

- 1. One technique in performing this task emphasizes the Repetition Exercise and was pioneered by Sanford Meisner. Another technique in performing this task relies on a four step process consisting of the “Literal,” “Want,” “Essential Action,” and “What if.” The “inside-out” approach to this task is exemplified by Practical Aesthetics. One man notably obtained a (*) cab driver’s license before for performing this task, while another built and lived in a colonial house in preparation for performing this task. Both of those men adhere to the “method” school of this task. For 10 points, name this task, performed by Robert DeNiro in *Taxi Driver* and Daniel Day-Lewis in *The Crucible*.**

ANSWER: acting [prompt on answers involving a performance]
<OA, BW>
- 2. This company produces Tangle Lake, a quantum processor with 49 qubits. In April 2020, this company announced that, along with QuTech, it has developed silicon spin qubits that can operate above 1 Kelvin. This company fused its own mobile Linux project with Nokia’s Maemo to create MeeGo. In 1994, Thomas Nicely discovered a floating-point bug in this company’s (*) P5 product. In 2005, this company lost an antitrust lawsuit to AMD. This company pioneered the x86 architecture, and its Ivy Bridge generation includes products such as the i3, i5, and i7. For 10 points, name this Santa Clara company that primarily produces semiconductor chips.**

ANSWER: Intel Corporation
<OA, BW>
- 3. In a novel by this author, the school prefect unintentionally humiliates two Siamese Princes by having them search the grass in the rain for their lost emerald ring. The main character of that novel is asked the question: “what would you do if all of a sudden I weren’t here anymore?” In another novel by this author, the protagonist is told, “When you meet the (*) Buddha, kill the Buddha.” This author created the Ayakura and Matsugae families in the first of four novels about the reincarnation of Kiyooki, which concludes with *The Decay of an Angel*. This author described Mizoguchi’s burning of the title structure in another novel. For 10 points, name this Japanese author of the *Sea of Fertility* tetralogy and *The Temple of the Golden Pavilion*.**

ANSWER: Yukio Mishima [accept Kimitake Hiraoka
<Any Fiction, JM>
- 4. In a whimsical jazz-influenced ballet by a composer from this modern day country, the dancers play kitchen utensils that flirt, duel, and fall in love with each other. That composer of *La revue de cuisine* is better known for writing the *Double Concerto for Two String Orchestras, Piano, and Timpani*. Another composer from this country had the tubas play descending half notes before timpani beats in the opening of his (*) *Sinfonietta*. A six-movement nationalist tone poem cycle by a composer from this country contains the movement “Vltava,” better known as “the Moldau.” For 10 points, name this country home to Bohuslav Martinu, Leos Janacek, and Bedrich Smetana.**

ANSWER: Czech Republic [or Czechia]
<Classical Music, JM>
- 5. The *New Horizons* exploration of the classical KBO 486958 Arrokoth revealed a surface of this color, suggesting the presence of organic molecules that, with water, could be raw materials for prebiotic chemistry. The conversion of methane ice to tholins under UV radiation gives Triton’s surface its characteristic hue of this color. Widmanstätten patterns are found in (*) siderites, which are meteorites also named after an element whose oxide is this color. That element also composes the metallic core of M-type asteroids, differentiating them from S- and C-type asteroids. The formation of superoxides on minerals exposed to UV rays contributes to one planet’s regolith of this color by creating hematite. For 10 points, name this color found on the surface of Mars due to the presence of rust.**

ANSWER: red [accept pink or other shades of red; grudgingly accept orange]
<Astro, RK>
- 6. In one religion in this country, pipe-smoking mediums consult spirits known as Old Black Men. Priests called fathers-of-saints in a religion from this country may become possessed by spirits in ceremonies accompanied by chanting and drums called *atabaques*. In one festival in this country, different dance schools dress up in costume and perform on (*) *carros alegóricos* during an annual parade. It’s not in North America or Africa, but followers of a religion from this country worshipped deities called orixas. The syncretic religion Candomblé originated from slaves brought to this country. For 10 points, name this country where every year, people celebrate the festival of Carnival.**

ANSWER: Brazil [prompt on Umbanda and Candomblé with “Which country is this religion from?”]
<Non-Abrahamic Religion, JH>

7. **A poem by this author tells the reader that, now that they “see the black ruins of [their] life” in the title location, they will not be able to recover their life elsewhere. Another poem by this author tells the reader that they will not encounter dangers as long as “a rare excitement / stirs [their] spirit and [their] body.” Besides writing “The (*) City,”** this poet wrote a poem in which a character prepares to bestow a scroll “loaded with titles, with imposing names.” This poet wrote a poem in which the title city “gave you the marvelous journey” and “has nothing left to give you now.” Besides “Ithaca,” this poet wrote a poem about idling senators performing the title action. For 10 points, name this poet who described a “kind of a solution” in “Waiting for the Barbarians.”

ANSWER: Constantin Cavafy

<Poetry, BW>

8. **A porous layer of nanoparticles of this element’s oxide are immersed in an electrolyte solution and covered by a molecular dye as an alternative to silicon in DSSCs. A chromium oxide catalyst developed by Banks and Hogan at Phillips Petroleum can be used in the place of a catalyst containing this element’s trichloride in the industrial production of polyethylene. This element’s halide can be produced in the conversion of ores such as (*) rutile and ilmenite to its dioxide in the Kroll process and can be converted to this element’s pure form through the Hunter process. For 10 points each name this transition metal whose alloys are used in several aerospace applications due to its high tensile strength and corrosion resistance, symbolized Ti.**

ANSWER: titanium [accept Ti before mention]

<Chemistry, RK>

9. *Note to players: action tossup. Players must perform the action to receive points. Since we are in quarantine and person-person contact is not allowed, text descriptions or emoji equivalents are acceptable.*
The Guinness World Record credits Joey Kola with performing this action the most times in a minute. NBA player Fred Carter is credited for popularizing this action. In *Big Hero 6*, Hiro describes this action as “not a fighting thing,” but something people do when they’re “excited, or pumped up.” Fox anchor E. D. Hill was criticized for calling this action a “terrorist...jab” when (*) Barack Obama performed it with Michelle. Baseball player Stan Musial allegedly preferred to perform this action because he would contract less germs than a traditional handshake. For 10 points, name this action performed by Berkeley A after negging or powering that Saratoga A has appropriated that usually involves touching knuckles with your teammates.

ANSWER: or [accept descriptions of fistbumping]

<Writer’s Choice, JH>

10. **John Amery, a member of this movement, created the idea of a British Free Corps, whose members would be selected from prisoners of war. Though not women’s suffrage, Mary Richardson became the leader of the women’s section of this movement. Members of a political party that subscribed to this ideology clashed with protesters in the Battle of Cable Street. A radio announcer that subscribed to this ideology, Lord (*) Haw-Haw, began his broadcasts with the phrase “Germany calling, Germany calling.” A “union” of adherents to this ideology was founded by Oswald Mosley. A political party that espoused this ideology was hurt by the Public Order Act, which banned its paramilitary arm, nicknamed the blackshirts. For 10 points, name this ideology whose British followers sought inspiration from Benito Mussolini.**

ANSWER: British fascism [accept British Union of Fascists or BUF; prompt on Nazism or Nazi sympathizing]

<Commonwealth, JH>

11. **This planet is home to an apex predator that was hunted for the precious pearls found in its body and whose skeleton is commonly depicted in this planet’s landscape. Eopies, known for their excessive flatulence and bad temper, are quadruped herbivores that were used to haul parts for a sport popular on this planet. Reptilian animals native to this planet with thick hides of green skin, long, rounded heads, and short tails are named for their habit of licking water from their backs and are used to haul goods for (*) moisture farmers. Large, quadrupedal mammals with thick brown fur and a pair of spiralling forms known as banthas are found on this planet and are used as beasts of burden by Tusken Raiders. For 10 points each, name this desert planet home to Anakin Skywalker and his son Luke.**

ANSWER: Tatooine (The first clue refers to krayt dragons and the lizards are called dewbacks)

<Movies and TV, RK>

12. **A person who surprisingly rides shopping carts while at the supermarket always keeps spoons in his pocket when he is in this location. That person is also known for taking petite sniffs and tiny bites when tasting foods. In a running joke, one person menacingly says the name “Delaney” upon the arrival of that coworker to this location. After leaving his**

job in this location, a man named (*) Vinny started working for Andrew Rea, better known as “Binging with Babish.” A series focusing on fermentation and a series about remaking junk food are both set in this location. “It’s Alive” and “Gourmet Makes” are both set in, for 10 points, what culinary location where Chris Morocco, Brad Leone, and Claire Saffitz all work? ANSWER: Bon Appetit Test Kitchen [prompt on partial answer; prompt on 1 World Trade Center; prompt on Chris Morocco’s home kitchen by asking “where does he work?” before “Delaney”]
<Writer’s Choice, JM>

13. **This organ’s homeostatic function is regulated by the stimulation of M3 receptors in the hypothalamus. The incretins GLP-1 and GIP, secreted by L- and K-cells respectively, stimulate the release of one hormone from this organ. That hormone, whose release is blocked by Neuropeptide Y, is synthesized by the release of the (*) C-peptide from its precursor molecule. As in the hypothalamus, somatostatin is released by the delta cells of this organ. Exocrine acini secrete this organ’s namesake lipase, trypsin, and chymotrypsin to aid digestion in the duodenum, while its endocrine regions, known as the islets of Langerhans, regulate blood glucose levels. For 10 points, name this organ whose alpha cells secrete glucagon.** ANSWER: pancreas
<Biology, RK>

14. **A man from this city cites his dislike for Scandinavian lutefisk to illustrate cultural differences. In a play set in this city, Kenneth commits suicide after returning home from the Korean War, leading to his parents being treated as social outcasts. In another play, a man from this city says that “families are happier when they live in their own (*) communities.” That man is the chairman of a “welcoming committee” for a neighborhood in this city. That neighborhood experiences gentrification in a Bruce Norris play that bookends a play in which Karl Lindner attempts to bribe a family to not move to Clybourne Park. For 10 points, name this city, home to the Younger family in *A Raisin in the Sun*.** ANSWER: Chicago [accept Clybourne Park until mention]
<Drama, BW>

15. **In one essay, this author argues that the justification that authors “containing multitudes” is not an adequate justification for modern fiction. In another essay, this writer recalls feeling the title emotion on a train to Auschwitz and notes that it is a combination of both pleasure and pain. In one essay, this author uses the example of her Jewish-Chinese protagonist, (*) Alex-Li, to show how all characters ultimately represent the author. That character appears in her novel *The Autograph Man*. This author also wrote an essay in which she discusses how Facebook has shaped priorities and caused generational change. This author included the essays “Joy” and “Generation Why?” in her essay collection *Feel Free*. For 10 points, which British author also wrote about Samad Iqbal and Archie Jones in *White Teeth*?** ANSWER: Zadie Smith
<Any Genre, BW>

16. **In a movie adaption of this musical, a musical number is performed on scaffolding with the chorus rattling their fingers on the scaffolding. One character in this musical sings that the title character “should have stayed a great unknown” and that “tables, chairs, and oaken chests would have suited [him] best.” The male and female choruses alternate between singing (*) “he is dangerous” and the title of this musical before the priests declare that the title character “must die.” The title character of this musical sings a high G5 “why” while praying in the Garden of Gethsemane. For 10 points, name this rock opera-musical by Andrew Lloyd Weber about the week leading up to the title figure’s crucifixion.** ANSWER: Jesus Christ Superstar
<Other Auditory, JM>

17. **An oxtail stew from this country is made with peanut sauce and is often eaten with sauteed shrimp paste. Another staple from this country consists of stale rice recooked with garlic, which is often eaten with a fried egg and meat as part of a popular breakfast. A fast food chain from this country serves spaghetti served with chunks of hot dog, as well as a hamburger containing a sweet mayo, the (*) Yumburger. That chain also serves a variant of fried chicken called Chickenjoy. A dessert from this country is made with mashed purple yam and topped with ube ice cream. Besides kare-kare and halo-halo, this country is also known for its vinegar-heavy adobo marinades. For 10 points, name this home country of Jollibee, which is headquartered in Quezon City.** ANSWER: Philippines
<Cultural Geo, BW>

18. **After this empire’s forces won the Battle of Hadhramaut through the use of *panjagān*, it installed the Himyarite king Sayf ibn Dhi-Yazan as a vassal. The western neighbor of this empire paid it for the maintenance of the Great Wall of Gorgan to protect this empire from eastern invaders. The Gokturks, in alliance with this empire, destroyed the Hephthalites, or White Huns. A war between this empire and Axum resulted in this empire’s conquest of Yemen. This empire attacked its western neighbor in the Lazic War, even though they had signed the (*) Eternal Peace about ten years earlier. That agreement was signed between Justinian the Great and a ruler of this empire, Khosrau I. For 10 points,**

name this Persian empire that fought countless wars with the Byzantines and succeeded the Parthian Empire.

ANSWER: Sasanian empire [or Sassanid; prompt on Persia or Persian empire before mention]

<Ancient, JH>

19. **In one story by this author, Ixchel is seduced by a man claiming to be descended from royalty but is actually a serial killer. That story, “One Holy Night,” appears in this author’s collection *Woman Hollering Creek and Other Stories*. In a novel by this author, the protagonist memorizes “The Walrus and the Carpenter” to sing to (*) Ruthie. That novel ends with the protagonist promising that she has “gone away to come back” and imagining saying goodbye to a “sad red” building. In that novel, the protagonist is jealous of her sister’s nickname “Nenny” and is abandoned by Sally at a carnival. For 10 points, name this author, who described Esperanza Cordero in *The House on Mango Street*.**

ANSWER: Sandra Cisneros

<Short Fiction, BW>

20. **The arrival of Bernard Petitjean led to a new wave of reprisals against members of this religion. Followers of this religion attempted to have the advisor William Adams executed as a pirate. Seizure of the cargo of the *San Felipe* sparked the persecution of this religion, which led to the execution of the (*) Twenty-Six Martyrs. Followers of this religion were exposed by being forced to step on images called fumi-e. This religion’s members beheaded Buddhist statues during the Shimabara Rebellion, but were forced to become *kakure kirishitan* following its failure. Traders of this religion were expelled from Nagasaki during the Tokugawa Shogunate. For 10 points, name this religion that was spread throughout Japan by the missionary Francis Xavier.**

ANSWER: Japanese Christianity [accept Catholicism]

<Abrahamic Religion, JH>

21. **Hirota et al. discovered that this entity gives rise to near-surface dips with depths of dozens of microns in certain liquids in the Moses effect, which finds applications in the trapping and self-assembly of particles. Pure niobium or a lead alloy is traditionally used as a superconducting material in the Josephson junctions of (*) SQUIDs, devices used to measure these entities. The Paschen-Back effect occurs when this entity disrupts coupling between orbital and spin angular momentum, causing the splitting of spectral lines to diverge from the linear corrections predicted by Zeeman effect. In the Hall effect, this entity produces a potential difference across a conductor when applied perpendicular to the flow of current. For 10 points, name this entity symbolized by a capital B or H.**

ANSWER: magnetic field [prompt on B or H before mention]

<Physics, RK>

22. ***Exact answer required.* These are the first four words in a song containing the lines “I know what it's like to have to trade / The ones that you love for the ones you hate.” The chorus of that song begins with the lines “If you wanna start a fight / You better throw the first punch / Make it a good one.” These are also the first four words in the title of a movie in which gold is found in a grave marked “Unknown.” That movie contains an iconic (*) Mexican standoff after Arch Stanton’s grave is robbed. In that movie whose title begins with these four words, Angel Eyes is killed by Blondie. For 10 points, name these four words, which are followed by “and the Dirty” in a Panic! at the Disco Song and by “and the Ugly” in the title of a spaghetti western.**

ANSWER: The Good, the Bad [accept The Good, The Bad and the Ugly or “The Good, The Bad and the Dirty”]

<Misc Trash, BW>

23. **The Double-Heart of Stacked Stones located in Taiwan was an ancient structure used for obtaining this commodity. Large platforms called *trabucchi* jutting from the coast of Gargano were constructed to procure this commodity. To obtain this commodity, water wheel-like structures would be placed over rivers in the (*) Pacific Northwest. Temporary dams built to acquire this commodity were used by the Baka pygmies to lower the water level of rivers for easier access. The Wagenya people lower large baskets into rapids on the Congo River to obtain this commodity. Weirs and other obstructions can be used to procure this commodity. Containers with inverted funnels are commonly baited to obtain this commodity. For 10 points, name this commodity which can be caught using a line and rod.**

ANSWER: fish [accept specific species of fish]

<Anthro/Soft SS, JH>

24. **In 2018, Tremaine Edmunds became the youngest professional player to perform this action. In 1952, Dick “Night Train” Lane set a record for most number of these actions performed in a single season with 12. After Malcolm Smith performed one of these actions in the 2013 NFC Championship game, Richard Sherman called Michael Crabtree “mediocre” and “sorry.” In Super Bowl 51, Robert Alford gave the Falcons a 21-0 lead by performing one of these actions and (*) scoring. Super Bowl 49 was ended on one of these actions performed by Malcolm Butler, leading to calls that the Seahawks should have run the ball. When one of these actions is followed by a touchdown, it is called a “pick-six.” For 10 points, identify this action in football, in which a defender catches a pass intended for a receiver.**

ANSWER: interceptions [accept pick before “pick-six”]

<Sports, BW>

25. **The leader of a rebellion against this dynasty gave fiefs corresponding to the four cardinal directions to his major generals, giving them titles like the “Western King of 8000 Years.” In *Autumn in the Heavenly Kingdom*, Stephen R. Platt argued that Hong Rengan played a pivotal role in that rebellion. During this dynasty, military modernization was pushed for by Li (*) Hongzhang. The Xiang army was reorganized by Zeng Guofan during this dynasty to fight a rebellion led by the self-proclaimed brother of Jesus, Hong Xiuquan. The Taiping Rebellion occurred during, for 10 points, what final dynasty of China ruled by the Manchus?**
ANSWER: Qing Dynasty [or Da Qing or Qing Chao or Daiqing gurun]
<Asian World, JM>
26. **This city’s River Services include Clipper boats that are used for commuter travel and which service stops such as Festival Pier. A train station in this city is the namesake of a children’s book bear. In 2014, this city’s subway added service on Friday and Saturday nights. Subway lines in this city are either classified as Deep or Sub-Surface, and can be accessed with this city’s (*) Oyster Cards. Subway stations in this city include Russell Square and Green Park. This city’s Paddington station is a terminal of the Great Western Railway, and its St. Pancras station contains Eurostar service. For 10 points, name this city whose Underground includes a station at Piccadilly Square.**
ANSWER: London
<Non-Cultural Geo, BW>
27. **These animals are depicted in codices carrying torches, as they are believed to have gifted humankind with fire. In the Popol Vuh [“vookh”], the Hero Twins sacrifice and resurrect one of these animals to trick the Lords of the Dead into being sacrificed, but not resurrected. A god that takes the form of these non-amphibian animals guides his brother to the underworld in order to steal the bones of previous gods from Mictlantecuhtli [“meekt-LAHN-teh-koot-lee”]. The xoloitzcuintle [“sho-loh-itz-QUEENT-leh”] was a (*) hairless one of these animals served at many banquets. The brother of Quetzalcoatl [“ket-zahl-kwat-ull”], Xolotl [“sho-LOH-tul”], has the head of one of these animals. During one of his tasks, Heracles had to drag one of these animals into the daylight using chains of adamant. For 10 points each, name these animals that included one that guarded the entrance to the Greek underworld, Cerberus.**
ANSWER: dogs [accept itzcuintli or the xolo; award 10 brownie points if they answer xoloitzcuintli before mention]
<Non-European Myth, JH>
28. **Tang Dynasty philosopher and essayist Han Yu described this person as “a man of the barbarians who did not speak the language of China and wore clothes in a different fashion” in his *Memorial on the Bone of [this person]*. Neo-Confucianist philosophers objected to the metaphysics of this person’s teachings, specifically his (*) denial of reality. This figure is usually in the middle of the traditional scene *The Vinegar Tasters*, with Confucius and Laozi to his left and right, respectively. Meditation is central to the *Chan* school of a religion named for this figure. For 10 points, name this religious figure who achieved enlightenment under the Bodhi Tree.**
ANSWER: Gautama Buddha [or Siddhartha Gauthama or Siddhartha Gautama]
<Other Thought, JM>
29. **In a novel by this author, the protagonist learns that the Railways support Jakkalsdrif for its cheap labor and that prices in the nearby town go up whenever people from Jakkalsdrif go there to shop. In another novel by this author, the protagonist recognizes Pollux, which leads him to conclude that a neighbor aided with an attack on his (*) lesbian daughter’s farm. That novel by this author ends with the protagonist letting Bev Shaw euthanize a stray dog. Besides writing a novel in which the protagonist seduces the student Melanie Isaacs, this author wrote a novel in which the cleft-lipped title character travels to Prince Albert to bury his mother’s ashes. For 10 points, identify this author, who described David Lurie in *Disgrace* and wrote *Life & Times of Michael K*.**
ANSWER: John Maxwell Coetzee
<Long Fiction, BW>
30. **According to legend, this polity’s archbishop refused an invader’s demand for a religious debate, leading to the burning of Oreshek. This polity signed the Treaty of Nöteborg with its western neighbor, in which this polity ceded control of the contested fort of Vyborg. This polity’s veche [wice] bell was stolen and its lands were conquered by a force led by (*) Ivan III. This polity legendarily halted Teuton expansion at the Battle on the Ice and defeated Sweden at the Battle of the Neva. This polity’s friendship with the Golden Horde led to its leader succeeded Andrey II as the Grand Prince of Vladimir. For 10 points, identify this polity once ruled by Alexander Nevsky.**
ANSWER: Veliky Novgorod [accept Novgorod the Great, do not prompt on or accept “Nizhny Novgorod”]
<European History, BW>
31. **Description acceptable. In 2014, Lisita and Konev used this technique to prove that any infinite sequence of 1’s and -1’s has Erdős discrepancy at least three. Thomas Hales used HOL Light and this technique to resolve the Kepler Conjecture. This technique can be applied by reducing a given problem to SAT-solving. This method was used to show that every (*) Rubik’s cube can be solved using at most twenty steps. Distributed versions of this technique are used to find large primes. The most famous application of this technique occurred in a 1976 paper by Haken and Appel. For 10 points,**

identify this technique, which was used to prove the Four-Color Theorem.

ANSWER: computer-assistance [accept all answers involving use of a computer; prompt on answers describing some form of exhaustive search]

<Math, BW>

32. **A land syndicate led by Harrison Gray Otis that was based in this city supposedly created a false drought by dumping water into the sewers. A mayor of this city, Fred Eaton, used his inside knowledge via Joseph Lippincourt to speculate in land and obtain water rights for this city. The career of engineer (*) William Mulholland was ended by the failure of the St. Francis dam, which provided water to this city. The Water Wars began when an aqueduct was built diverting water from the Owens Valley to this city. The increasing salinity of Mono Lake resulted from creeks being diverted to provide water to this city. An aqueduct named after this city brings water to it from the Sierra Nevadas. For 10 points, name this major southern Californian city located in the San Fernando Valley.**

ANSWER: Los Angeles [or L.A.]

<American History, JH>

33. **In a work subtitled “the illusion of destiny,” this author claimed that thinking of the world as a collection of “civilizations” is the root cause of modern-day conflicts. This thinker contended that equality should be defined as people having similar capacities. This author described the impossibility of preserving liberties in a (*) Pareto optimal society in his namesake “liberal paradox.” This economist asserted that development can be measured by the decreasing the presence of certain “unfreedoms.” Another work by this economist concluded that famine is caused by high food prices. For 10 points, name this author of *Development as Freedom* and *Poverty and Famines*, an Indian economist.**

ANSWER: Amartya Kumar Sen

<Econ/Hard SS, BW>

34. **In a 2018 speech, the founder of a company that bears his three letter initial as its name from this country announced “globalization by localization” and “creativity from happiness” as parts of his 2.0 vision. Casting, training, producing, and marketing are the four parts of the “cultural technology” system of another company from this country that manages a group called Neo-Culture Technology or (*) NCT. This country’s active exportation of its culture industry through entertainment is called *Hallyu*, or its namesake wave. For 10 points, name this country home to JYP Entertainment and SM Entertainment as well Big Hit Entertainment, which manages the boy band BTS.**

ANSWER: South Korea [or Hanguk or Namhan or Republic of Korea; accept Korean Wave or Hallyu before mention]

<Popular Music, JM>

35. **A republic in this country was brought down by a series of protests called *rotaka*. Britain began the invasion of this country in Operation Ironclad to preempt Japanese occupation. The Menalamba uprising was a failed attempt by the Sakavala people to oppose French control of this country. The kingdom of (*) Merina, which was based in this country, was ruled by several queens named Ranavalona. The successes of this country’s first president Philibert Tsiranana led this country to be nicknamed the “Happy Island.” Independence from France was achieved by this country’s Malagasy people. For 10 points, name this African island country with capital at Antananarivo.**

ANSWER: Madagascar

<Non-Asian World, JH>

36. **Erichthonius invented one of these objects to conceal his feet, which were those of a dragon. A hubristic king of Elis who ordered his subjects to worship him as Zeus built a bridge of brass and used one of these objects equipped with dried skins and cauldrons to imitate thunder. Automedon, who specializes in these objects, consoled (*) Balios and Xanthus after the death of Achilles. A myth involving one of these objects explains the deserts in Africa and the black skin of Ethiopians, which occurred when Phaethon flew his father’s one of these objects too close to the Earth. Every day, Apollo uses one of these objects to pull the Sun across the sky. For 10 points each, name these objects exemplified by the quadriga and often pulled by horses.**

ANSWER: chariots [prompt on quadriga before mention]

<European Myth, RK>

37. **This artist depicted his second wife, whom he eloped with, resting her head on her right hand in *Girl in Bed*. An early portrait by this artist of his first wife depicts her profile with rusting green shutters in the background is titled simply *Portrait of Kitty*. A later portrait by this artist depicts his wife with one breast exposed, wrapped in a yellow robe, and a bull-terrier resting on her legs. This artist of *Girl with a White Dog* painted a nude portrait of (*) Kate Moss in 2002 shortly before his death. Sue Tilly, better known as “Big Sue,” frequently modelled for this artist, including for one in which she lies nude on a muted sofa. For 10 points, name this British artist of *Benefit Supervisor Sleeping*.**

ANSWER: Lucian Freud

<Painting, JM>

38. **This author was criticized for an op-ed defending Anna Stubblefield in which he argued that a disabled man was unable to withhold consent and can be assumed to have enjoyed the experience of being assaulted. This thinker argued that morality and rationality are independent, but our preoccupation with ethics means that we care about being moral. This thinker once argued that the problem of evil implies that a creator must be either “evil or a bungler.” This utilitarian founded (*) The Life You Can Save, which advocates ending poverty through effective altruism. This thinker argued that excluding animals from utilitarian calculations is “speciesist” and wrote the book *Animal Liberation*. For 10 points, name this bioethics professor at Princeton University.**

ANSWER: Peter Singer

<Philosophy, BW>

39. **The green roof of a museum redesigned by this architect in 2005 was inspired by the seven major hills of the city it's in. This architect of the California Academy of Sciences kept the brick facade of the Fogg Museum but added a glass pyramid roof in his renovation of the Harvard Art Museums' building. Like many of his other museums, the use of natural light is maximized in this architect's design for the modern wing of the Art Institute of (*) Chicago. This architect matched the industrial environment of the new location in his design for the Whitney Museum's new building. For 10 points name this architect who collaborated with Richard and Su Rogers on the Centre Pompidou.**

ANSWER: Renzo Piano

<Other Visual, JM>

40. **This gas's concentration decreases with height in the stratosphere and the primary sink of this gas in the troposphere is reaction with hydroxyl radicals formed by the reaction of singlet oxygen atoms with water vapor. Serpentinization and the Fischer-Tropsch process produce this gas as a side product. The PETM and the Permian-Triassic extinction event have been explained with the (*) clathrate gun hypothesis, which posits that the sudden release of this gas may have caused runaway climate change. Reservoirs of this gas that contain both thermogenic and biogenic forms have been found in arctic permafrost. For 10 points, name this gas released ruminants such as cows and used as a primary constituent of natural gas.**

ANSWER: methane [accept CH₄]

<Environmental Science, RK>