

2016 MYSTERIUM: “I quiz all sounds, all thoughts, all everything”

Packet 9 – isserlis

Questions by Yale (Jacob Reed, Stephen Eltinge, Laurence Li, Adam Fine, Isaac Kirk-Davidoff) and Maryland (Jordan Brownstein, Weijia Cheng, Ophir Lifshitz, Naveed Chowdhury, Ani Perumalla), with Sriram Pendyala

Tossups

1. A DLC for a video game in this series infamously caused a player to claim that its publisher “tore away [his] ability to feel human.” That ahistorical DLC features an invasion of Europe by the Aztecs and is titled *Sunset Invasion*. Another DLC for that game in this series extended the map eastward; that DLC was *Rajas of India*. Two other DLCs for that second game in this series included earlier state dates like 867 AD and 769 AD; those DLCs were *The Old Gods* and (*) *Charlemagne* respectively. Official converters allow the conversion of saves from this series to saves from its publisher’s *Europa Universalis* series. For 10 points, name this Paradox grand strategy game series of character-based medieval dynasty simulators, set during the time of the Crusades.

ANSWER: Crusader Kings

<WC Mythology/Other>

[Note to moderator: pronounce /p/, etc., as simply the name of the letter (“pee”).]

2. Voiced obstruents and /p/ trigger geminate devoicing in this language’s loanwords. Early loanwords in this language allow sequential voicing in compounds, but new ones are immune, despite Lyman’s law. Since this language bans non-nasal codas, its loanwords epenthesize /u/, except after /h/, /t/, and /d/, which its speakers perceived in a Dupoux et al. study. Taiwan uses a spiral letter of this language as a playful possessive marker. This language did not borrow “thank you” from Portuguese. It coins pseudo-English (*) *wasei* portmanteaus like *pasokon* via back-clipping. It verbs loanwords with the suffix *suru*. English borrowed *skosh*, *bokeh*, *rickshaw*, and *tycoon* from this language. It writes loanwords in one of its three scripts, conflating the sounds /r/ and /l/. Over half its lexicon is from Chinese. For 10 points, name this East Asian language that uses three scripts: *hiragana*, *katakana*, and *kanji*.

ANSWER: Japanese [or Nihongo]

<OL Social Science/Thought>

3. At one of these events, the cynic philosopher Peregrinus Proteus committed suicide on a funeral pyre. A prophecy of the Delphic Oracle led Cylon to believe he could seize Athens while one of these events was occurring, only to be murdered in Athena’s temple by Megacles. Before being devoured by wolves, Milo of Croton was notably successful during several of these events. Similar events in (*) Nemea and on the Isthmus of Corinth occurred in years before and after these events, and the *stadion* was the main occurrence at these events. A giant statue designed by Phidias presided over these events, at which *kotinos*, or olive wreaths, were given as prizes. For 10 points, name this ancient Greek sporting tradition revived in 1898.

ANSWER: Olympic Games [anti-prompt on specific events]

<JB European/Ancient History>

4. Before declaring that he's performing this activity, the protagonist of a film says "this is my hand. I can move it. My blood gushes in it." Between parts of this activity, that man declares "I shall bear this memory between my hands as carefully as a bowl of fresh milk... and this will be a sign, and a great content." That participant in this activity is repeatedly asked if he's worried by a character who says "nothing escapes me." That protagonist disrupts this activity to save an actor-juggler and his family. HAL 9000 first makes a mistake when he prematurely (*) ends this activity with Frank Poole. In another movie, the protagonist confesses that he wants to do "one meaningful act" before giving away his strategy in this game to a priest who reveals himself to be the antagonist. This game is started on a beach during the Plague by Antonius Block, played by Max von Sydow. For 10 points, name this game that a knight plays with Death in Ingmar Bergman's *The Seventh Seal*.

ANSWER: chess

<JR Other Arts>

5. A novel set in this modern-day country opens with poetry written by the ladies of the Residency being savagely critiqued by the Magistrate and the Collector. A novel set in this country repeatedly refers to the refrain "come, come" from a milkmaid's song sung by a professor at a tea party. In that novel set here, a woman feels her "hold on life" undermined by a monotonous, booming echo. J. G. Farrell wrote about the siege of a city in this country in his (*) *Empire* trilogy. In a novel set in this country, a character befriends a woman who takes her shoes off while in a mosque, Mrs. Moore. In that novel set here, Ronald Heaslop's fiancée, Adela Quested, retracts her claim that the protagonist assaulted her in the Marabar Caves. For 10 points, Dr. Aziz appears in an E. M. Forster novel titled for "A Passage" to what former British colony?

ANSWER: British India [or the British Raj]

<JB British Literature>

6. This quantity names a void that attempts to solve the Sandage-de Vaucouleurs paradox. Baryon acoustic oscillations constrain this quantity, which is the first rung of the *inverse* distance ladder. Sandage wrote about a search for two numbers: the deceleration parameter and this one. Slipher's work on spectra enabled this quantity's first measurement, which was very large since clusters were assumed to be (*) bright stars. This quantity was the slope of a line through the origin on a plot of 24 "nebulae" whose values were obtained from Cepheid variables. This parameter is defined as \dot{a}/a , where a is the scale factor. Its reciprocal is an estimate of the Universe's age, and its current value is around 67 km per second per megaparsec. This constant relates distance to redshift, or velocity, in a "law" for galaxies far, far away. For 10 points, identify this "constant" that describes the Universe's expansion and is named for an American astronomer.

ANSWER: Hubble constant [or Hubble parameter; accept Hubble bubble; prompt on "the rate the Universe's expansion" or equivalents until read]

<OL Other Science>

7. After the assassination of the Mlimo, this man walked into the Matopo Hills unarmed to negotiate peace with Ndebele rebels. By going on an overseas speaking tour, Khama III foiled a plan that would have incorporated his territories into this man's BSAC. On this man's behalf, Charles Rudd negotiated a concession for exclusive mining rights in the lands ruled by Lobengula. This man resigned from his political offices after the (*) Jameson Raid failed to overthrow Paul Kruger's government in Transvaal. This man gained economic prominence in Kimberley, where he established De Beers, the world's largest producer of diamonds. For 10 points, name this man who established a namesake scholarship to study at Oxford.

ANSWER: Cecil John Rhodes

<WC World History>

8. A letter by this author describes realizing that he had left university exactly ten years earlier on a journey he undertakes with his brother after realizing the weaknesses of his friends. This poet compared himself to an old man who walks to Rome to “look upon the likeness of the One he hopes to see again in Heaven.” This poet wrote of a ship sailing between Charybdis and Scylla “full of forgetful cargo.” The line “Love, that doth reign and live within my thought” opens the (*) Earl of Surrey’s translation of one of his poems. A collection of 366 poems by this author of “The Ascent of Mont Ventoux” addresses “You who hear in scattered rhymes” and contains many poems consisting of an octave and a sestet. For 10 points, name this Renaissance Italian poet who addressed Laura in the sonnets of his *Il Canzoniere*.

ANSWER: **Petrarch** [or Francesco **Petrarca**]

<JB European Literature>

9. Complexes with this number of methide ligands bonded to some second row transition metals have an unusual geometry with bond angles of 95 and 85 degrees. Two *Science* papers in 2011 and 2012 by the DeBeer lab and coworkers, and the Einsle and Rees labs, respectively, established that the central atom in the FeMoco cofactor was a carbon of this valency. The coordination complex hexacyanoferrate(II) has this many d electrons. Black (*) phosphorus is composed of interpenetrating rings of this many phosphorous atoms. Although rings with this many carbon atoms are not the kinetically most favorable, they are usually the thermodynamically most stable. Under ideally basic conditions, the chelator EDTA binds this many times to its metal center. A well-known molecule with this many carbon atoms has chair and boat conformations. For 10 points, name this number of carbon atoms in the molecule benzene.

ANSWER: **six** [or **6**]

<SP Chemistry>

10. This book follows a discussion of figuring out the “rule” for a sequence of numbers with an examination of the word “reading.” In its preface, the author calls it a “number of sketches of [philosophical] landscapes” and says that “I should have liked to produce a good book. It has not turned out that way.” This book’s second part has recently been retitled *Philosophy of Psychology – A Fragment*, in a revised translation by Joachim Schulte and Peter Hacker. Most sections of this book consist of a thought experiment followed by a dialogue with an imagined skeptical reader. It opens with an analysis of the account of (*) language acquisition in Augustine’s *Confessions*. This book, which was translated by G. E. M. Anscombe, claims that there is no single defining property of “games” to justify its notion of “family resemblance.” It uses a language-game in which people say they have a beetle in their box to argue against the idea of a private language. For 10 points, name this *magnum opus* of Ludwig Wittgenstein.

ANSWER: ***Philosophical Investigations*** [or ***Philosophische Untersuchungen***]

<JR Philosophy>

11. Players of one of these instruments often recite memorized series of *bols* called *thekas*, which include *tintal*. Another of them is featured in a *tani avartanam*. An instrument of this kind regulates the changing *irama* of Central Javanese Gamelan. Korean *pungmul* (“POONG-mool”) features ones called *janggu*. Another of these instruments is tuned using a black paste made with flour and iron filings. Virtuosi on that one of these instruments include Alla Rakha and Zakir Hussain. In West Africa, these instruments are often (*) hourglass-shaped and have easily-changed pitch, allowing them to “talk.” Their “frame” variety includes the *bodhrán* (“BOH-ron”). In Carnatic music, one called the *mridangam* outlines the *tala*. A high-pitched one of these instruments called the *djembe* one has a head made of goatskin. For 10 points, name these percussion instruments that include tablas and bongos.

ANSWER: **drums** [accept the following until they are read: **tablas**, **kendhangs**, or **janggu**; prompt on answers mentioning “percussion”]

<JR Auditory Arts>

12. The winning campaign in this election allegedly committed massive voter fraud in Chicago and Texas. Although their subject did not run for president in this election, it is at the center of the books *Master of the Senate* and *The Passage of Power* by Robert Caro. A campaign issue in this election was the status of the islands of Quemoy and Matsu. In his nomination acceptance speech, the winner of this election proclaimed “we (*) stand today on the edge of a New Frontier.” This was the first presidential election to feature televised debates, during which one candidate’s youthful appearance is often credited with swinging the election. For 10 points, name this presidential election in which John F. Kennedy defeated Richard Nixon.

ANSWER: US presidential election of 1960

<NC American History>

13. In a work in this genre, the protagonist is given a team of unbroken oxen who run him deep into the woods before getting entangled in the trees. The narrator of a book in this genre is tormented by red ants and describes the Johnkannaus Christmas ritual while in the “loophole of retreat.” After contemplating the white ships on a bay, a character in a work in this genre engages in a surreal two-hour fight with (*) Covey. The protagonist of a work in this genre spends seven years in her grandmother’s attic and has an affair with Mr. Sands to escape the rapist Dr. Flint. That book in this genre was written by Harriet Jacobs. For 10 points, name this genre of *The Narrative of the Life of Frederick Douglass*, which details his escape from captivity in the South.

ANSWER: slave narratives [or anything indicating a book about slavery or escape from slavery; prompt on “autobiography”]

<JB American Literature>

14. *Description acceptable.* Yusuf al-Qaradawi publicly criticized Muhammad Sayyid Tantawi’s 1989 fatwa about *this* practice, which characterized some forms as *halal*. Islamic institutions often use a kind of substitute for this practice in agreements called *murabaha*. The Qur’an prohibits excessive forms of this practice, called *ribā*. In the parable of the talents, a servant is berated for not benefiting from this practice, since he (*) buried the coin he had been given. Exodus 22:25 states that this practice should not be conducted with the needy. Deuteronomy 23:20 states that this practice can be conducted with foreigners, but not fellow Israelites. For 10 points, name this practice, once prohibited by the Catholic Church as usury, in which payment is extracted for the right to borrow money.

ANSWER: loaning on interest [prompt on “returns” or “profit”; anti-prompt on “*ribā*” or “usury” until they’re read]
<WC Religion>

15. The negative exponential of “this quantity over RT ” appears in the denominator of the Fermi–Dirac integral. It’s not magnetic flux, but this quantity can become “pinned” to a particular value near a metal–semiconductor junction. This quantity, temperature, and volume are held fixed in the grand canonical ensemble. Dimensionless fugacity equals the exponential of this quantity over RT . This value is constrained to be exactly (*) zero below the critical temperature of a Bose–Einstein condensate. This quantity, pressure, and temperature are equalized across a liquid–vapor phase boundary. For electrons in a metal, this value coincides with the Fermi level, while generally it is the derivative of free energy with respect to particle number. For 10 points, name this energy cost of adding an additional particle to a system.

ANSWER: chemical potential [accept Fermi level or Fermi energy until “Fermi level” is read]

<SE Physics>

16. Thirteen people were hung in Cologne for being leaders of a subversive movement made up of people of this sort, the Edelweiss Pirates. One of these people who threw a stone at Austrian occupiers of Genoa named Ballila was the namesake of an organization made up of them, the ONB. Artek, a massive facility for people of this type in Crimea, was used to host Samantha Smith by Yuri Andropov, and people of this sort served as delegates to the Komsomol Congress. Baldur von (*) Schirach headed an organization for these people whose members manned anti-aircraft batteries starting in 1943. People of this type participated in the Soviet Pioneer movement, and the future Benedict XVI and Gunter Grass served in a compulsory organization for these people. For 10 points, identify this sort of person who made up the Hitler Youth.

ANSWER: children [or youth until it is read; or boys or teens or obvious equivalents; or scouts; anti-prompt on “students”; accept answers mentioning nationalities such as “German children”]

<JB European/British History>

17. This phenomenon is the subject of chapter two of Gary Becker’s *Treatise on the Family*. A book that is mostly positive about this phenomenon also says that it makes people “as stupid and ignorant as it is possible for a human creature to become... unless government takes some pains to prevent it.” This phenomenon was traced back to the propensity to barter in a book first published in 1776. According to the Paris Manuscripts, this phenomenon actively removes the craftsman’s pride in the created object and forces people to (*) trade time worked – namely, themselves – for money, causing alienation from the “species being.” This phenomenon and machinery are the main generators of relative surplus-value in *Das Kapital*. In *The Wealth of Nations*, Adam Smith imagines countries getting richer and richer as productivity increases through intensification of this phenomenon, which he models with a pin factory. For 10 points, name this specialization of tasks in the workforce.

ANSWER: the division of labor [prompt on “labor”; prompt on “specialization” until it is read]

<JR Economics/Psychology>

18. A delay in the printing of engravings of this painting was caused by Mrs. Hocquet’s son, who smashed the printing plate with a hammer, destroying the face of its title figure. Those engravings, promoted by the publisher John Boydell, were based on the work of William Woollett. At the far left of this painting, a man runs into the scene carrying a hat with one hand and the fleur-de-lis in the other. A bare-chested and (*) tattooed man crouches as he contemplatively stares at this painting’s title figure. The people in this history painting are depicted in contemporary clothing, despite Sir Joshua Reynolds’s suggestions to depict them in togas. For 10 points, name this painting set after the Battle of Quebec, depicting the death of a British general, by Benjamin West.

ANSWER: The Death of General Wolfe

<WC Visual Arts>

19. A woman in this play describes hearing a dying man cry “God” four times, then feeling his feet and knees, which were “as cold as stone.” In this play, a character is forced to eat a leek which a Welshman wears on his hat. Bardolph is hung for stealing a “pax” from a church in this play. The protagonist of this play promises to “play a (*) set [that] shall strike his father’s Crowne into the hazard” after receiving a gift of tennis balls. A speech beginning “Once more upon the breach, dear friends!” is given at Harfleur in this play. The title character of this play disguises himself with Erpingham’s cloak the night before given a speech addressed to “we few, we happy few, we band of brothers” on St. Crispin’s Day. For 10 points, name this Shakespeare play whose title king beats the French at the Battle of Agincourt.

ANSWER: Henry V

<JB Other Literature>

20. The unusual biosynthesis of this amino acid from purine precursors has been cited as evidence for the RNA World hypothesis. In affinity chromatography, nickel resins can be used to bind proteins containing a tag with 6 or more of this amino acid. In zinc-finger motifs, the zinc ion is ligated by two cysteine residues and two of this amino acid. In the (*) Ames test, mutagenesis is assayed by looking for revertants of *Salmonella typhimurium* that originally cannot synthesize this amino acid. This amino acid has a side chain with a pKa of around 6. It is almost always the “base” that directly deprotonates water in the catalytic triad of serine and cysteine proteases. The decarboxylation of this amino acid produces a compound, released in mast cell degranulation, whose receptors are antagonized by Benadryl’s active ingredient. For 10 points, name this amino acid with an imidazole side group, closely related to the immune modulator histamine.

ANSWER: histidine [accept His or H]

<SP Biology>

Bonuses

1. In this approach, one imposes canonical commutation relations on field operators that act on Fock states. For 10 points each:

[10] Name this quantum mechanical formalism. Its name refers to the fact that fields themselves are being treated as operators, rather than the physical observables treated in a simpler related technique.

ANSWER: **second quantization** [prompt on “quantization”]

[10] Second-quantized Fock states are labeled by occupation numbers rather than particle coordinates because particles have this property. This property means that exchanging particles does not change the physical state.

ANSWER: particles are **identical** [or particles are **indistinguishable**]

[10] Second quantization expresses fields in terms of the creation and annihilation operators of this simple system. Potential energy varies with the square of displacement in this system.

ANSWER: quantum **harmonic oscillator** [accept **QHO**]

<SE Physics>

2. This author’s historiographical works include *History and Social Theory* and *What is Cultural History?* For 10 points each:

[10] Name this historian of popular culture in the Renaissance. His influential survey *The Italian Renaissance* is now in its third edition.

ANSWER: (Ulick) Peter **Burke**

[10] Along with Natalie Zemon Davis, Burke was one of the major popularizers of *this* term, which refers to a period from roughly 1400 to 1800. This term has been used to replace or supplement the term “Renaissance.”

ANSWER: **Early modern**

[10] Volume 2 of Burke’s *Social History of Knowledge* runs from the *Encyclopédie* to *this* collaborative encyclopedia. Burke praises this website’s use of flags like “the neutrality of this article is disputed.”

ANSWER: **Wikipedia**

<JR European/British History>

3. A lot of sad piano pieces feature bell-like ostinati on B-flat. Answer some questions about them, for 10 points each.

[10] The B-flats might actually signify bells in the funeral march from this composer’s second piano sonata. He also wrote the “Black Key” and “Revolutionary” études.

ANSWER: Frédéric (François) **Chopin** [or Fryderyk Franciszek **Chopin**]

[10] B-flat octaves repeatedly toll in this piece’s slow movement, “Le Gibet” (“luh gee-BAY”). This piece by Ravel depicts the water nymph Ondine (“own-DEEN”) in the first movement and the imp Scarbo in the third, which was meant to be harder than *Islamey*.

ANSWER: **Gaspard de la nuit** [or **Gaspard of the Night**]

[10] B-flats pulse between two stepwise moving tritones in *Silent Music* No. 5 by this Catalan composer from a bell making family. This composer of piano miniatures paired a *sardana* with “El noi de la mare” in *Cançons i Danses*.

ANSWER: Frederic **Mompou** (“fruh-duh-REEG moom-POH”) [or Federico **Mompou**]

<OL Auditory Arts>

4. In this location, Ishmael stares at a large, smoked-over, oil painting and decides it depicts a whale. For 10 points each:

[10] Name, or describe, this location in New Bedford described in the third chapter of Melville's *Moby Dick*, where Ishmael first encounters Queequeg when he arrives late at night after selling shrunken heads around town.

ANSWER: the Spouter Inn [or obvious equivalents like a tavern, bar, etc.]

[10] Later, Ishmael returns to the Spouter Inn to find Queequeg whittling on this object. During his so-called "Ramadan" fast, Queequeg places this object, which is named Yojo, on top of his head.

ANSWER: Queequeg's idol [or Queequeg's god; or anything indicating a religious statue]

[10] Queequeg and Ishmael later sign onto the *Pequod*, which is captained by this one-legged Quaker who is on a fanatical mission to kill Moby Dick.

ANSWER: Captain Ahab

<JB American Literature>

5. Answer some questions about a pivotal moment in the life of the Buddha, for 10 points each:

[10] After ending his ascetic practices, the Buddha accepted this woman's offering of milk-rice. After eating, he threw this woman's bowl into a river, only to have it miraculously float upstream.

ANSWER: Sujata

[10] After eating Sujata's rice, the Buddha sat down under a tree, and touched the earth after *this* demon asked him who his witness was. This demon sent his "daughters" to tempt the Buddha.

ANSWER: Mara

[10] Picture the Buddha sitting underneath the Bodhi Tree, eyes closed, touching the earth. You have just imagined the most common depiction of the Buddha obtaining this, the end goal of Buddhist practice.

ANSWER: nirvana [accept enlightenment or equivalents of reaching Buddhahood]

<IKD Religion>

6. This complex was constructed in the 1950s as part of Joseph Darst's urban renewal project, but struggled with high crime and low occupancy rates. For 10 points each:

[10] Name this massive complex that was demolished in the 1970s. People such as Charles Jencks blamed its failure on modernist architecture.

ANSWER: Pruitt-Igoe

[10] The Pruitt-Igoe housing project was located in this city. The Lewis and Clark expedition departed from this city on the Mississippi, which is the largest in Missouri.

ANSWER: St. Louis

[10] A housing project in Chicago was named for William Green and a nun of this ethnicity. This ethnicity was shared by the anarchist whose followers carried out the Wall Street bombing and by the Governor of New York from 1983 to 1994.

ANSWER: Italian-American

<NC American History>

7. In Unix, “everything,” including documents, directories, sockets, drives, printers, and screens, is said to be one of these. For 10 points each:

[10] Name these items that are located at unique paths under the root directory in a hierarchical system. In ancient versions of DOS, their names were limited to 8 letters plus a 3 letter extension.

ANSWER: **files**

[10] Some prefer to say that in Unix, everything is a file *descriptor*; this stream’s file descriptor is 0. Unless it is redirected using the less-than sign, this stream expects data from the keyboard until the “end of file” signal.

ANSWER: **standard input** [accept **standard in** or **stdin**]

[10] This distributed operating system from Bell Labs takes it a step further, treating everything, even hardware, as a file server. This OS includes Tom Duff’s *rc* shell and Rob Pike’s *rio* window system, a rewrite of *8½*; those also appear in a Unix port “from User Space.”

ANSWER: **Plan 9** from Bell Labs [do not accept “*Plan 9 from Outer Space*”]

<OL Other Science>

8. This area is often divided into dorsolateral and orbital/ventromedial parts. For 10 points each:

[10] Name this part of the brain involved in working memory and executive functions like decision-making. This large region extends backwards from the forwardmost part of the brain.

ANSWER: **prefrontal cortex** [or **PFC**; prompt on “frontal lobe”]

[10] Maybe it won’t surprise you that emotions have been shown to have an impact on decision-making. According to Antonio Damasio, the prefrontal cortex stores and draws on *these* “markers” of emotional states.

ANSWER: **somatic** markers

[10] The link between emotions and decision-making is reinforced by the numerous connections between the prefrontal cortex and this “system” that surrounds the corpus callosum. This “system” includes the hippocampus and amygdala.

ANSWER: **limbic** system [or **visceral brain**]

<JR Economics/Psychology>

9. In Piero della Francesca’s depiction of this scene, a dove flies directly over Jesus’s head, while three standing angels on the left look on. For 10 points each:

[10] Name this scene, which usually involves St. John pouring water over Jesus’s head.

ANSWER: the **Baptism** of Christ [accept loose equivalents, as long as they indicate a **Baptism** and don’t say that someone other than Jesus is being baptized; accept **battesimo**]

[10] Most formal analyses of Piero’s painting of the *Baptism* note that Jesus’s head occupies *this* location in the painting. Aristotle’s outstretched hand occupies this location in *The School of Athens*.

ANSWER: the exact **center** of the canvas

[10] This historian drew on his legal training to write a meditation on the nature of evidence and proof in art history, called *The Enigma of Piero [della Francesca]*. His most famous book analyzes the “cosmos” of the 16th-century miller Menocchio.

ANSWER: Carlo **Ginzburg** (The other book is *The Cheese and the Worms*.)

<JR Visual Arts>

10. This word has often been applied to art that tries to hide the act of its creation. For 10 points each:

[10] Name this “nonchalance” that consists of doing difficult tasks effortlessly.

ANSWER: sprezzatura

[10] *Sprezzatura* was considered essential to being a good Renaissance gentlemen by *this* author of *The Book of the Courtier*.

ANSWER: Baldassare Castiglione

[10] Castiglione also insisted that good courtiers learn poetry, drawing, music, and *this* art form. In Europe, this art form began to be a major way for courtiers to socialize starting in the fifteenth century.

ANSWER: dancing [accept word forms]

<JR European/Ancient History>

11. This collection’s last poem compares two people to “rapid falcons in a snare, Condemned to do the flitting of the bat.” For 10 points each:

[10] Name this cycle of fifty sonnets whose first poem begins “by this he knew she wept with waking eyes.”

ANSWER: Modern Love

[10] In the penultimate poem of George Meredith’s *Modern Love*, the central couple walks on one of these places by the “moaning verge.” A Matthew Arnold poem is titled for one of these places at Dover.

ANSWER: beaches

[10] The first sonnet in *Modern Love* comparing the man and his wife to figures on one of these objects, “each wishing for the sword that severs all.” Philip Larkin wrote “what will survive us is love” in a poem about an “Arundel” object of this sort.

ANSWER: marriage-tombs [prompt on synonyms like “graves,” “gravestones,” etc.]

<JB British Literature>

12. This bonus is about the kidney. For 10 points each:

[10] Name this portion of the nephron that leads from the proximal tubule to the distal tubule. It takes advantage of the concentration gradient in the medulla, and it is named for a German anatomist.

ANSWER: loop of Henle [accept word forms]

[10] The ascending limb of the loop of Henle is impermeable to this species. This species is reabsorbed to some extent in the papillary ducts.

ANSWER: water [accept equivalents like H₂O]

[10] This most common pediatric cancer of the kidney is also called nephroblastoma. The rates of this cancer are elevated in Beckwith–Wiedemann syndrome.

ANSWER: Wilms’ tumor

<SP Biology>

13. One of this man’s sons was killed using a fake crab, while another died after being weakened by a bird made of gypsum. For 10 points each:

[10] Name this demon who was killed after having his jaw shot off with a blowgun, which caused him to fall out of a tree.

ANSWER: Seven Macaw [or Vucub Caquix]

[10] Seven daughters of Atlas make up this mythological group. They are sisters of Calypso and the Hesperides, and include Maia and Electra, the mothers of Hermes and Iasion respectively.

ANSWER: Pleiades

[10] Seven gods representing this concept bring gifts to Japan on New Year’s. Lakshmi is considered the goddess of wealth and this concept, which is also personified by Fortuna.

ANSWER: luck

<AF Mythology/Other>

14. In this play, a character is infuriated when he is told he must wear a chef's hat while beating eggs. For 10 points each:

[10] Name this play that opens with the Father speaking for a group which interrupts a rehearsal of *Mixing It Up*.

ANSWER: **Six Characters in Search of an Author** [or **Sei personaggi in cerca d'autore**]

[10] The climax of Pirandello's *Six Characters in Search of an Author* occurs when the Boy shoots himself after finding the little girl dead inside of this object in the garden.

ANSWER: the **fountain**

[10] *Six Characters* is subtitled for a work in this genre "in the making." Examples of the "old" style of this genre in ancient Greece include *The Frogs*, *The Clouds*, and *The Birds*.

ANSWER: **Comedy** [or **Komedia**]

<JB Other Literature>

15. A city in Pakistan is named after this king, who was one of OPEC's leaders when it began its oil embargo in 1973. For 10 points each:

[10] Name this king who was assassinated by his nephew in 1975.

ANSWER: **Faisal** bin Abdulaziz al Sa'ud

[10] Faisal ruled this absolute monarchy. It was created when his father Ibn Sa'ud united the Hejaz and Nejd.

ANSWER: Kingdom of **Saudi Arabia**

[10] Faisal was supported politically by this group of seven brothers, his half-brothers. This group included King Fahd and the current king, Salman.

ANSWER: **Sudairi** brothers [or the **Sudairi** seven]

<NC World History>

16. This reaction constant is equal to [read slowly] the ratio of freezing temperature squared to the freezing-point depression constant. For 10 points each:

[10] Name this quantity, whose negative is the slope of the straight line when plotting the natural log of the equilibrium constant against reciprocal temperature.

ANSWER: **delta H over R** [accept **change in enthalpy** in place of "delta H" and either **k**, **k B**, or **k Boltzmann** in place of "R"; do not accept just "delta H" or "change in enthalpy"]

[10] That relationship is part of this man's equation, which calculates the temperature dependence of the equilibrium constant. This Dutchman, the first recipient of the Nobel Prize in chemistry, names a "factor" used in the calculation of colligative properties.

ANSWER: Jacobus Henricus **van 't Hoff**, Jr.

[10] The van 't Hoff factor for the salt calcium chloride is just slightly less than this integer value.

ANSWER: **three** [or **3**]

<SP Chemistry>

17. Much of this castle sits on a “bridge” spanning the Cher River. For 10 points each:

[10] Name this favorite castle of Catherine de’ Medici, which, along with the Château de Chambord (“shawm-BORE”), is one of the most famous castles in France.

ANSWER: Château de **Chenonceau** (“shnon-SOH”) [or **Chenonceaux**]

[10] The Châteaux of Chenonceau and Chambord are part of a spectacular series of castles built by the rulers of Angers (“on-JAY”), Orléans (“or-lay-ON”), and other cities in the valley of *this* river.

ANSWER: **Loire** (“lwahr”) Valley

[10] The Château d’Angers in the Loire Valley contains a famous series of *these* artworks depicting the Apocalypse. The most famous one of these artworks depicts the Norman Conquest of England and is named for Bayeux.

ANSWER: **tapestries** [or **tapisseries**]

<JR Other Arts>

18. Answer some questions about encyclopedias in the Middle Ages, for 10 points each.

[10] One of the most important early encyclopedias was the *Etymologiae* by this saint from modern-day Spain. Most of this man’s work consisted of assembling quotations and plagiarizing Pliny the Elder.

ANSWER: Saint **Isidore** of Seville

[10] For the late Middle Ages, the go-to encyclopedia was a work by Vincent of Beauvais (“boh-VAY”) titled for one of *these* objects. This object also titles the Journal of the Medieval Academy of America.

ANSWER: a **mirror** [or **Speculum**; accept **Speculum Maius**]

[10] Like the ending of St. Augustine’s *Confessions*, the beginning of Vincent’s *Speculum Maius* is a commentary on *this* chapter of the Bible. This chapter opens, “In the beginning, God created the Heavens and the Earth.”

ANSWER: **Genesis 1** [accept the **beginning of Genesis**, the **beginning of the Bible**; accept **Bereshit** for “Genesis”]

<JR Philosophy>

19. In one of its many passages on “seriousness,” this book claims that “poetry will never rise to the level of seriousness.” For 10 points each:

[10] Name this 1938 book, the central concept of which is analyzed in law, philosophy, and art, and which is said to have declined in culture due to the rise of total warfare. Its author also wrote *The Autumn of the Middle Ages*.

ANSWER: **Homo Ludens**

[10] The author of *Homo Ludens*, Johan Huizinga, was a disciple of *this* Swiss historian, who popularized the term “Renaissance” with his *The Civilization of the Renaissance in Italy*.

ANSWER: (Carl) Jacob (Christoph) **Burckhardt**

[10] Surprisingly, Huizinga barely cites *this* author’s account of the “play-drive” from *On the Aesthetic Education of Man*. This 18th-century German wrote the plays *The Robbers* and *Wallenstein*, and the poem “Ode to Joy.”

ANSWER: Friedrich **Schiller** [Johann Christoph Friedrich von Schiller]

<JR Social Science/Thought>

20. Ludwig Tieck, an author from this movement, included audience members in his play *Puss-in-Boots*. For 10 points each:

[10] Name this literary movement kicked off by Tieck and Wackenroder’s *Outpourings of an Art-Loving Friar*. It was exemplified by “fragments” written by the Schlegels and Novalis.

ANSWER: **Romanticism**

[10] All of those authors, and other Romantics like Heinrich Heine, wrote in *this* language.

ANSWER: **German** [or **Deutsch**]

[10] The German Romantics are given relatively short shrift in *this* book, which is more concerned with the theories of Coleridge. Its author’s *Natural Supernaturalism* is often seen as a companion to this book.

ANSWER: *The **Mirror and the Lamp**: Romantic Theory and the Critical Tradition*

<JR European Literature>