

2016 Terrapin XXIX: Lead Can't Penetrate Steele

Packet 1

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Tossups

1. **In a story by this author, a rape victim uses a silver crucifix to prove her identity after her child is injured while watching a horse race. In a novel by this author of “The Power of Blood,” a hunchbacked servant mistakenly crawls into bed with the protagonist at an inn where his friend is thrown around in a blanket after they refuse to pay. Berganza may be the transformed son of a witch in a story by this author, in which a syphilitic man (*) overhears a conversation between two dogs. A journey to the wedding of Daranio and Silveria is the subject of his pastoral book *La Galatea*. In a novel by this author, Samson Carrasco disguises himself as the Knight of the White Moon to fight the title character, who loves Dulcinea. For 10 points, name this Spanish author of *Exemplary Novels* who created the windmill-tilting *Don Quixote*.**

ANSWER: Miguel de Cervantes Saavedra

<ES European Literature>

2. **This empire built a Dome of the Rock-style mosque in the “Half Moon Camp,” where efforts to get POWs excited about waging a jihad were directed by the archaeologist who unearthed Tell-Hallaf. The ruler of this empire proclaimed himself the protector of 300 million Muslims and ceremoniously rode through the Jaffa Gate during an 1893 trip to Jerusalem. A consortium of banks from this empire financed the Baghdad Railway. Troops of this (*) European empire were defeated at the Battle of Beersheba by Edward Allenby. This empire’s ruler met with Sultan Abdulaziz in 1905, and it sent the gunboat *Panther* to Agadir in 1911, sparking the First and Second Moroccan Crises respectively. For 10 points, name this European empire that, under Wilhelm II, allied with the Ottomans during World War I.**

ANSWER: German Empire [or Germany; or Deutschland]

<JB European History>

3. **This organism can move using pirouettes and omega turns. Jennifer Doudna of CRISPR fame determined the crystal structure of a protein *discovered* in this organism, which contains a PAZ domain and acts as a “molecular ruler.” Lin-4 and let-7 regulate developmental timing in this organism. In this organism, the *daf-2* and *daf-23* genes are critical in the transition to the dauer stage in the presence of environmental stress. In a process *discovered* in this organism, the enzyme (*) Dicer catalyzes a cleavage reaction which forms siRNAs. This organism’s rare males contain more somatic cells than the more common hermaphrodites. Andrew Mello and Craig Fire discovered RNA interference in this organism, which was the first multicellular organism to have its whole genome sequenced. For 10 points, name this model organism, a nematode.**

ANSWER: Caenorhabditis elegans

<SR Biology>

4. The director of *Pale Flower* criticized a shot in which a man of this profession sits in a watchtower to watch two gangs fight. A film titled for this profession opens with its protagonist reclining and smoking on his bed next to a large bird cage. In another film, a man tries to protect his daughter from these people by chasing her with a razor and cutting off her long hair. A film titled for this profession follows the hitman Jef Costello and was directed by (*) Jean-Pierre Melville. A film titled for these people features a shot of four graves with swords sticking out of them, and it climaxes with a rainy battle. The films *Yōjimbō* and *Sanjūrō* follow one of these people. A film remade by John Sturges as a Western features a group of these people who are hired to protect crops from bandits. For 10 points, Akira Kurosawa directed a film about seven of what type of warriors?

ANSWER: samurai [or rōnin; prompt on warriors, assassins, hitmen, bodyguards, or similar answers]

<JB Other Arts (Film)>

5. In a paper that claims that these entities are misnamed, Steven Cheung used “memorizing slogans” as an example of one of these entities during the Great Leap Forward. Stanley Fischer argued that these entities are dubious theoretical devices based on a suspicion that suitably specific examples of them can rationalize anything. An early article about these entities describes how “decreasing returns to the (*) entrepreneur function” counteract the reduction of these entities by firms, thus explaining the size of firms. That article, “The Nature of the Firm,” was authored by Ronald Coase, who observed that in the absence of these entities, bargaining results in efficient solutions to externalities. For 10 points, name these costs of participating in a market.

ANSWER: transaction costs

<WC Social Science>

6. This book defines an emotion as “active” if it is the sole cause of a “modification of the body.” This book’s claim that “the order and connection of ideas is the same as the order and connection of things” is often called parallelism. In this book’s epistemology, imagination is based on inadequate ideas and reason is based on adequate ones. This book refers to each thing’s striving to persist in its own being using the word (*) *conatus*. This book defines “mode” and “attribute” in its opening definitions, which are followed by axioms and propositions in a Euclid-inspired format. This book presents its author’s theory that God is identical to all of Nature. It contains the section “Of Human Bondage.” For 10 points, name this treatise by Baruch Spinoza titled for moral philosophy.

ANSWER: Ethics

<JB Philosophy>

7. During a siege by this state’s founder, the Church of the Tithes collapsed under the weight of the citizens hiding on its roof. While in this state’s capital to obtain a patent, or *yarlyk*, St. Michael was executed for refusing to walk between two fires. Before establishing this state, its founder chased Cuman refugees into the lands of Bela IV, where his forces won the Battle of Mohi and decimated the population of Hungary. A prince earned his (*) nickname “Moneybag” for his loyalty to this state, but his descendant of the same name broke this state’s power by forcing them back from the Ugra River in 1480. This state lost the Battle of Kulikovo to Dimitri Donskoi. This state with “Blue” and “White” branches was founded by Batu Khan. For 10 points, name this Mongol state that ruled Russia, whose modern name may derive from the color of its shining tents.

ANSWER: the Golden Horde [or Qipchaq Khanate; or Ulus of Jochi; or Ulus of Batu until “Batu” is read; prompt on the Mongol Empire or the Tatars]

<JH European History>

8. In this play's first act, a man repeatedly cuts off his wife with phrases like "don't interrupt," "will you stop that," and "will you let me talk?" A character in this play orders champagne for a woman at the next table and introduces another character as "the quarterback for the New York Giants" while at a restaurant. A character in this play writes "University of Virginia" on a pair of sneakers, but burns them after he (*) sees his father give a pair of stockings to The Woman in a Boston hotel room. In this play's last act, the protagonist plants seeds while fantasizing about Ben, his brother who got rich in Africa. This play ends with the funeral of the title character, who crashed his car to collect life insurance money for his family. For 10 points, name this play that features Biff and Happy and is titled for the demise of Willy Loman, a work by Arthur Miller.

ANSWER: Death of a Salesman

<JB Other Literature>

9. A series of paintings of this name implement the theories that their creator put forth in "Twelve Rules for a New Academy" and "Art-as-Art." Those paintings influenced another series of this name, whose paintings feature bands of paint separated by lines of unpainted canvas and have titles like *Zambezi* and *Marriage of Reason and Squalor*. Ad Reinhardt and Frank Stella created series of this name. Thick lines of this color on white compose the paintings *Chief* and *Mahoning* by (*) Franz Kline. In his later career, Mark Rothko made multiple works of this color on Maroon and Gray. A painting intended to reduce art to the "zero of form" depicts a white background with a square of color and was painted by Kazimir Malevich. For 10 points, what color names a series of paintings that includes *Saturn Devouring His Children* by Francisco Goya?

ANSWER: black paintings [accept ultimate or last until "bands" is read]

<SY Painting>

10. One form of this technique can use evaporative light scattering detectors. The fact that it is impossible to simultaneously resolve all peaks in this technique in an acceptable amount of time is called the general elution problem. This technique can be described by the equation " H equals A , plus B over u , plus C times u ," where A , B , and C are the multipath, longitudinal diffusion, and mass transfer coefficients. The results of another form of this technique can be visualized using (*) UV light or iodine vapors. In one form of this technique, dividing the solute migration distance by the solvent front migration distance gives the retention factor. For 10 points, columns and silica gel plates are often used in what technique for separating mixtures based on polarity?

ANSWER: chromatography [accept column chromatography; accept HPLC or high-performance liquid chromatography; accept LC or liquid chromatography; accept thin-layer chromatography or TLC]

<SR Chemistry>

11. Before being torn apart for winning a urination contest, Derbforgaill arrived in Ireland in the form of one of these animals and was wounded by Cú Chulainn. After finding 150 of these animals chained together, Aengus identified one of them as his love, Caer Ibormeith. Fionnula and her brothers spent 900 years living as these animals after being cursed by the jealous Aoife ("EEF-yuh"), the second wife of their father Lir. Greek warriors who (*) transformed into this animal included a son of Ares killed by Heracles and a son of Poseidon strangled by Achilles. In Hindu myth, one of these animals serves as the mount of the goddess Saraswati. In this form, a god fathered Polydeuces and Helen, who were born from shells. For 10 points, name this type of bird that Zeus transformed into to seduce Leda.

ANSWER: swans [prompt on birds until read]

<JS Mythology>

12. *Description acceptable.* An anecdote describes how, after failing to perform this action, a man was repeatedly told to come to a bridge earlier by an old man who gave him a copy of *The Grand Duke's Art of War*. That attempt to perform this action involved hiring a strongman to throw a massive piece of iron at some carriages. Another attempt to perform this action, which involved fastening a piece of lead to a lute, was made by the blind musician (*) Gāo Jiànlí, the friend of Jīng Kē (“jīng kuh”), who also attempted to perform this action. Zhāng Liáng (“jōng lyong”) attempted to perform this action to avenge the conquest of the state of Hán by its target. For 10 points, name this never-accomplished feat that would have caused the death of a unifier of China from the Qín dynasty.

ANSWER: killing Qín Shǐ Huángdì [accept Shǐ Huángdì, Yíng Zhèng, or Zhào Zhèng in place of “Qín Shǐ Huáng”; accept equivalents for “kill” like assassinate or murder; prompt on overthrowing Qín Shǐ Huáng or equivalents]

<WC World History>

13. Solving this equation in the Landau gauge yields a set of solutions in which energy is proportional to the cyclotron frequency. In the presence of an electromagnetic field, the momentum term in this equation is replaced with “momentum minus charge times vector potential.” Replacing imaginary time in this equation with inverse temperature yields the heat equation. Applying separation of variables to this equation yields a simple ODE whose solution is a complex exponential function of (*) time, and also an eigenvalue equation whose eigenvalues are the energies. The energies of the particle-in-a-box can be computed with this equation, which describes how a system’s wavefunction evolves in space and time. For 10 points, name this fundamental equation of quantum mechanics named for an Austrian physicist.

ANSWER: Schrödinger equation

<BB Physics>

14. A poem titled for a type of music from this country includes the lines “It’s no go the Yogi-Man, it’s no go Blavatsky, / All we want is a bank balance and a bit of skirt in a taxi.” The speaker tells Dostoyevsky “we cannot tell our voices from the wind” in a poem from this country spoken by a man who falls in a ditch and contemplates the title plant. A poem from this country notes “I’m truly sorry Man’s dominion / Has broken (*) Nature’s social union.” In a poem from this country, the protagonist’s horse has her tail pulled off as they flee across a bridge. A poet from this country described a man whose shout of “Well done, Cutty Sark!” prompts witches to chase him, and wrote of “the best laid schemes o’ Mice an’ Men” in “To a Mouse.” For 10 points, name this country home of Hugh MacDiarmid and Robert Burns, the author of “Tam o’ Shanter.”

ANSWER: Scotland [prompt on the United Kingdom; prompt on Great Britain; do not accept or prompt on “England”] (The leadin is from “Bagpipe Music” by Louis MacNeice.)

<JB British Literature>

15. Base-jumpers can jump without a permit off the Perrine Bridge over this river, which irrigates Magic Valley. Both the “Big” and “Little” Lost Streams are tributaries of this river, whose plain contains Inferno Cone and Craters of the Moon National Monument. The Bonneville flood occurred 14,000 years ago along this river. This river’s namesake fine-spotted cutthroat trout can be found in Grand (*) Teton National Park, through which it flows. In the 20th century, this river’s diversion reduced the output of Shoshone Falls. Evel Knievel failed to use the Skycycle X-2 to jump across this river’s namesake canyon. This river, whose largest tributary is the Salmon River, forms part of the Idaho–Oregon border and carved out Hells Canyon. For 10 points, name this largest tributary of the Columbia River.

ANSWER: Snake River [or Lewis River; accept Shoshone River until read]

<AP Other (Geography)>

16. A composer from this country arranged the slow movement of his 2-cello string quartet, based on the song “Legend,” for strings as *Variations on a theme of a composer from here*. A composer from here took the finale of Beethoven’s String Quartet No. 13 as a theme of his String Quartet No. 1, and wrote *Serenata alla spagnola* for a collaborative string quartet on B-flat A F; like *Les Vendredis*, it was for a “quartet Friday” at a patron’s home. A composer from here arranged for cello and strings the slow movement of his (*) String Quartet No. 1, *Andante cantabile*. Haydn dedicated his “Joke” and other Opus 33 quartets to a duke of this country. Prince Galitzin of this country commissioned 3 of Beethoven’s late quartets. A composer from here wrote a Nocturne for his String Quartet No. 2 and joined Belyayev’s circle. A count from here commissioned Beethoven’s “Razumovsky” quartets. For 10 points, name this country of Arensky, Borodin, and Tchaikovsky.

ANSWER: Russia

<OL Music>

17. Teddy Roosevelt called this politician a “Hun within our gates” and a “skunk who ought to be hanged” after he was misquoted as saying the US had “no grievances towards Germany.” This man worked with Charles von Hise to create a legislative reference library, and edited a namesake *Weekly* magazine with his wife Belle Case. This politician’s son led a committee that investigated the use of detective agencies like Pinkerton to prevent collective bargaining. This advocate of (*) direct primaries pioneered the concept of public universities contributing back to the state government, which became his state’s namesake “Idea.” In 1924, this man ran with Burton K. Wheeler on the Progressive ticket. For 10 points, name this Wisconsin governor nicknamed “Fighting Bob.”

ANSWER: Robert La Follette, Sr.

<AP American History>

18. The cooling time of these objects varies with the ratio of their mass to luminosity raised to the $5/7$ power. These objects can be classified as DZ if they contain metal spectral lines, or DA if their spectra only contain Balmer lines. By assuming these objects act like a relativistic ideal gas, they can be modeled as a polytrope with index n equals 3, which yields the surprising result that their masses are (*) independent of their radii.

These objects are stabilized against gravitational collapse by electron degeneracy pressure. Sirius B is an example of these objects, whose maximum mass equals 1.44 solar masses according to the Chandrasekhar limit. For 10 points, after a red giant goes supernova, what stellar remnant less massive than black holes and neutron stars is created?

ANSWER: white dwarfs [prompt on dwarf]

<WK Other Science (Astronomy)>

19. In a story by this author, the title character causes a prison warden to eat a doorknob and his parents to think that they are battling broncos. In a story by this author, the protagonist is shocked to find that he lives in “so wild a region” when he sees no roads for an entire day. The narrator of a story by this author of “The Hypnotist” is haunted by the phrase “Consciousness is the creature of Rhythm” and watches a fez-wearing creature strangle his friend after losing a (*) game of chess. In a story by this author, the protagonist is tricked by a disguised scout, who tells him about some burnable driftwood. The protagonist of that story jumps into a river to avoid gunshots, but feels a “stunning blow upon” his neck just as he goes to embrace his wife. For 10 points, name this author of “Moxon’s Master” who wrote about Peyton Farquhar in “An Occurrence at Owl Creek Bridge.”

ANSWER: Ambrose Bierce

<AP American Literature>

20. This practice is the subject of the 24th book of the *Ṣaḥīḥ al-Bukhārī*, which includes a ḥadīth describing a transformation into a bald-headed poisonous snake with black spots over its eyes. Abu Bakr vowed to fight against anyone who would separate *salat* and this other practice, and fought against those tribes that refused to engage in this practice in the Ridda wars. Supervising this practice was a major function of the *bayt al-māl*. The 60th verse of the Sūrat at-Tawbah describes the eight categories of people who can benefit from this practice, like (*) stranded travelers and slaves. *Ṣadaqa* is a voluntary version of this practice, and *khums*, a related practice, was initially levied on military plunder. The usual rate for this practice is 2.5 percent of one's net worth. For 10 points, name this Pillar of Islam that is a tax for the distribution of alms.

ANSWER: zakāt [prompt on giving alms, charity, taxation, or equivalents]

<WC Religion>

Bonuses

1. To circumvent the Benedictine Rule's prohibition on monks having servants, this order dubbed the laborers on their estates "lay brethren." For 10 points each:

[10] Name this order, known as the White Monks, which tried to restore monastic life to the austerity of the Benedictine Rule. It was reformed by Bernard of Clairvaux.

ANSWER: Cistercians

[10] A writer with this first name wrote an invective against the Cistercians, accusing them of murdering a nobleman and replacing his buildings with a ploughed field in three days. Along with Peter the Hermit, a man of this first name led the People's Crusade.

ANSWER: Walter [or Walter Map; or Walter Sans-Avoir; or Walter the Penniless; or Gautier]

[10] This English king founded the Beaulieu Abbey for the Cistercians. This brother of Richard I was forced to sign the Magna Carta by his rebellious barons in 1215.

ANSWER: John I [or John Lackland]

<JB European History>

2. The protagonist of this story says that his love interest's name "sprang to [his] lips in strange prayers and praises which [he himself] did not understand." For 10 points each:

[10] Name this story whose narrator tries to buy a gift for Mangan's sister at a bazaar before realizing that he has become "a creature driven and derided by vanity."

ANSWER: "Araby"

[10] This Irish author included "Araby" in his collection *Dubliners*. He wrote about Leopold Bloom in *Ulysses*.

ANSWER: James Joyce

[10] In "Araby," a now-deceased one of these people was the previous tenant of the narrator's house. Elsewhere in *Dubliners*, the story "Eveline" describes a yellowed photograph of one, and the story "Grace" ends with a speech by one of these people.

ANSWER: Catholic priests [or fathers; or Jesuits; prompt on clergymen, ministers, etc.]

<AP Other Literature>

3. He composed *Semper Fidelis* and promoted the music of Wagner as the efficient leader of the US Marine Band. For 10 points each:

[10] Name this composer who wrote an elaborate piccolo solo for *The Stars and Stripes Forever*. He was nicknamed "March King" in a nod to Johann Strauss.

ANSWER: John Philip Sousa

[10] This word names the lyrical second section of a march, and the counterpart of the minuet in the third movement of classical symphonies. This word names a type of sonata that Corelli wrote for two violins over a basso continuo.

ANSWER: trio

[10] Sousa ramped up the intensity by contrasting the gentler trio with these louder sections in which short, martial, chromatic phrases are often exchanged in a dialogue between high and low instruments.

ANSWER: break strain [or breakstrain; accept breakup strain, dogfight, or interlude]

<OL Music>

4. The bump function has both this property and a compact support. For 10 points each:

[10] Name this type of function that has continuous derivatives up to some order in a defined domain. C-infinity functions are this kind of function that have continuous derivatives of all orders.

ANSWER: smoothness

[10] The bump function is an example of a function that is smooth, but does not have this other property. Complex functions that have this property at all points in the complex plane are called entire.

ANSWER: analytic [accept holomorphic]

[10] A complex function is analytic if it converges to this representation of the function. This type of series, which is called a Maclaurin series when centered at zero, is calculated from the value of the function's derivatives at a single point.

ANSWER: Taylor series

<SR Other Science (Math)>

5. Frantz Schmidt, a member of this profession in Nuremberg, left a fascinating diary discussed in a Joel Harrington book. For 10 points each:

[10] Name this profession whose members administered procedures such as hanging, drawing, and quartering, and operated the guillotine during the French Revolution.

ANSWER: executioners [or hangmen]

[10] Until the age of 85, Mastro Titta served as the official executioner for this territory. The legal basis for this territory was established by a document named for Pepin the Great.

ANSWER: Papal States [or Republic of Saint Peter; or Church States; or Italian Stati Pontifici; or Stati della Chiesa]

[10] The English executioner Jack Ketch authored a pamphlet apologizing to the leaders of this rebellion after brutally hacking their heads off. This rebellion, named for an illegitimate son of Charles II, targeted James II and was defeated at Sedgemoor.

ANSWER: Monmouth ("MON-mith") Rebellion [or the Revolt of the West; or the West Country Rebellion]

<JB European History>

6. This poet addressed a "fierce half-brother, staring down from that simplified west" in "Orion." For 10 points each:

[10] Name this feminist American poet who wrote "Valediction Forbidding Mourning" and collections such as *Snapshots of a Daughter-in-Law* and *Diving into the Wreck*.

ANSWER: Adrienne Rich

[10] Rich's essay "When We Dead Awaken: Writing as Re-Vision" takes its title from this man's work. The play *What Happened after Nora Left Her Husband* by Elfriede Jelinek ("el-FREE-duh YELL-in-ek") follows up on this Norwegian's play *A Doll's House*.

ANSWER: Henrik Ibsen

[10] One of Rich's ghazals tells this poet that "we are ghosts condemned to haunt the cities where you want to be at home." This one-time poet laureate of New Jersey wrote "Preface to a Twenty-Volume Suicide Note" and "In Memory of Radio."

ANSWER: Amiri Baraka [or Leroi Jones; prompt on Leroi]

<JB American Literature>

7. After being asked by Mike Barnicle on MSNBC about what he would do about this city if he was elected president, Gary Johnson asked in response, “And what is [this city]?” For 10 points each:

[10] Name this city in northwest Syria, the site of frequent barrel bombing attacks by the Syrian government. Later, when Johnson was unable to name his favorite foreign leader, he stated, “I guess I’m having a [this city] moment.”

ANSWER: **Aleppo**

[10] A recent government offensive in Aleppo saw the death of Mohammad-Reza Zarealvani, an officer of this military organization’s Sabarin Unit. Other parts of this military organization include the Quds Force and the Basij.

ANSWER: Islamic **Revolutionary Guard** Corps [or **IRGC**; accept Army of the **Guardians of the Islamic Revolution**; accept **Sepāh**-e Pāsdārān-e Enqelāb-e Eslām; prompt on **Iranian** military or equivalents]

[10] The Quds Force is commanded by this general. When Hugh Hewitt asked Donald Trump about whether he was familiar with this general, Trump answered affirmatively before confusing the Quds Force with the Kurds.

ANSWER: Qasem **Soleimani**

<WC Other (Current Events)>

8. The Pan–Tompkins algorithm is used to detect QRS complexes in the analysis of these signals, and the R–R interval gives information about the rate of these signals. For 10 points each:

[10] Name these signals, measurements of the electrical activity of the heart.

ANSWER: **electrocardiograms** [accept **EKGs** or **ECGs**]

[10] An EKG signal with no P-wave and an irregularly-irregular R–R interval is characteristic of this arrhythmia when the upper chambers of the heart beat erratically. This arrhythmia is contrasted with atrial flutter.

ANSWER: **atrial fibrillation** [prompt on partial answer]

[10] A short P–R interval and slurring upstroke of the QRS complex are common readings in the EKG of a patient with this disorder, in which there is an accessory conduction pathway called the Bundle of Kent.

ANSWER: **Wolff–Parkinson–White** syndrome [or **WPW** syndrome]

<SY Biology>

9. This event was centered on the Apostolic Faith Gospel Mission, and was led by William Seymour, a one-eyed African-American pastor from Houston. For 10 points each:

[10] Name this event that began in Los Angeles in 1906 and that was key to the spread of Pentecostalism.

ANSWER: **Azusa Street** revival

[10] A unique tenet of Pentecostalism is the concept of baptism in the Holy Spirit, which is accompanied by this verbal action. In the second chapter of the Acts of the Apostles, people perform this action on the day of Pentecost.

ANSWER: speaking in **tongues** [or gift of **tongues**; or **glossolalia**]

[10] Pentecostalism is part of this broader Christian movement that emphasizes spiritual gifts like the ability to speak in tongues. Accordingly, the name of this movement derives from a Greek word meaning “gift.”

ANSWER: **Charismatic** Christianity

<WC Religion>

10. Answer the following about the theme of jealousy in operas, for 10 points each.

[10] In this “play with music,” Lucy Brown and Polly Peachum sing the “Jealousy Duet” after Macheath is jailed.

ANSWER: The Threepenny Opera [or Die Dreigroschenoper]

[10] Ominous parallel chords accompany the first mention of “jealousy” in this composer’s opera *Otello*. This Italian composer also wrote *La Traviata* and *Aïda*.

ANSWER: Giuseppe Verdi

[10] Verdi added a melody often called this character’s “jealousy theme” to the prelude of *Aïda* in 1872. This daughter of the Pharaoh is in love with Radamès.

ANSWER: Amneris

<JH Other Arts (Opera)>

11. This man used an enema machine to pump yogurt into the rectums of the patients at his Battle Creek Sanitorium. For 10 points each:

[10] Name this man who created a breakfast cereal called “Granula,” whose blandness was intended to stop masturbation.

ANSWER: John Harvey Kellogg

[10] Kellogg, like cracker-namesake Sylvester Graham, is one of the reformers discussed in Adam Shprintzen’s book on the “Crusade” of this movement. Kellogg adhered to this dietary practice out of health, rather than ethical, concerns.

ANSWER: vegetarianism [or veganism]

[10] This man’s cousin’s Grahamite views on meat-eating inspired the vegetarian diet enforced on his failed commune at Fruitlands. He also authored some incomprehensible “Orphic Sayings.”

ANSWER: Amos Bronson Alcott [or Amos Bronson Alcott; prompt on Alcott]

<JB American History>

12. An author from this country inspired Cynthia Ozick’s *The Messiah of Stockholm* and Jonathan Safran Foer’s *Tree of Codes*. For 10 points each:

[10] Name this country home to that author of *The Street of Crocodiles*, Bruno Schulz. It’s not Russia, but the author of the science fiction novel *Solaris* was also from this country.

ANSWER: Poland (*Solaris* is by Stanislaw Lem.)

[10] Isaac Singer compared Bruno Schulz to Kafka and to this French author of the seven-volume novel *In Search of Lost Time*, which C. K. Scott Moncrieff translated with the title *Remembrance of Things Past*.

ANSWER: Marcel Proust

[10] In Schulz’s surreal story “Cinnamon Shops,” a boy rides a driverless carriage into the countryside after being sent to get his father’s object of this sort. In Maupassant’s “The Piece of String,” Hauchecorne (“oash-CORN”) is unable to convince anyone that he did not steal one of these objects.

ANSWER: wallets [or pocketbooks; or pouch; or coin purse]

<JB European Literature>

13. Elaine Cumming and William Henry's disengagement theory of these people has since been contested by activity and continuity theories. For 10 points each:

[10] Identify this sort of person. Robert Neil Butler coined a term for prejudice against them.

ANSWER: old people [or the elderly; or aging people; or equivalents like geriatric people]

[10] Studies of material well-being among the elderly often use the principle of cumulative disadvantage, which this sociologist first described as the "Matthew Effect." This man advanced the strain theory of deviance and coined the term "self-fulfilling prophecy."

ANSWER: Robert K. Merton

[10] Elisabeth Kubler-Ross's observations of the elderly prior to death inspired her five-stage model of this feeling, which features the steps of denial, anger, bargaining, depression, and acceptance.

ANSWER: grief

<JB Social Science>

14. Unlike a similar concerted mechanism, this mechanism involves a carbocation intermediate, meaning it is favored for tert-butyl halides but not primary alkyl halides. For 10 points each:

[10] Name this mechanism in which a leaving group is replaced by a nucleophile in two steps.

ANSWER: SN1 mechanism [or unimolecular nucleophilic substitution]

[10] The SN1 reaction of tert-butyl bromide with an ethanol solvent is this type of reaction. In this type of reaction, a compound reacts with the solvent it is placed in.

ANSWER: solvolysis

[10] Perhaps the most common solvolysis reactions involve this compound as the nucleophile. This compound is sometimes called the "universal solvent," since its high polarity and ability to form hydrogen bonds allow it to dissolve a wide variety of chemicals.

ANSWER: water [or H2O] (Solvolysis reactions with water are referred to as "hydrolysis.")

<BB Chemistry>

15. One book discusses Lucian of Samosata, the Grand Inquisitor, and the modern Anyone as exemplars of this attitude. For 10 points each:

[10] Name this attitude of distrust towards other people's intentions, the name of which derives from an ancient Greek school of philosophy practiced by the tub-dwelling Diogenes.

ANSWER: cynicism [or the Cynics]

[10] Peter Sloterdijk ("pee-tuh SLOW-tuh-dyke") defined cynicism as "enlightened false consciousness" in a book about the cynical form of this concept. David Hume argued that this concept "is, and ought only to be the slave of the passions."

ANSWER: reason

[10] This philosopher adopted Sloterdijk's term "kynicism" to advocate using humor to challenge official culture in his *The Sublime Object of Ideology*, which also examines Lacan's claim that Marx invented the symptom.

ANSWER: Slavoj Žižek ("ZHEE-zhek")

<JB Philosophy>

16. The “Siberian Ice Maiden” mummy was found in one of the kurgans that this people’s Pazyryk subculture built on the Ukok Plateau. For 10 points each:

[10] Name these Russian-Iranian nomads who were displaced in south Russia by the Sarmatians. Earlier, they had overcome the Cimmerians and dominated the steppes above the Black Sea.

ANSWER: Scythians [or Śaka; or Sacae]

[10] The Scythians fought over their south with the Kushan Empire, which ruled over this region in modern-day Afghanistan along the Amu Darya River. Seleucid satrap Diodotus I founded a kingdom in this region.

ANSWER: Bactria [or Greco-Bactria]

[10] This Greek man claimed that the first Scythian king, Scythes, was a child of Hercules and Echidna. He compiled his other accounts in his *Histories*, for which he is known as the “father of history.”

ANSWER: Herodotus

<AP World History>

17. In a novel, this character narrates the tale of Miss de Barral, who is abandoned by her criminal father and marries Captain Anthony. For 10 points each:

[10] Name this captain of the *Nellie* who tells a woman that her dead fiancé’s last word was her name, although his parting words were actually “The horror! The horror!”

ANSWER: Charles “Charlie” Marlow [accept any underlined name]

[10] Marlow relates the events of *Chance*, *Heart of Darkness*, and *Lord Jim*, all novels by this Polish-born English author.

ANSWER: Joseph Conrad [or Józef Teodor Konrad Korzeniowski]

[10] The same five men aboard the *Nellie* appear in the exposition to this Conrad short story, in which Marlow relates his experiences on the John Beard-captained *Judea*, which combusts and is scuttled en route to Bangkok.

ANSWER: “Youth”

<AP British Literature>

18. A 1593 book with this title by Cesare Ripa describes allegorical personification of over 700 concepts. For 10 points each:

[10] Name this field of art study. In a book of “Studies” in it, Erwin Panofsky defined it as the analysis of the cultural context of symbols in art, as opposed to a similarly named method which is the “description and classification of images.”

ANSWER: iconology [or Iconologia; do not accept or prompt on “iconography”]

[10] A chapter of *Studies in Iconology* analyzes the motif of this figure being blindfolded. This person kisses and fondles a woman in an Agnolo Bronzino painting whose background includes a girl with a serpent’s tail.

ANSWER: Cupid [or Venus, Cupid, Folly, and Time; prompt on Eros]

[10] A Panofsky book about this technique as “symbolic form” claims the ancient Greeks did not have the cultural conception of space necessary to invent it. In this technique, farther objects are smaller and foreshortened.

ANSWER: perspective

<JB Painting>

19. A god in this myth system used eight tubs of wine to get the eight heads of a serpent drunk. For 10 points each:

[10] Name this religion whose kami gods include Susano'o, a deity of storms and the brother of Amaterasu.

ANSWER: **Shinto** [prompt on Japanese religion]

[10] After slaying the dragon Orochi, Susano'o found this sword in its corpse. Along with a mirror and a jewel, this sword is part of the Imperial regalia of Japan.

ANSWER: **Kusanagi** [or **Grass-Cutting** Sword; or **Kusanagi**-no-Tsurugi]

[10] While fighting the Orochi, Susano'o carried his future wife Kushinada in the form of one of these objects.

Izanagi used one of these objects as a torch in the underworld, allowing him to see his wife's rotting corpse.

ANSWER: **combs**

<JS Mythology>

20. A revolution in physics occurred after the publishing of this theory, which states that mass and energy curve spacetime. For 10 points each:

[10] Name this theory published in 1915 by Albert Einstein that presented a geometric explanation for gravity.

ANSWER: **general relativity** [or **GR**; prompt on relativity; do not accept or prompt on "SR" or "special relativity"]

[10] Einstein names a convention that uses letters in subscripts and superscripts to implicitly denote performing this operation over the indices of a vector or tensor in general relativity.

ANSWER: **summation**

[10] In standard tensor notation, *upper* indices indicate a vector or tensor with this property. The position vector has this property, which conceptually means that the change-of-basis matrix for the vector or tensor is the *inverse* of the change-of-basis matrix for the components of the basis.

ANSWER: **contravariant** [do not accept or prompt on "covariant"]

<TW Physics>