

2019 Terrapin: Come on Angel, Come and Save Us

Packet 3

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Tossups

1. **A man working in this industry nicknames his coworkers “The Druid” and “The Clinger” and stares at mannequins cast from his model ex-wife in a novel that ends with trading his Ray-Bans for a bag of bread. A character working in this industry uses “Bolivian Marching Powder” at night clubs in Jay McInerney’s (“MACK-uh-NER-nee”) second-person novel *Bright Lights, Big City*. After falling asleep staring at his ivory Christ statuette, a character working in this industry dreams of (*) sacrificing a lamb in a novel that ends with him rushing down the stairs to embrace a crippled man carrying a wrapped gun. In that novel, the title character’s work in this industry involves advising figures like “Brokenhearted” and “Sick-of-it-all.” For 10 points, the title character of Nathanael West’s *Miss Lonelyhearts* works in what industry as an advice columnist?**

ANSWER: **publishing** industry [accept any answers about the industry that produces **newspapers**, **magazines**, **periodicals**, or **publications**; accept **journalism** or **journalist**; accept **printing**; prompt on **media**; prompt on **writing** or **writer**; anti-prompt on **advice column** or advice **columnist** or **fact-checking** industry]

<JH, American Literature>

2. **A subgroup of these people known as the Agudas were deported after a revolt carried out by Muslims among these people. One of these people named Estevanico was killed in the village of Hawikuh after surviving a shipwreck during the Narváez (“nar-VAH-ez”) expedition and lead Marcos de Niza in a search for the Seven Cities of Cibola. These people formed autonomous inland settlements like Palmares (“pow-MAH-riss”) known as (*) *quilombos* (“kee-LOHM-boos”). Gaspar Yanga established a “maroon” community of these people near Veracruz. In 1888, Princess Isabel signed the Golden Law to free these people in Brazil. For 10 points, name these people who were forcibly brought to Latin America through the Middle Passage.**

ANSWER: **slaves** [or **esclavos** or **escravos**; accept escaped **slaves** or freed **slaves** or any other specific answer containing the word **slave**; prompt on **Africans**, **Black people**, **Afro-Latinos**, or equivalents; prompt on **Moors**; anti-prompt on **maroons** until it is read]

<AE, World History>

3. **In a 2015 paper, Delia Graff Fara argued that bare occurrences of these things are accompanied by an unpronounced determiner, defending the view that they are predicates. Gareth Evans presented an example involving Madagascar as an objection to theories in which these things are evaluated relative to causal (“CAUSE-al”) chains. John Searle (“surl”) developed a “cluster theory” of these things building on Bertrand Russell’s account in which they are (*) “disguised definite descriptions.” To solve a puzzle involving Venus, Gottlob Frege (“FRAY-guh”) posited that they have “senses.” Like natural kind terms, Saul Kripke argued that these terms are rigid designators. Millians hold that these terms refer directly to their bearers. For 10 points, identify these proper nouns, exemplified by “Jack,” “Caleb,” and “Justin.”**

ANSWER: **names**

<CK, Philosophy>

4. **After a ruler of this city got into an argument with Plato over virtue, that ruler encouraged a Spartan named Pollis to assassinate Plato aboard a galley. That ruler of this city rose to power during the chaos following the sack of Akragas and conquered the nearby city of Rhegium. Another ruler of this city, Gelon, restored the power of the landowning *gamaroi* and won the Battle of (*) Himera against the Carthaginian king**

Hamilcar. While defending this city from a Roman siege, this city's ruler Hieron II supposedly hired an inventor from this city to build defense mechanisms like a claw and a heat ray. This city was targeted during the Peloponnesian War by the Sicilian Expedition. For 10 points, name this major Greek city of ancient Sicily that was home to Archimedes.

ANSWER: Syracuse [or Siracusa or Sarautsa or Seragusa]

<AE, European History>

5. In one of these poems, the speaker says of his critics, "I may be straight, though they themselves be bevel," before reminding them that "all men are bad and in their badness reign." William Empson's *Seven Types of Ambiguity* begins by unpacking a line about "bare ruined choirs" in one of these poems. In an Oscar Wilde story, Cyril forges a portrait to convince Erskine ("UR-skin") that their dedicatee, Mr. W.H., was a young (*) actor. One of these poems states that "music hath a far more pleasing sound" than the addressee, whose hair is compared to "black wires." Another of these poems declares that though the "rough winds do shake the darling buds of May," the addressee shall live on "so long as men can breathe or eyes can see." For 10 points, name these 14-line poems including one beginning, "Shall I compare thee to a summer's day?"

ANSWER: sonnets by William Shakespeare [or Shakespearean sonnets; prompt on partial answers, such as sonnets or Shakespeare poems]

<CK, British Literature>

6. In 1963, John Coltrane and this musician recorded a track he composed whose original D minor version's bridge repeats a D-flat major 1-6-2-5 chord progression, and whose melody opens like Gershwin's "Someone to Watch Over Me" with a rising 6-note F major pentatonic pickup and long high G. Lorenzo Tio's "Mexican Blues" inspired a standard he wrote with Barney Bigard that swapped the trombone and clarinet's registers to create a "mike-tone." Early in his career, his band's signature song was "East St. Louis Toodle-oo," an example of his (*) "jungle music." His career was revived after he had Paul Gonsalves play a 27-bar saxophone solo during a performance of "Diminuendo and Crescendo in Blue" at the 1956 Newport Jazz Festival. He composed the standards "In a Sentimental Mood" and "Mood Indigo." For 10 points, name this jazz pianist who often performed Billy Strayhorn's "Take the 'A' Train."

ANSWER: Duke Ellington [or Edward Kennedy Ellington]

<JL, Other Arts>

7. Measuring this phenomenon can provide a redshift-independent probe of galactic cluster mass, a technique used at observatories like the ATC. The spectrum of this phenomenon is gravitationally changed in the Sachs-Wolfe effect, the integrated form of which takes into account interactions between Earth and the surface of last scattering. The South Pole-based DASI experiment discovered the (*) polarization of this phenomenon, and the BICEP experiments tried to measure the B-mode polarization in this phenomenon caused by gravitational waves in the early Universe. COBE ("KO-bee") and Planck ("plonk") were satellite observatories for measuring this phenomenon, which has a nearly perfect blackbody spectrum with a temperature of 2.7 kelvins. For 10 points, name this blackbody radiation often called the afterglow of the Big Bang.

ANSWER: cosmic microwave background radiation [or CMB or CMBR; accept Sunyaev-Zel'dovich effect or S-Z effect in the first sentence]

<GR, Other Science: Astronomy>

8. The queen of this kingdom, whose name means "frog-bellied," is attacked during a ritual by a figure whose right foot is so heavy that none of this kingdom's soldiers can lift it. A prince of this kingdom originally named "cloud-lord" becomes enraged after the death of his uncle, who is cursed to hibernate for half of each year. A figure carrying a signet ring shrinks to the size of an ant to sneak into this kingdom and tricks its soldiers into (*) igniting a pile of clothes on his tail, which he uses to burn this kingdom. A princess of this kingdom has her nose and ears cut off after trying to seduce a king; that king enlists a corps of bears and monkeys to

build a bridge to this kingdom ruled by a ten-headed demon. For 10 points, name this kingdom ruled by Rāvana that is the namesake of a modern-day island country to the south of India.

ANSWER: **Lankā** (“LUN-kah”) [or **Lankāpura**; accept **Śri Lanka**] (The figure mentioned in the first line is Angad, and the queen, prince, and princess are Mandodarī, Meghnād, and Śūrpanakhā, respectively.)

<AP, Mythology>

9. **A duke of this city is said to have just one defect in his whole life: that he commissioned a bust of Napoleon for ten thousand francs. A prince of this city only talks to his wife for half an hour at the dinner table every few weeks and is poisoned by a somewhat mad highwayman-cum-poet on behalf of a countess. In fear of lifelong disfigurement from a cut on the cheek, a character from this city kills an actress’s manager. That character escapes imprisonment for that crime in this city’s (*) Farnese (“far-NAY-zay”) Tower by using some ropes sent by his aunt Gina and this city’s Prime Minister, her lover Count Mosca. The death of his lover Clélia Conti prompts Fabrice del Dongo to retire to a monastery in this city near Lake Como. For 10 points, name this Italian city home to the title *Charterhouse* of a Stendhal novel.**

ANSWER: **Parma**

<AP, European Literature>

10. **In 1892, Charlie Siringo uncovered the plans of workers who produced this good to strike under the leadership of George Pettibone in the town of Coeur d’Alene (“KOR duh-LAIN”). The German engineer Philip Deidesheimer (“DYE-diss-HY-mer”) developed a system of “square sets” of lumber that could be locked together like honeycomb to help produce this good. The Virginia and Truckee Railroad brought large amounts of this resource to be processed in (*) Carson City from centers of production in Washoe (“WAH-sho”) and Virginia City. This resource led to the growth of several boomtowns in Nevada following the discovery of a large deposit of this metal called the Comstock Lode. For 10 points, name this precious metal that the bimetallist William Jennings Bryan advocated as currency in the “Cross of Gold” speech.**

ANSWER: **silver** [accept **silver** ore]

<AE, American History>

11. **Harvard pharmacologist P. B. Dews experimented on three animals from this class called Albert, Bertram, and Charles. *Cameroceras* were Paleozoic ancestors of this class. A. R. Hough studied how *Sepia officinalis*, a member of this class, can be conditioned to use its camouflage mechanism, and other researchers have discovered that some organisms in this class can sense light using opsins in their skin. Many members of this class have papillae and reflectin-containing (*) chromatophores in their skin, which display patterns for camouflage or communication. The only externally-shelled organisms in this class are nautilus, and soft-bodied organisms in this class can spray ink as an escape mechanism. For 10 points, name this class, part of the phylum Mollusca, that includes cuttlefish, octopodes, and squid.**

ANSWER: **Cephalopoda** [or **cephalopods**]

<GR, Biology>

12. **The wheel of fortune in William Hogarth’s *Emblematical Print on the South Sea Scheme* parodies a depiction of one of these events that appears on the cover of the NYRB edition of a Veronica Wedgwood history. A huge tree appears in that engraving depicting this sort of event, which is part of the *Great Miseries of War* series by Jacques Callot (“kah-YO”). A group of people peek over a wall to watch one of these events in a painting by Edouard Manet; that painting (*) draws heavily on a painting of one of these events in which light emanates from a square lantern on the ground. That painting of one of these events shows a man in white with outstretched arms facing a line of French soldiers. For 10 points, name this sort of event depicted in Manet’s painting of Emperor Maximilian and Goya’s *The Third of May, 1808*, which can be carried out by firing squads.**

ANSWER: **executions** [accept **hangings** or executions by **firing squad**; prompt on more general answers like **shootings** and **murders**; prompt on **wars**]

<JH, Painting & Sculpture>

13. In an experiment, this psychologist found that subjects preferred to keep their hands in ice water for a longer period of time if the water warmed at the end, even though it resulted in more pain. That experiment led this psychologist to propose a peak-end rule for retrospective evaluation of experiences. In a 2011 book, this psychologist observed that the rule “what you see is all there is” can explain why individuals experience (*) framing effects in their judgment. That book examined the abilities and the limitations of two modes of thinking, the automatic System 1 and the conscious, reasoning System 2. For 10 points, name this psychologist and behavioral economist who wrote *Thinking, Fast and Slow* and developed prospect theory with Amos Tversky.

ANSWER: Daniel Kahneman [accept Barbara L. Frederickson in the first two sentences]

<WC, Social Science>

14. The third pope of this name, who called two synods (“SIN-uds”) in Rome in 731 to oppose the Iconoclasm, was the last pope before Francis to be born outside of Europe. The ninth pope of this name created the *Liber extra* to codify canon law and established the Papal Inquisition. That pope with this name excommunicated Frederick II and denounced him as a “predecessor to the Antichrist.” Another pope with this name supposedly saw some slave boys in a market and said that they were “not (*) Angles, but angels.” That pope, who dispatched a mission to convert the Anglo-Saxons, had the epithet of “the Great” and is credited with instituting a namesake type of chant. For 10 points, a pope with what name introduced a namesake calendar reform to replace the Julian calendar?

ANSWER: Gregory [accept with any number or epithet, but in order they are III, IX, I or the Great, and XIII]

<AE, European History>

15. This character reflects that “It is impossible to convey the life-sensation of any given epoch of one’s existence,” concluding that “We live, as we dream – alone.” This character comes across a reed hut where he finds a note reading “Wood for you. Hurry up” and an old book on seamanship that contains margin notes he mistakes for a cipher. This character spends weeks waiting for rivets necessary for some repairs to arrive. This character discusses the wilderness of Roman-era (*) London with a group of five men, including a “Director of Companies,” in the frame story of a novel. In that novel, this character discovers the postscriptum “exterminate all the brutes!” in a report by a man who dies with the words “the horror! the horror!” For 10 points, name this narrator who searches for Kurtz in the Congo in Joseph Conrad’s *Heart of Darkness*.

ANSWER: Charles Marlow [or Charles Marlow; or Charlie Marlow]

<AP, World/Other Literature>

16. Solketal is a protected form of this molecule that is formed from it by creating two ether linkages. Heating oxalic acid and this molecule produces formic acid, with this molecule acting as the catalyst. Acrolein (“uh-CRO-lee-in”) can be synthesized from this chemical in the presence of magnesium sulfate. This chemical is produced as a byproduct of biodiesel production and is a common cosmetics additive. In a sulfuric acid-catalyzed reaction, this non-aromatic molecule reacts with nitric acid to form a vasodilator and (*) explosive. Saponification produces this molecule along with fatty acid salts, and it is a viscous liquid at room temperature. For 10 points, name this three-carbon triol, the backbone of most lipids.

ANSWER: glycerol [or glycerine]

<GR, Chemistry>

17. In this country, Aarón Joaquín González founded a non-trinitarian Protestant church called La Luz del Mundo, whose members gather yearly for the Santa Cena service. According to a religious tradition from this country, the bishop Juan de Zumárraga agreed to build a church on a hill after a saint brought him some flowers carried inside his *tilma*, or cloak, which unfolded to reveal a miraculous (*) image of the Virgin Mary. That saint from this country was a native convert to Christianity named Juan Diego. This country’s patron saint is

the Virgin Mary, who appeared on Tepeyac Hill as Our Lady of Guadalupe. For 10 points, name this Latin American country whose celebration of All Saints' Day coincides with its celebration of Day of the Dead.

ANSWER: **Mexico**

<WC, Religion>

18. **In the partial wave expansion for scattering, an incoming plane wave is decomposed into a sum of waves with different values for this quantity. Commutation relations for the operators that describe this quantity can be written with a Levi–Civita (“LAY-vee CHEE-vee-ta”) symbol. (*)** Spherical harmonics are eigenfunctions of operators corresponding to this quantity, which are the generators of rotations. A Stern–Gerlach apparatus separates particles based on their projection of this quantity along the quantization axis, and it is proportional to magnetic moment. The j and l (“ell”) quantum numbers correspond to eigenvalues of the square of this quantity. For 10 points, name this quantity with “spin” and “orbital” types, which is conserved in the absence of external torque.

ANSWER: **angular momentum** [accept orbital **angular momentum** or spin **angular momentum**; prompt on spin by asking “what general physical quantity is spin a type of?”; do not accept or prompt on “momentum” or “linear momentum”]

<GR, Physics>

19. **This composer’s early pieces for violin and guitar include a sonata concertata and 14 variations on the French revolutionary song “La Carmagnole.” The theme of the last piece in this composer’s Opus 1 begins [read slowly] long A, short A A C B A, then high E. This composer’s *Le Streghe* is a set of variations based on the popular “Witches’ Dance” from a ballet by Franz Süssmayr. The third movement rondo of this composer’s Violin Concerto No. 2 in B minor is (*) nicknamed, due to its repeatedly ringing F-sharps, “La Clochette” or “La Campanella.”** This gaunt composer with a meaty ravioli recipe cultivated legends about his devilry and unmatched technical ability. Themes by this composer inspired six piano études by Liszt and a Rhapsody by Sergei Rachmaninoff. For 10 points, name this first great Romantic virtuoso who composed 24 caprices for violin.

ANSWER: Niccolò **Paganini**

<JS, Classical Music>

20. **The “Ordinary Lives” of six people who fled from this country was the subject of the book *Nothing to Envy* by the *Los Angeles Times* journalist Barbara Demick. The Irish politician Sean Garland was arrested in 2005 for suspicion of circulating counterfeit “supernotes” from this country. In this country, a secretive government agency called “Office (*) 39” obtains hard currency through illegal activities. The 1999 book *Eyes of the Tailless Animals* is a memoir of a woman’s experience of surviving this country’s reeducation camps for political prisoners. Mike Pence warned this country not to “hijack” the Olympics after this country announced that it would send a delegation to the 2018 Winter Olympics. For 10 points, name this country ruled from Pyongyang by Kim Jong-Un.**

ANSWER: **North Korea** [or **DPRK** or **DPR Korea** or **Democratic People’s Republic of Korea** or **Chosŏn Minjujuŭi Inmin Konghwaguk**; prompt on Korea; do not accept or prompt on “Republic of Korea” or “ROK”]

<JH, Other>

Bonuses

1. The massive temple complex of Todai-ji was constructed during this period as the center of a system of provincial temples known as *kokubun-ji*. For 10 points each:

[10] Name this period of Japanese history in the 8th century that began with the establishment of Heijō-kyō as the capital. This period was followed by the Heian (“HAY-on”) period.

ANSWER: Nara period

[10] The Nara period saw the composition of this first written history of Japan, which was commissioned by Empress Genmei (“GEHM-may”). About a decade later, this text was followed by the *Nihon Shoki*.

ANSWER: Kojiki [accept Records of Ancient Matters or An Account of Ancient Matters; accept Furukotofumi]

[10] After the Nara period, Emperor Kammu moved the capital to Heian-kyō, now this modern city. This city remained as the site of the imperial court until the Meiji Restoration, despite severe damage during the Ōnin War.

ANSWER: Kyōto

<AE, World History>

2. In 1583, Philip II of Spain banned this dance due to its perceived lewdness. For 10 points each:

[10] Name this slow dance in triple meter that, in a Baroque suite, would typically come between the courante (“koo-RONT”) and the gigue (“zheeg”). The fourth movement of Handel’s Keyboard Suite in D minor is one of these dances.

ANSWER: sarabande

[10] Sometimes, a gavotte (“guh-VOT”) would be added between the sarabande and the gigue, such as in the first suite of *Concert Royaux* (“con-SAIR rwah-YO”) by this composer of *The Mysterious Barricades*.

ANSWER: François Couperin (“coop-RAN”)

[10] Handel’s Keyboard Suite in D minor was written for this specific instrument, commonly used in the Baroque era. François Couperin wrote a treatise on *The Art of Playing* this instrument that creates sound by plucking strings.

ANSWER: harpsichord [or clavecin or clavicembalo; accept *The Art of Playing the Harpsichord* or *L’Art De Toucher Le Clavecin*; do not accept or prompt on “harp”]

<AE, Classical Music>

3. At the beginning of this novel, Nüwa sends the evil fox spirit Daji to punish King Zhou (“joe”) for lusting after a temple statue of her. For 10 points each:

[10] Name this Ming-dynasty fantasy novel set during the fall of the Shang dynasty.

ANSWER: *The Investiture of the Gods* [or *The Creation of the Gods*; or *Fengshen Yanyi*]

[10] In the better-known Ming fantasy novel *Journey to the West*, this mischievous character, who was imprisoned by the Buddha for eating the Heavenly Peaches, travels to India with the monk Xuanzang (“shwen-dzong”) to obtain sacred texts.

ANSWER: Sun Wukong [or Monkey King; or Songoku]

[10] This other character from *Journey to the West*, who fights with a nine-toothed rake, was reincarnated as a hideous monster after he sexually harassed Chang’e (“chong-UH”).

ANSWER: Pigsy [or Zhu Bajie]

<CK, World/Other Literature>

4. Microtomes and ultramicrotomes are used to slice samples in preparation for one type of this technique. For 10 points each:

[10] Name this type of microscopy that achieves higher resolution than normal light microscopy by using a beam of particles with shorter wavelength than visible light. It comes in scanning and transmission types.

ANSWER: electron microscopy [accept transmission electron microscopy or TEM; accept scanning electron microscopy or SEM]

[10] To achieve contrast in TEM (“T-E-M”), biological samples must be stained with heavy metals such as osmium. Osmium tetroxide is effective in staining these structures. FRAP is another technique used to study diffusion in these structures.

ANSWER: **membranes** [or phospholipid plasma **membranes**; accept cell **membranes** or **bilayers**]

[10] In a technique developed by Faulk and Taylor, antibodies tagged with this metal can be used to stain specific structures, such as mitochondrial DNA, so that they can be seen using TEM.

ANSWER: **gold** [or **Au**; accept immunog**old** labeling]

<GR, Biology>

5. This thinker described his ideas in formulas known as “mathemes.” For 10 points each:

[10] Name this psychoanalyst who discussed the importance of small children recognizing themselves in his conception of the “Mirror Stage.” He published most of his work in his *Écrits* (“ay-KREE”).

ANSWER: Jacques **Lacan**

[10] Lacan’s work in psychoanalysis influenced Laura Mulvey’s later psychoanalytic theories about this art form. Slavoj Žižek (“SLAH-voy ZHEE-zhek”) analyzed this art form in a psychoanalytic “pervert’s guide” that explored works like *The Matrix* and *Psycho*, among others.

ANSWER: **films** [or **movies**; or **cinema**; accept *The Pervert’s Guide to Cinema*]

[10] In “Visual Pleasure and Narrative Cinema,” Mulvey used the concept of “scopophilia” to describe this visual phenomenon, in which a certain group of people are objectified for the pleasure of the audience.

ANSWER: **male gaze** [prompt on gaze]

<VS, Social Science>

6. Answer the following about the uproar in the post-war French world of letters over the introduction of Coca Cola, for 10 points each.

[10] An article by Robert Escarpit (“ro-BAIR ess-car-PEE”) for this newspaper titled “Coca-colonization” (“coca CALL-uh-nization”) argued that it represented an attack on the “vulnerable point” of the “national beverage.” This major French newspaper issued a list of 100 Books of the Century in 1999.

ANSWER: *Le **Monde***

[10] While living in Paris, this Hungarian-born writer lamented that the US was able to “force their revolting ‘Coke’ down our throats” because “Europe bought the whole package.” He also wrote the novel *Darkness at Noon*.

ANSWER: Arthur **Koestler** (“KESS-ler”)

[10] A 1959 novel references the influx of American products into France via this character’s longing for “blewgenes” and “cacocalo.” This character’s uncle Gabriel works as a ballerina dancer at a nightclub.

ANSWER: **Zazie** (“zah-ZEE”) (The title character of *Zazie in the Metro* by Raymond Queneau.)

<JB, European Literature>

7. During this event, a woman called La Voisin (“vwah-ZANN”) confessed to having murdered no fewer than 2,500 infants. For 10 points each:

[10] Name this sensational event in French history that exposed the fact that many members of French society had been hiring female fortune-tellers for criminal purposes. This event implicated the Madame de Montespan (“mon-teh-SPAWN”).

ANSWER: **Affair of the Poisons** [or *L’affaire des poisons*]

[10] The Madame de Montespan was the mistress of this French king, during whose reign the Affair of the Poisons took place. This king, who was called the “Sun King,” built the Palace of Versailles.

ANSWER: **Louis XIV** [or **Louis the Great** or **Louis le Grand** Monarque]

[10] This general’s mother, Olympe Mancini (“oh-LAMP mahn-CHEE-nee”), was expelled from the French court as a result of the Affair of the Poisons. Fighting for Austria, this general defeated the French at the Battle of Blenheim (“BLEN-um”).

ANSWER: **Eugene of Savoy** [or François-**Eugène de Savoie** or Franz **Eugen von Savoyen**]

<JH, European History>

8. Chemical “caryatids” (“CARE-ya-tids”) have been used to produce an imidazolate metal organic framework that has a structure analogous to these naturally occurring materials. For 10 points each:

[10] Name these highly porous aluminum silicate minerals that allow large amounts of material to adsorb (“ad-ZORB”) on their surfaces.

ANSWER: **zeolites** [accept **zeolitic** imidazolate framework]

[10] Zeolites are useful in this role due to their high surface area. Zeolites act in this role in the oil industry for cracking reactions that break up large hydrocarbon chains.

ANSWER: **catalysts** [accept fluid **catalytic** cracking or heterogeneous **catalysts**]

[10] In another application, zeolites can be used to partially separate these two diatomic gases, the two most common in the atmosphere.

ANSWER: **oxygen** AND **nitrogen** [or **O2** AND **N2**; accept in either order; do not accept just “O” and “N”]

<GR, Chemistry>

9. Abdi-Heba, a ruler of this city, wrote Amarna Letters 285 to 290, one of which complains that the “Apiru” have plundered the land and that the king has not sent archers. For 10 points each:

[10] Name this city whose own archeological finds include the “Siloam inscription” in the Siloam tunnel, which was originally built by King Hezekiah to bring water to this city from the Gihon Spring.

ANSWER: **Jerusalem** [or **Yerushalayim** or al-**Quds**]

[10] Another notable find in Biblical archeology is a stone describing the building of a “Tiberium” by this Roman governor of Judea, who tried Jesus and supposedly washed his hands before sentencing Jesus to death.

ANSWER: Pontius **Pilate** [prompt on **Pontius**]

[10] Some of the earliest textual sources on the Bible are the Ketef Hinnom (“keh-TEF hee-NOME”) amulets, which contain this prayer that begins, “The Lord bless you and keep you; the Lord make his face to shine upon you and be gracious to you.”

ANSWER: **Priestly Blessing** [or **Priestly Benediction** or **birkat kohanim**; accept **raising of the hands** or **lifting of the hands** or **nesi’at kapayim**]

<WC, Religion>

10. This director created a Jules Verne-inspired film that includes a famous scene in which Professor Barbenfoouillis (“bar-bon-foo-YEE”) crashes a rocket into the eye of the Man in the Moon. For 10 points each:

[10] Name this early director of surreal, illusionist films such as *The Impossible Voyage* and *A Trip to the Moon*.

ANSWER: Georges **Méliès** (“male-YES”)

[10] Méliès started making films after purchasing the cinematograph invented by this duo. Their 46-second film of women leaving a factory in Lyon is considered the first motion picture.

ANSWER: **Lumière** brothers [or Auguste and Louis **Lumière**]

[10] The Lumière brothers’ cinematographs were used to show films in these early theatres. Usually erected in converted storefronts, they were named for their inexpensive price of admission.

ANSWER: **nickelodeons**

<CK, Other Arts>

11. Artur Moreira de Sá requested that 2,000 copies of a book promoting this idea be sent to his country’s foreign ministry to indoctrinate diplomats with this idea. For 10 points each:

[10] Name this idea originally developed by Gilberto Freyre (“zheel-BAIR-too FRAY-ree”) which held that because a certain country had a warmer climate and was less racist, it acted as a more effective colonizer.

ANSWER: **Lusotropicalism** [or **Luso-tropicalismo**]

[10] This leader used the idea of Lusotropicalism to justify his country's holding of overseas colonies such as Mozambique and Angola. This leader established the Estado Novo ("ish-TAH-doo NOH-voo") regime that was toppled by the Carnation Revolution.

ANSWER: António **Salazar** [or António de Oliveira **Salazar**]

[10] Salazar was a dictator of this country, which gave independence to Angola and Mozambique in the 1970s after Salazar's overthrow. In 1961, this country lost control of Goa after it was taken by India.

ANSWER: **Portugal**

<JL, European History>

12. When he was 56, this poet broke his own hand while punching a young Hemingway in the face. For 10 points each:

[10] Name this American poet who began "The Emperor of Ice-Cream" with the line "Call the roller of big cigars," and wrote of the title bird "among twenty snowy mountains" in "Thirteen Ways of Looking at a Blackbird."

ANSWER: Wallace **Stevens**

[10] In *Death in the Afternoon*, Hemingway argued that certain American authors would be better if they weren't so sexually frustrated. He particularly called out this author who wrote about Mr. Snopes asking for proof from Mr. Harris about the title event in "Barn Burning."

ANSWER: William **Faulkner**

[10] Hemingway's bizarrely vicious and one-sided dislike of Ford Madox Ford led him to describe the latter as a "well-clothed, up-ended hogshead" in this memoir about his time as writer living in 1920s Paris.

ANSWER: A **Moveable Feast**

<JH, American Literature>

13. The flag of this province contains several red water lilies called *pompeblêden*, which are often mistaken for hearts. For 10 points each:

[10] Name this northern Dutch province. The language that shares its name with this province is considered to be one of the languages most similar to English.

ANSWER: **Friesland** ("FREEZ-lont") [or **Fryslân**; or **Frisia**; or **Frisian** languages]

[10] Three Dutch provinces have flags with red lions rampant: South Holland, Limburg, and this least populous Dutch province. This province is the namesake of an island country separated from Australia by the Tasman Sea.

ANSWER: **Zeeland** ("ZAY-lont") [accept New **Zealand**]

[10] Flevoland's ("FLAY-vo-lont's") flag has one of these symbols as a pun on the name of the engineer who designed the polders to reclaim Flevoland. Four of these symbols are white on a blue background in the flag of Quebec.

ANSWER: **fleur-de-lis** [or **fleur-de-lys**; or **flower of luce**; accept **Fleurdelisé**; prompt on **flower**; prompt on **lily** or **lilies**] (The engineer was named Cornelis Lely.)

<AP, Other>

14. A resonant microwave cavity in the ADMX experiment is designed to detect these particles. For 10 points each:

[10] Name these particles that were proposed to resolve the problem of the strong interaction not breaking CP-symmetry. These specific particles result from spontaneous breaking of a symmetry described by Roberto Peccei ("pet-CHAY") and Helen Quinn.

ANSWER: **axions**

[10] Axions, like WIMPs, are candidates for this type of nonradiating, and thus invisible, matter. According to lambda-CDM cosmology, this stuff is about five times more abundant in the universe than normal baryonic matter.

ANSWER: **dark** matter

[10] The most convincing evidence for dark matter came from this astronomer's observation of flat galactic rotation curves, which differ from the expected curve given the observable galactic mass.

ANSWER: Vera **Rubin**

<GR, Physics>

15. In 1970, William Shockley, a Nobel Prize-winning inventor of the transistor, proposed a plan to pay people 1,000 dollars for each IQ point under 100 to undergo this surgical procedure. For 10 points each:

[10] Name this surgical procedure, whose compulsory form was declared constitutional in *Buck v. Bell*. In the majority opinion in that case, Oliver Wendell Holmes stated, “Three generations of imbeciles are enough.”

ANSWER: compulsory **sterilization** [or forced **sterilization** or **sterilize** or other word forms; prompt on **eugenics**; prompt on descriptive answers like making people unable to have children]

[10] At this physician’s Battle Creek Sanitarium, he hosted three eugenics conferences for the Race Betterment Foundation. This physician developed a namesake variety of cornflakes that he served to his patients for breakfast.

ANSWER: John Harvey **Kellogg**

[10] The term “eugenics” was first coined by this British scientist, who advocated arranged marriages in *Hereditary Genius*. He set up an endowment to create a namesake chair for eugenics that employed Karl Pearson.

ANSWER: Francis **Galton**

<JH, American History>

16. This work praises “free spirits” who, when adopting the title “perspective of life,” realize that the “will to truth” is simply the “will to power.” For 10 points each:

[10] Name this book whose account of master–slave morality was expanded in its author’s later work *On the Genealogy of Morals*.

ANSWER: ***Beyond Good and Evil*** [or ***Beyond Good and Evil: Prelude to a Philosophy of the Future***; or ***Jenseits von Gut und Böse: Vorspiel einer Philosophie der Zukunft***]

[10] This German philosopher wrote *Beyond Good and Evil*. He wrote that “God is dead” in his philosophical novel about an Iranian prophet.

ANSWER: Friedrich **Nietzsche** (“NEE-chuh”)

[10] This Chicago law professor wrote the 2002 book *Nietzsche on Morality*. In 2016, he was forced to resign as editor of the Philosophical Gourmet Report after mailing a box of feces to MIT professor Sally Haslanger.

ANSWER: Brian **Leiter**

<VS, Philosophy>

17. Peerless Jones helps this character awaken a giant sea urchin that lives in the Earth’s mantle in the story “When the World Screamed.” For 10 points each:

[10] Name this character. He first appeared in a novel narrated by the reporter Edward Malone in which he discovers a land of dinosaurs in the Amazon.

ANSWER: Professor **Challenger**

[10] Professor Challenger appears in *The Lost World*, a novel by this author who created the duo of Dr. Watson and Sherlock Holmes.

ANSWER: Arthur Conan **Doyle**

[10] In a Sherlock Holmes story, a league for men with this physical attribute mysteriously pays the pawnbroker Jabez (“JAY-bezz”) Wilson 4 pounds a week to copy articles from the *Encyclopædia Britannica*.

ANSWER: **red-headed** [or **red hair** or **ginger** or equivalents; accept “**The Red-Headed League**”]

<CK, British Literature>

18. This group’s breakup at the start of World War I inspired August Macke’s (“OW-goost MACK-uh’s”) painting *Farewell*. For 10 points each:

[10] Name this group, some of whose tenets are outlined in *Concerning the Spiritual in Art*. Its co-founder Franz Marc created the painting *The Fate of the Animals*.

ANSWER: Der **Blaue Reiter** (“dair BLAO-uh RYE-tuh”) [or The **Blue Rider**]

[10] Der Blaue Reiter is named for a painting by this Russian artist, one of its founders. This artist categorized many of his abstract paintings as “Compositions” and “Improvisations.”

ANSWER: Wassily **Kandinsky**

[10] This artist’s diaries describe his initiation into the Blaue Reiter circle and his subsequent trip with Macke to Tunisia, which inspired his painting *In the Style of Kairouan*. This artist’s namesake center digitally published 3,900 pages of his lecture notes on color theory in 2016.

ANSWER: Paul **Klee** (“clay”)

<VS, Painting & Sculpture>

19. Tychonoff’s theorem states that the product of any collection of spaces with this property has this property with respect to the product topology. For 10 points each:

[10] Name this property of spaces. In general topology, this property means that any open cover of the space admits a finite subcover.

ANSWER: **compactness** [or **compact**]

[10] Subsets of the Euclidean space are compact if and only if they are bounded and have this property, according to the Heine–Borel (“HIGH-nuh bo-REL”) theorem. A set with this property contains all its limit points.

ANSWER: **closed**

[10] The Arzelà–Ascoli theorem states that an equicontinuous sequence of functions defined on a compact space has this property. A sequence of functions has this property if the difference between its terms is eventually arbitrarily small for some N that depends [emphasize] *only* on epsilon.

ANSWER: **uniform convergence** [or **converges uniformly** or word forms; prompt on **convergence** or word forms]

<JN, Other Science: Mathematics>

20. This figure, a daughter of Helios, resides on the island of Aea. For 10 points each:

[10] Name this sorceress who gives Odysseus advice that allows him to escape Scylla (“SILL-uh”) and Charybdis (“kuh-RIB-diss”). She earlier turned his men into pigs.

ANSWER: **Circe**

[10] This god helps Odysseus resist Circe’s magic by giving him the magical herb moly. Earlier in the *Odyssey*, he convinces Calypso to allow Odysseus to leave her island.

ANSWER: **Hermes**

[10] When Elpenor (“el-PEE-nor”) dies after falling off of Circe’s roof, Odysseus marks his grave with one of these objects. Tiresias instructs Odysseus to carry one of these objects until he finds a suitable location to sacrifice to Poseidon.

ANSWER: **oar** [accept winnowing **oar**]

<JS, Mythology>