

Pre-ICT and Nationals Open/Minnesota Open 2019 (PIANO/MO): “What about bad subject matter? Or a bad title drop, even? That could kill a tournament pretty good.”

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Packet 1 Tossups

1. **Macrophages in this organ accumulate lipofuscin [LIE-poh-FYOO-shin] and turn it black in a melanosis caused by anthra-quinone toxicity. Nicolaes Tulp gave everybody an anatomy lesson by discovering a valve leading into this organ. Cancer in this organ, which can be diagnosed by elevated M2-pyruvate kinase, progresses through a cycle of APC mutation, K-ras accumulation, and p53 loss in the textbook example of the multi-hit model. This organ’s walls contain pouches called (*) haustra and are inflamed in diverticulitis. Biotin is synthesized in this organ, where phyllo-quinone turns into mena-quinone, also known as active vitamin K. Cancers of this organ progress from polyps to adenomas to carcinomas and are detected using fecal occult blood, a sigmoidoscope, or a camera inserted up the anus. For 10 points, name this organ that extracts water from digested food and ends in the rectum.**

ANSWER: large intestines [or colon; or cecum; accept rectum until mentioned; prompt on gut or intestines] <AS>

2. **The upper right-hand corner of one section of *this* work depicts a seated man in a purple robe who sips a glass of wine while staring at a green-and-red, lion-like monster. A seemingly abstract section of this work depicts moths, an otter eating a salmon, and mice nibbling on communion wafers. This artwork includes an almost indecipherable version of the Eusebian (*) Canons. This artwork includes jewelry-like knots and other gold decorations on an enormous Chi-Rho monogram. This work of Insular Art may have derived from the same source as a similar item from Durrow, and it contains only one carpet page, unlike the contemporaneous Lindisfarne Gospels. For 10 points, name this early Medieval manuscript from a namesake Irish monastery.**

ANSWER: Book of Kells <JR>

3. **A 2017 book by Peter Brooks is titled for this author’s alleged claim that his country’s capital would never have been ruined if people had read his most recent novel. A set of “principles for a sociology of cultural works” is outlined alongside an essay on this author’s “point of view” in Pierre Bourdieu’s *The Field of Cultural Production*. This novelist once claimed “The author, in his work, must be like God in the Universe, present everywhere and visible nowhere.” Jean-Paul (*) Sartre’s final monograph was a 3,000-page study of this man titled *The Family Idiot*. This author once remarked of his most famous character: “c’est moi” [say MWAH]. Geoffrey Braithwaite tries to track down the inspiration for this author’s story “A Simple Heart” in a Julian Barnes novel titled for this man’s *Parrot*. This realist tried to use the precise “mot juste” [moh ZHEWST]. For 10 points, name this author of *Madame Bovary*.**

ANSWER: Gustave Flaubert [accept Flaubert in the Ruins of Paris or Flaubert’s Parrot] <JR>

4. It's not the Diels–Alder reaction, but, in 2008, David Baker's lab engineered 32 catalysts for this reaction in the first examples of enzymes designed completely *in silico*. Every anabolic step of the pentose phosphate cycle is one of these reactions. Because six crucial atoms for this reaction's mechanism form a chair intermediate, *trans* reactants form *anti* products. Thus, this reaction was the origin of oxazo-lidinone and proline auxiliaries for asymmetric synthesis. An enzyme (*) named for this reaction makes D-HAP and GAP from fructose-1,6-bis-phosphate in glycolysis. This reaction is put under kinetic control by dousing the first ketone in cold L·D·A before slowly adding the second ketone. Heating acetaldehyde in base leads to this carbon-carbon bond-forming reaction, which often ends with an E1cb dehydration step to form an enone. For 10 points, name this reaction in which an enolate attacks a carbonyl.

ANSWER: aldol condensation [or aldol addition; or aldol reaction; or retro-aldol condensation; or reverse aldol condensation] <AS>

5. With Gabriele Oettingen, this man hit up bars on either side of the Berlin Wall just before it fell to compare expressions of depressive body language on either side. With Lyn Y. Abramson, this researcher found that people who attribute causes to internal, stable, and global causes have an “attributional style” conducive to depression. The Values In Action inventory came out of a project of this man and Christopher Peterson, which created a handbook of (*) *Character Strengths and Virtues*. A 1998 address by this man lamented his discipline's “almost exclusive attention to pathology.” Stephen Maier assisted experiments led by man, which found that some animal test subjects would not jump out of an enclosure even after an escape from harmful stimuli opened up. For 10 points, what UPenn professor and pioneer of “positive psychology” electrocuted dogs, thereby inducing “learned helplessness”?

ANSWER: Martin (Elias Pete) Seligman <MJ>

6. A character in this film states that although his “heroes are no longer warriors,” “no one has thus far succeeded in singing an epic of peace.” Another character in this film lists his favourite sensations as smoking, drinking coffee, drawing, and rubbing his hands together on a cold day. A location in this film is named after its cinematographer, Henri Alekan. The actor who played Nick in John Cassavetes's *A Woman Under the Influence* plays himself in this film, describing himself as a “compañero” and sketching the extras of a movie about (*) Nazi Germany. Voiceovers written by Peter Handke play throughout this film, in which Peter Falk reveals to Bruno Ganz's character that he gave up his immortality to experience ordinary life. Daniel falls in love with Marion while watching over a divided Berlin in—for 10 points—what Wim Wenders [VIM VEN-derz] film about an angel who decides to become human?

ANSWER: Wings of Desire [or *Der Himmel über Berlin*] <DS>

A leader of this country described his governing strategy with the motto “in the arms of the chameleon the branch does not break.” Leonard Wantchekon, an ex-dissident from this country, conducted a classic field experiment in it by having electoral candidates randomize their stump speeches. Tensions between regionalist parties in this country, like one representing the northern Bariba people, caused its early politics to be dominated by a “three-headed monster” consisting of Justin Ahomadégbé, Sourou-Migan Apithy, and Hubert Maga. Nicéphore Soglo's 1991 election victory in this country ended twenty-years of (*) single-party rule by Matthieu Kérékou. Kérékou also renamed this country for a kingdom sacked by Henry Rawson, discarding a colonial name referencing a kingdom that ran the slave port of Ouidah and had a troop of namesake “Amazons.” For 10 points, name this country formerly called “French Dahomey.”

ANSWER: Republic of Benin [or République du Bénin; prompt on French Dahomey until mentioned] <JG>

8. A character in this novel tells the story of how “possum hunters” found the bones of a “bluegum preacher” who was eaten by his children. A “woman’s single soprano” repeats the phrase “yes, Jesus!” during a sermon in this novel that causes another character to cry “in the annealment and the blood of the remembered Lamb.” The word “eye” is replaced with a drawing of an eye at one point in this novel, in which a man is given a gift described as a “mausoleum of all hope and desire” and befriends an (*) Italian immigrant girl known only as “sister.” A girl in this novel accidentally exposes the “muddy bottom of her drawers” and is consequently associated with the smell of trees by her mentally-challenged brother Benjy. The Harvard student Quentin drowns himself in the Charles River in—for 10 points—what William Faulkner novel about the Compson family?

ANSWER: *The Sound and the Fury* <WJ>

9. A book about trainees in these places dissects perspectives from “experience” and “responsibility.” Julius Roth described conflicting norms of scheduling in these places in the book *Timetables*. A distinction between “forecasting” and “foretelling” was expanded in a book by Nicholas Christakis about how employees in these places are reluctant to make predictions. Trainees in one of these places in Kansas were interviewed for a book by Howard Becker, *et al.* Anselm Strauss and Barney Glaser first applied grounded theory in a book about these places, where Talcott Parsons theorized that some people exhibit (*) “sanctioned deviance.”

Ophelia Dahl and Paul Farmer lead a non-profit that builds these places. These places are described in the books *Boys in White* and *Awareness of Dying*. The “sick role” applies to people treated in—for 10 points—what facilities?

ANSWER: hospitals [or doctors’ offices; or health clinics; or medical schools; or any other sort of medical or health care facility, but do not accept “mental hospitals” or “asylums”] <SK>

10. The Manuscript Thott.290.2 suggests that medieval women could engage in this activity if male participants were buried from the waist down. It’s not “seduction” or “nunnery arson,” but the crossdressing opera singer Julie d’Aubigny was legendarily good at *this* activity. In medieval Germany, instructors of this activity like Hans Talhoffer often traced teachings to the mysterious Johannes Liechtenauer. “Prize playing” in this activity allowed advancement in the “Company of Masters” that governed this activity under Henry VIII. Anastasia (*) Kielmansegg and Pauline von Metternich scandalized Europe by doing this activity wearing only corset covers to avoid infection and employing female “seconds.” The *Mensur* tradition centers on this activity, whose popularity in German universities led to facial scars becoming a rite of passage. For 10 points, name this activity often ended by drawing “first blood.”

ANSWER: sword fighting [accept fencing and word forms; accept dueling or martial arts outright until “Hans Talhoffer” and then prompt with “With what weapon?”; prompt on self-defense with “With what weapon?”] <JG>

11. An uncharged object acquires magnetization proportional to *this* quantity times its susceptibility in the Barnett effect. A form of this quantity can be calculated as “two times a quaternion’s time derivative times its inverse.” This quantity traces out the polhode of a Poinsoit [pwaa-SOH] ellipsoid at constant kinetic energy. Combinations of these squared quantities are often replaced in Lagrangians by squared derivatives of Euler angles. The cross product of this (*) pseudovector with an arbitrary vector equals the difference between the time derivatives of the other vector on the body and space axes. Euler forces are proportional to this quantity’s time derivative. In a purely rotational system, this quantity equals half the curl of the velocity field, and its square is proportional to the kinetic energy. For 10 points, name this quantity equal to angular momentum divided by moment of inertia.

ANSWER: angular velocity [or rotational velocity; or omega; do not accept or prompt on linear “velocity” alone; do not accept or prompt on “angular frequency”] <AS>

12. **This thinker discussed becoming religious late in life in a book summarizing “3/4” Jewish philosophers, counting Wittgenstein as “1/4.” At age 87, this long-time teacher of the class “Non-Scientific Knowledge” began spitting philosophy hot takes on the Blogspot page “Sardonic Comment.” This author of *Jewish Philosophy as a Guide to Life* praised Amartya Sen in lectures arguing for the “collapse” of the fact-value dichotomy. A paper by this man imagines rolling the clock back to 1750 to observe English speakers named (*) Oscar. This man noted that different species have very different physical structures for sensing pain to support his notion of “multiple realizability.” His view that “meaning just ain’t in the head” informs a narrative about a spaceship finding a place with oceans made of chemical XYZ. For 10 points, name this analytic philosopher who devised the Twin Earth thought experiment.**

ANSWER: Hilary (Whitehall) Putnam <MJ>

13. **A character in this play is compared to Priapus when he sings about whipping people with his penis. Another character compares this play’s setting to a “pool of eternal youth” for “citized souls” and proposes digging for guano in order to create farmland. In its final scene, a character plans to eliminate “opossums” with “vile grins,” shouting, “I shall protect civilization!” The “historical name” Hannibal is proposed for a man in this play who says that his “name has been stolen.” A “really big guy to do the wind” and “someone strong for Captain of the ship” are requested by the Master of (*) Ceremonies while this play’s actors choose masks. Iris, Ceres, and Juno are joined by the “black devil-god” Eshu in this play, which reimagines two pre-existing characters as a mulatto and a black slave. Prospero frees Ariel, but not Caliban, in—for 10 points—what reimagining of a Shakespeare play by Aimé Césaire?**

ANSWER: A Tempest [or *Une Tempête*; do not accept or prompt on “*The Tempest*”] <DS>

14. **Diodorus Pasparos received divine honors for negotiating a reduction of *this* city’s debts, and its monuments include the “Trajaneum.” An Egyptian embargo on the supply of papyrus supposedly caused this city to invent parchment. Lysimachus established a treasury in this city under the supervision of Philetaerus, who later founded this city’s ruling dynasty. A man from this city documented the effects of the Antonine Plague and served as personal physician to the emperor (*) Marcus Aurelius. That physician from this city was Galen. In 133 B.C., Attalus III bequeathed the kingdom centered at this city to Rome. A structure taken from this city that depicts the life of Telephus and the Gigantomachy now resides in a namesake museum in Berlin. For 10 points, name this city in Asia Minor whose acropolis contained a monumental “Altar.”**

ANSWER: Pergamum [accept Kingdom of Pergamon; accept Pergamos] <MK>

15. **Each September, this country’s capital begins hosting a month-long flower festival called Floriade. Stupid people in this country are often likened to a native pink and grey bird called the galah. In January 2019, toxic algae killed millions of fish near Menindee in this country’s longest river. As of 2016, many GPS systems shifted this country about five feet northwest to account for movement from its measured position in 1994. This country’s Lake (*) Hillier and Hutt Lagoon are both bright pink. This country’s poisonous snakes include three species of taipan. Yellow parrots called budgerigars, or “budgies,” are from this country. A large sheet of limestone along its southern coast makes up the Nullarbor Plain. The Darling is the longest river in—for 10 points—what country whose fauna include wild dogs called dingos and eucalyptus-eating koalas?**

ANSWER: Commonwealth of Australia <MJ>

16. In “Resolution and Independence,” the speaker claims that the leech-gatherer stared at the water as if he’d just been using *these* objects. The addressee of a poem is told to stop using these objects “Or surely you’ll grow double.” The speaker of another poem claims that *not* using these objects is like “look[ing] round...Mother Earth / As if she for no purpose bore you; / As if you were her first-born birth, / And none had lived before you!” Using these objects is contrasted with “dream[ing] [one’s] time away” while sitting on an (*) “old grey stone” in “Expostulation and Reply.” In “The Tables Turned,” these objects are called a “dull and endless strife” and are contrasted with “let[ting] Nature be your Teacher.” Wordsworth dismisses these objects with the lines “Enough of Science and of Art / Close up those barren leaves.” For 10 points, name these objects that include *Lyrical Ballads* and *Wordsworth’s Poetical Works*.

ANSWER: books <JR>

17. This term is usually translated as “phenomenon” in the context of a widely-quoted saying beginning “Ye [this word] hetu....” This is the first term in a compound word referring to the “true” or “real” body. In that usage, this term refers to “qualities” that are often compared to atoms. A “higher” version of this concept names a collection of “scholastic” philosophical rethinkings of ideas from the sutras, which comes after the *vinayas* to form the third (*) “basket” of the Tripitaka. This is the title concept of an anthology of sayings of the Buddha that’s the most widely-read portion of the Pali Canon. The Buddha’s first teaching after attaining Nirvana is supposedly preserved in a Sutra named for the “setting in motion” of this concept’s “wheel.” For 10 points, give this term meaning “law” or “true doctrine.”

ANSWER: dharmā [or dhamma; accept dharmakaya or Dhammapada or Dhammacakkappavattana Sutta or abhidharma] <JR>

18. One of this man’s performances begins [read slowly] in swung eighths by arpeggiating up from E-flat on an “A-flat add-6” chord. Late in his career, this pianist made a trio recording with Lionel Hampton and Buddy Rich, and he recorded tracks like “Gone With the Wind” and “Have You Met Miss Jones” with Ben Webster in 1956. This pianist would sometimes invert a then-standard technique by jumping from a left-hand chord to a root note an octave *higher*. André Previn said that he feels “like a jerk” after playing one of this man’s renditions of “Sweet Lorraine,” and Oscar Peterson claimed that hearing one of this man’s recordings as a kid led him to (*) quit piano for a few months. This man often improvised on Dvořák’s *Humoresque*. He made his name in ‘30s Harlem by beating Fats Waller in a cutting contest. For 10 points, name this mostly-blind Stride-era pianist, known for virtuosic versions of “Tiger Rag” and “Tea for Two.”

ANSWER: Art(hur) Tatum (Jr.) <JM>

19. The steering diode in these devices is usually just a multiple-emitter transistor. In a totem pole configuration for C-MOS, these devices can be constructed from two sinking *n*-type FETs wired in series next to the ground. The single vertical line symbolizing these devices is called a Sheffer stroke. Twelve of the fourteen pins of the 7400 series of transistor-transistor logic belonged to these devices’ inputs and outputs. Just four of these devices can construct the MUX operation, using the (*) fewest number of transistors required to satisfy functionally complete logic. Like XOR [“X or”] gates, they become inverters if one of their inputs is wired to an arbitrary positive voltage. In electronics, these gates are diagrammed using a “D” shape with a circle at the tip. For 10 points, name these logic gates that return “true” unless all inputs are true, thus performing the inverse of conjunction.

ANSWER: NAND gates [prompt on logic gates; do not accept or prompt on “NOT” or “AND” or “negative AND”] <AS>

20. In 1986, four members of this city's gang El Rukn were convicted of plotting a terrorist attack funded by the Libyan government. Activist Ferdinand Lee Barnett founded a newspaper in this city, where newspaper founder Robert S. Abbott started the Bud Billiken Club. Research in this city was the basis for St. Clair Drake and Horace Clayton Jr.'s 1945 book *Black Metropolis*. Operation PUSH was founded in this city, where John H. Johnson founded (*) *Jet* magazine. John H. Sengstacke attacked Jim Crow as the publisher of a newspaper called this city's *Defender*. In this city, the founder of the National Rainbow Coalition helped elect its first black mayor, Harold Washington. Jesse Jackson was from this city where, after the Great Migration, neighborhoods like Bronzeville formed a "Black Belt" on the South Side. For 10 points, name this Midwestern city once represented by Barack Obama.

ANSWER: Chicago <JR>

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Packet 1 Bonuses

1. For 10 points each—answer the following about shipwrecks in Latin literature.

[10] This character’s mortal enemy Lichas of Tarentum drowns after being shipwrecked. This protagonist of Petronius’s *Satyricon* attends an immensely ostentatious dinner party hosted by the freedman Trimalchio.

ANSWER: **Encolpius**

[10] In this author’s comedy *Rudens*, the star Arcturus foretells the shipwreck of the wicked pimp Labrax. This predecessor to Terence also wrote *Miles Gloriosus* and *Menaechmi*.

ANSWER: Titus Maccius **Plautus**

[10] The tenth poem in *this* Golden Age collection reverses the *propempticon* theme, in which the poet wishes a friend a good voyage, by asking that Maevius be shipwrecked. This collection draws heavily on the iambic poetry of Archilochus.

ANSWER: Horace’s **Epodes** [prompt on *iambi*] <MK>

2. The Arba‘een pilgrimage occurs 40 days after this holiday, which is one of the times some believers traditionally practice a form of self-flagellation called *tatbīr*. For 10 points each:

[10] Name this day that commemorates the death of Ḥusayn.

ANSWER: (Yom) ‘**Āshūrā**’ [prompt on Muharram, which is the month in which it occurs]

[10] Ḥusayn was a son of *this* fourth caliph of Sunnī Islām, whom Shī‘ites regard as the first Imām.

ANSWER: ‘**Alī** ibn Abī Ṭālib

[10] In Iran, many cities celebrate the day of ‘Āshūrā’ with a parade in which *this* large, cypress-shaped wooden edifice symbolizing Ḥusayn’s coffin is carried around.

ANSWER: **Nakhl** Gardānī <JM>

3. Two 2018 aRxiv [“archive”] papers suggested that lanthanum hydrides can be superconducting at 280 Kelvins, beating the previous high-temperature superconductor record in hydrogen sulfide by about 50 Kelvins. Answer the following about those papers, for 10 points each.

[10] Because the samples produced are so small, neither research group was able to measure this effect, in which Type I [“one”] superconductors show perfect diamagnetism by expelling their internal magnetic fields.

ANSWER: **Meissner** effect

[10] Thus, besides low resistance, the main proof for superconductivity is that critical temperature varies inversely with *this* quantity. BCS theory predicts that “critical temperature times the square root of” this quantity is a constant.

ANSWER: isotope **mass** [or molecular **weight**]

[10] On the other hand, Type II superconductors have no Meissner effect and instead form internal vortices whose size is governed by *two* length scales. One describes how rapidly magnetic fields decay in a superconductor, while the other falls directly out of Ginzburg–Landau theory. Name *either*.

ANSWER: London **penetration depth**

Ginzburg–Landau **coherence length** [prompt on partial answer] <AS>

4. In the 1560s, the ethnically-Greek mercenary Iakob Heraclid came to eastern Europe, brought Lutheranism with him, and set up a Protestant Latin school at Cotnari. Answer the following about him, for 10 points each.

[10] Heraclid may have come from *this* Mediterranean island, to which the Knights Hospitallers fled after their expulsion from Rhodes. A Semitic language native to this island is written in Roman letters.

ANSWER: **Malta**

[10] Along with “despot,” Heraclid held *this* Slavic leadership title in Moldavia for two years. Vlad Tepes had this linguistically-Slavic title when he ruled nearby Wallachia a century earlier.

ANSWER: **voivode** [or **Vodă**; or **wojewoda**]

[10] An Eastern Orthodox local rival of Iakob Heraclid killed him with *this* kind of weapon. The Soviet Pernach pistol was named for a medieval Slavic type of this weapon, whose types included the *bulawa* [boo-WAH-vah] wielded by Polish military commanders.

ANSWER: **mace** [or **baton**] <MJ>

5. In the Neolithic and the Bronze Age, this material was often used to make “prismatic cylinders” with a tube-shaped interior and a notched-rectangular outside. For 10 points each:

[10] Name this material that was also carved to make ring-shaped pierced disks, which were often covered in raised bumps.

ANSWER: **jade** [accept **jadeite** or **nephrite**; prompt on **hardstone**]

[10] Jade was also used in ancient China to make “suits” for use in *these* locations. One of these locations is home to a massive Terracotta Army.

ANSWER: **tombs** [or **mausoleums**; accept reasonable equivalents]

[10] Jade and similar minerals are widely used by *these* people to make ceremonial weapons like *mere*. These people use the term “greenstone” for jade and similar minerals.

ANSWER: **Māori** [prompt on **Polynesians** or **New Zealanders**] <JR>

6. In this novel, the protagonist’s boyfriend Laurence realizes that the protagonist’s grandmother is a smuggler. For 10 points each:

[10] Name this novel, in which Caroline Rose, a recent convert to Catholicism, begins to hear voices and typewriter sounds. It was inspired by its author’s troublesome relationship with dextro-amphetamine.

ANSWER: *The **Comforters***

[10] *The Comforters* is the first novel by *this* Scottish author of *Memento Mori* and *The Ballad of Peckham Rye*.

ANSWER: Muriel (Sarah) **Spark**

[10] Spark’s best-known novel is titled for *The Prime of this woman*. This school teacher is accused of “think[ing] she is the God of Calvin” by one of her students.

ANSWER: Miss **Jean Brodie** [accept either underlined portion] <JM>

7. Mikhail Bakhtin introduced the terms “heteroglossia” and “chronotope” in a collection of essays named for this kind of *Imagination*. For 10 points each:

[10] Name this concept that Bakhtin contrasted with dialectics. This term also denotes the main philosophical form used by Plato.

ANSWER: **dialogue** [accept word forms like **dialogical**; accept *The **Dialogic Imagination***]

[10] *This* twentieth-century German philosopher developed a “philosophy of dialogue,” which theorizes relational and objectifying modes of encounter named for the two word-pairs “I-You” and “I-It.”

ANSWER: Martin **Buber**

[10] This other philosopher argued that Buber’s model of dialogue mistakenly envisions the I-You as reciprocal and not asymmetrical, and fails to account for the third-person “illeity” necessary to the structure.

ANSWER: Emmanuel **Levinas** <JM>

8. For 10 points each—answer the following about indirect negative interactions between prey species in response to a shared predator:

[10] Robert Holt described that interaction between prey species as the “apparent” form of *this* process. Holt defined the P* [“P”-“star”] parameter to emphasize his model’s symmetry with Dave Tilman’s R* [“R”-“star”] model of this process.

ANSWER: **competition** [accept apparent **competition**; accept resource **competition**]

[10] Altering the form of *this* kind of curve, which describes how consumption by predators varies with prey density, can weaken apparent competition or even produce apparent mutualism. Three canonical types of these curves were introduced by Buzz Holling.

ANSWER: **functional response** curve

[10] Especially among plants, apparent competition is often cited as a cause for the negative impacts of *this* kind of species, which is an introduced or exotic species that has become noxious.

ANSWER: **invasive** species <SK>

9. Early followers of this man’s teachings often met in vegetarian restaurants, and their anarchist commune at Stapleton in Yorkshire has survived since the 1890s. For 10 points each:

[10] Name this writer whose works were edited and disseminated in Britain by Vladimir Chertkov. His turn to religion was laid out in the book *A Confession*.

ANSWER: Leo **Tolstoy** [or Lev Nikolayevich **Tolstoy**]

[10] One of the most influential books for the Tolstoyan movement was *this* book, banned in Russia, in which he described how a new society could be created around the teachings of Jesus. Its title quotes Luke 17:21.

ANSWER: *The **Kingdom of God is Within You*** [or ***Tsárstvo Bózhiye vnutrí vas***]

[10] In *The Story of My Experiments with Truth*, this man named *The Kingdom of God is Within You* as one of the three most important books in his life. He founded a commune named Tolstoy Farm while working in South Africa and used it as the headquarters for his *satyagraha* movement.

ANSWER: Mahatma **Gandhi** [or Mohandas (Karamchand) **Gandhi**] <DS>

10. This man founded the pioneering early music conservatory Schola Cantorum Basiliensis. For 10 points each:

[10] Name this man best-known for commissioning pieces like Béla Bartók’s *Music for Strings, Percussion and Celesta* and Igor Stravinsky’s *Concerto in D*.

ANSWER: Paul **Sacher**

[10] In 1976, twelve composers were commissioned by the performer Mstislav Rostropovich to write pieces based on a musical spelling of Sacher’s name for *this* string instrument.

ANSWER: violon**cellos**

[10] This composer contributed the piece *Les Mots sont allés* to the “eSACHERe” project. This man included eight voices that speak, shout, and recite in his 1968 *Sinfonia*, and he used similar techniques in his third *Sequenza*.

ANSWER: Luciano **Berio** <JR>

11. This writer recalled how Pitigrilli informed on her family to the Fascist government in a novel titled for her very odd family's colorful idioms, like "il bico del chilo del milo" [eel BEE-koh dell KEE-loh dell MEE-loh]. For 10 points each:
[10] Name this Italian author of *Family Lexicon* and *The Little Virtues*.

ANSWER: Natalia **Ginzburg**

[10] *This* was Ginzburg's maiden name. It was also the surname of other Turin-born Jewish writers like Carlo, who wrote *Christ Stopped at Eboli*, and Primo, whose book *If This Is a Man* was declined by Ginzburg when she was an editor at Einaudi.

ANSWER: **Levi** [accept Natalia **Levi**; accept Carlo **Levi**; accept Primo Michele **Levi**]

[10] The introduction to a 2018 edition of *The Little Virtues* has an introduction by Rachel Cusk, whose *Outline* trilogy follows the daily encounters of a writer with *this* first name. Homer Simpson and Tod Hackett both fall in love with an aspiring actress with this name in Nathanael West's *The Day of the Locust*.

ANSWER: **Faye** [accept **Faye** Greener] <SK>

12. Richard Titmuss argued against paying for this practice, arguing that monetary motives would crowd out altruistic ones and actually decrease its total supply. For 10 points each:

[10] Name this activity. Payment for it fell out of favor in part due to fears that people motivated by money would be more likely to carry diseases like hepatitis B or HIV.

ANSWER: **blood donation** [or word forms; do not accept "plasma donation"]

[10] Another frequently cited example of markets corroding social norms is a 2000 paper by Gneezy and Rustichini that examined the introduction of fines in one of *these* places. People felt less bad about arriving late to this kind of place after it started charging 10 shekels.

ANSWER: **daycares** [accept any answer indicating a **childcare** center, but do not accept or prompt on "preschools"]

[10] This economist and Roland Bénabou theorized that incentive schemes backfire when a principal has more information about a task's payoff than the agent. His 1988 textbook is still the standard for theoretical industrial organization.

ANSWER: Jean **Tirole** <SB>

13. This woman won a conviction against Cincinnati bootlegger George Remus, who, while in jail, befriended an undercover Prohibition agent who then began an affair with Remus's wife. For 10 points each:

[10] Name this "First Lady of Law" who became a zealous enforcer of the Volstead Act as Assistant Attorney General from 1921 to '29.

ANSWER: Mabel Walker **Willebrandt**

[10] During the 1928 election, Willebrandt controversially campaigned for *this* Republican, the eventual winner. She left government when this man chose William D. Mitchell as Attorney General instead of her.

ANSWER: Herbert (Clark) **Hoover**

[10] Willebrandt's *The Inside of Prohibition* criticized *this* activist group for being too aggressive. This group eclipsed the influence of the Women's Christian Temperance Union under its leader Wayne Wheeler.

ANSWER: **Anti-Saloon League** <SK>

14. A paper by Alan Dundes asked if we have to apply *this* term to James MacPherson's *Ossian*, the Grimm fairy tales, and the Finnish *Kalevala*. For 10 points each:

[10] Give this portmanteau word coined by Richard Dorson for legends invented recently by known authors and back-projected onto an oral culture. Dorson applied this term to all stories about Pecos Bill.

ANSWER: **fakelore**

[10] Scholars disagree over whether to classify *this* legendary lumberjack, who is often depicted in statues with his blue ox Babe, as fakelore.

ANSWER: Paul **Bunyan**

[10] A husband and wife with the surname Schoolcraft recorded lore from *this* American Indian tribe, some of which was real and some of which was dubious. Their culture hero Nanabozho sometimes takes the form of a rabbit.

ANSWER: **Ojibwe** [or **Ojibwa**; or **Chippewa**; accept **Anishinaabeg**] <MJ>

15. Since this theorem gives a "factorization" for a finite group into simple groups, one of its namesakes was the first to lay out the research program of classifying all finite simple groups. For 10 points each:

[10] Name this theorem, which holds that the set of quotients of adjacent members in a composition series is always the same for a given group.

ANSWER: **Jordan–Hölder** theorem (The program is the "Hölder program.")

[10] By the Jordan–Hölder theorem, the symmetric group of degree 5 has a composition length of 2, since *this* index-2 subgroup is simple. This group is isomorphic to the icosahedral symmetry group, and the fact that it's the smallest non-abelian simple group is key to the Abel–Ruffini theorem.

ANSWER: **A₅** [or the **alternating** group of degree 5]

[10] The Abel–Ruffini theorem states that, for degrees 5 and up, *these* equations can't be solved with radicals. For degree 2, these equations can be solved using the quadratic formula.

ANSWER: **polynomial** equations [prompt on **equations**] <JR>

16. This playwright wrote about Dr. Ben Stark's love affair with the young dental assistant Cleo Singer in his play *Rocket to the Moon*. For 10 points each:

[10] Name this playwright who depicted the life of the struggling Berger family in his play *Awake and Sing!* He also wrote a play in which the aspiring violinist Joe Bonaparte becomes a boxer in order to support himself.

ANSWER: Clifford **Odets** (The play is *Golden Boy*.)

[10] Many of Odets' plays, such as *Awake and Sing!* and *Waiting for Lefty*, center on working Americans dealing with the fallout of *this* economic downturn of the 1930s.

ANSWER: Great **Depression**

[10] This other author used the aftermath of the bank panic of 1933 as the setting for his play *Panic*, whose premiere gave Orson Welles his first leading role in America.

ANSWER: Archibald **MacLeish** <WJ>

17. A "polemic against the system" by Duncan Kennedy accuses *these* places of training impressionable young people to love and reproduce the existing hierarchy. For 10 points each:

[10] Name these institutions. Within the U.S., almost all of them use a "Socratic method" in which professors "cold call" students, and they usually have a student chapter of the right-wing Federalist Society.

ANSWER: **law schools** [or **legal education**; prompt on graduate **schools** or **universities**]

[10] This man instituted the now-ubiquitous Socratic method and case method in legal education as Dean of Harvard Law School in the late 1880s.

ANSWER: Christopher Columbus **Langdell**

[10] People relaying their law school horror stories often reference *this* 1973 film directed by James Bridges, in which the Harvard Law first-year James Hart is tyrannized by the abusive contracts professor Charles Kingsfield.

ANSWER: *The **Paper Chase*** <MJ>

18. This campaign greatly expanded literacy and women's rights, but it also created a class of poor, landless peasants whose movement to cities was cited by Said Arjomand and Theda Skocpol as key to Ayatollah Khomeini's success. For 10 points each:

[10] Name this economic modernization campaign started in 1963, which led to Khomeini's entry into politics. Its land reform did end feudal *vaqfs*, but only small numbers of landed farmers and the former feudal elite benefitted.

ANSWER: **White Revolution** [or **Inqilāb-e Safid**; accept the **Shāh and People Revolution** or **Inqilāb-e Shāh o Mardom**]

[10] Resentments stoked by the White Revolution contributed to the Islamic Revolution's overthrow of *this* dynasty. Mohammad Reza Shah was a member of this dynasty.

ANSWER: **Pahlavī** Dynasty

[10] The influence of *this* Islamic socialist on the Islamic Revolution was minimized under Khomeini. This writer distinguished the revolutionary "Red" Shi'ism from the oppressive "Black" Shi'ism's "religion of mourning."

ANSWER: 'Alī **Sharī'atī** Mazīnānī <JG>

19. For 10 points each—answer the following about Joan Didion's career as a film critic:

[10] Didion got her start writing film reviews for *this* magazine before moving to California. This magazine was edited by Diana Vreeland from 1963 to '71.

ANSWER: **Vogue**

[10] This other critic also wrote film reviews for *Vogue* in the mid-60s, some of which are collected in the book *Kiss Kiss Bang Bang*. She is better known for her 23-year stint as film critic for the *New Yorker*.

ANSWER: Pauline **Kael**

[10] Legendarily, Kael and Didion were both fired in the same year for panning *this* 1965 movie, which Kael called a "sugar-coated lie" and Didion called a "suggestion that history need not happen to people." Didion also suggested that this movie musical implies a lesbian relationship between Maria von Trapp and the Mother Superior.

ANSWER: *The* **Sound of Music** <DS>

20. This interaction is driven by the quadrupole moment of an aromatic system oriented perpendicular to the molecular plane toward a monopole. For 10 points each:

[10] Name this noncovalent interaction that's especially common in biological systems, where it explains how tryptophan coordinates sodium ions.

ANSWER: **cation- π** interaction

[10] Cation- π interactions are crucial for molecular recognition of quaternary ammonium compounds, including nicotine and *this* molecule, which is the head group for the most common phospholipid in human cell membranes.

ANSWER: **choline**

[10] Contrary to popular belief, π interactions explains about 75% of the enthalpy of DNA base pairing; only about a quarter is due to *this* other strong dipole-dipole interaction that usually involves nitrogen, oxygen, or fluorine.

ANSWER: **hydrogen bonding** [or **H-bonding**] <AS>