSOW-den-howt] have both recorded that concerto on *this* early keyboard instrument. This is the usual modern term for the instruments of Stein, Schantz, and other keyboards that Mozart performed on.

ANSWER: **fortepiano** [do not accept or prompt on "piano" or "pianoforte," which is the modern instrument]

[10] Levin is one of the many musicians who have attempted to complete this Mozart choral work. Constanze Mozart commissioned this piece's first completion from Mozart's student Franz Xaver Süssmayr.

ANSWER: **Requiem** in D minor, K. 626

<Auditory Arts>

19. Avery Craven's classic history of this process in Virginia and Maryland argues that fears of it were stoked by publication of Justus von Liebig's *Organic Chemistry in Its Applications to Agriculture and Physiology*. For 10 points each:

[10] Name this process that reformist journals such as Noah B. Cloud's *American Cotton Planter* attempted to reverse by promoting the raising of more livestock.

ANSWER: **soil exhaustion** in the American South due to over-planting of cotton [or **soil depletion**, accept any answer than involves soil or dirt losing its nutrients, prompt on over-planting of cotton alone]

[10] Reformers' attempts to get Southern planters to reverse soil exhaustion by using more manure were hampered by the dominance of this medical theory, which argued that diseases were spread by rotting organic matter through "bad air."

ANSWER: **miasmatic** theory

[10] Applying this substance to barns, outhouses, and cellars was a common antebellum method for combatting miasma. In a literary scene involving this substance, a character discovers that to make people covet something, "it is only necessary to make the thing difficult to attain."

ANSWER: **whitewash** [accept **lime** paint; prompt on paint] (The character is Tom Sawyer.)

<American History>

20. In a 2008 book, S. Brent Plate argued that both religion and this medium fundamentally reconstruct our reality through a process of "worldmaking." For 10 points each:

[10] Name this medium. According to Plate, the first wave of religious scholarship on this medium took place in the 1960s to 80s and focused on European modernists such as Bresson, Dreyer, and Bergman.

ANSWER: **film** [or **movies** or **cinema**]

[10] Plate situated Mel Gibson's *The Passion of the Christ* as part an antisemitic tradition stretching back to *this* early 19th century German nun and mystic, whose visions of the last years of Mary and suffering of Christ were recorded by her roommate, the Romantic poet Clemens Brentano.

ANSWER: Blessed Anna Katharina **Emmerick** [or Anne Catherine **Emmerich**]

[10] A staunchly pro-Islamic "white cinema" arose in the 1990s in this country, where imams are trained and mosques are run by a government agency called the Diyanet.

ANSWER: Republic of **Turkey** [or **Türkiye** Cumhuriyeti]

<Religion>