

1. After a Yule feast, this man allowed a guest to marry his widowed-sister-in-law Gudrid. This man was converted to Christianity by a king who was killed at the Battle of Svolder, and later convinced his mother to convert as well and build a notable church at Brattahild. This one-time hirdman under King Olaf earned the epithet (*) "the Lucky" for rescuing a shipwrecked crew. This man's greatest feat may have been anticipated by Bjarni Herjulfsson. This contemporary of Thorfinn Karlsefni may have established a settlement at L'Anse aux Meadows, possibly a part of the "Vinland" mentioned in his father's namesake saga. For 10 points, name this Viking explorer whose father was Eric the Red.

ANSWER: Leif Ericson [or Leif Eriksson or Leif Erikson or Leiv Eriksson den Hepne or Leifur Eiríksson]

<Bentley>

2. The Hofmeister series originally ordered substances by their ability to change this property for proteins. The square root of the cohesive energy density gives the Hildebrand parameter for it. For an ionic compound, this property is lowered due to the formation of ion pairs. The ratio of this value for two phases is given by the partition coefficient. Its namesake constant is the product of (*) ionic species. It is reduced for two substances that produce the same charged species according to the common ion effect. Rules governing this property state that acetates and nitrates always have it, but barium sulfate does not. A saturated mixture by definition does not have any more capability for it. For 10 points, name this property of a substance to dissolve in a solvent.

ANSWER: solubility [accept hydropathy, hydrophobicity, and hydrophilicity up to "Hildebrand", prompt after]

<Jose>

3. This fate befell Cyparissus after he accidentally killed a stag, and the Olympians do this to a lover of Hades named Leuce after her death. This happens to the daughter of King Cinyras while she is pregnant with her father's child Adonis. After Phaethon crashes the sun-chariot, this happens to his grieving sisters. This fate occurs to a couple who fail to catch a goose but act hospitably to Zeus and Hermes. This (*) transformation ends Ovid's tale of Baucis and Philemon. This also happened to a daughter of the river Peneus after a lead arrow made her run away from Apollo's pursuit. For 10 points, name this transformation which saved Daphne, but allowed Apollo to make a wreath from her new, immobile form.

ANSWER: transforming into a tree [or creating a tree to replace a person; accept transforming into a cypress tree, myrrh tree, white poplar tree, oak tree, linden tree, or bay laurel tree specifically]

<Silverman>

4. A scientific team led by Fourier claimed that a shocking one-third of this city's peasants were blind in the early 1800s. Al-Adid and his vizier Shawar saved this city from Shirkuh by allying with Amalric I, but burned its old portion of al-Fustat in 1168 to deny it to crusaders. The Druze revere a ruler from this city whose rampages in Jerusalem destroyed the Holy Sepulchre, the "Mad Caliph" al-Hakim. Qutuz, Aybak, and Baibars led a (*) slave dynasty in this city after overthrowing Saladin's Ayyubid Caliphate. This city was the capital of an Albanian-born Ottoman who declared himself Khedive after its Mamluk Sultanate was defeated by Napoleon's invasion. Muhammad Ali and Farouk I ruled from, for 10 points, what home of Tahrir Square and capital of Egypt?

ANSWER: Cairo, Egypt [or al-Qahira]

<Bentley>

5. This man used the example of incantations against waves only being recited in the deep ocean and not while fishing in lagoons as evidence for the psychological value of superstition. He first described a system that begins when *veigun* move to the north and *mwali* move to the south. Marcel Mauss refuted this man's claim that the *gimwali* system functioned as (*) reciprocal exchange between individuals. That interpretation of the kula ring was part of this man's belief that all components of culture serve a purpose. For 10 points, name this anthropologist who developed functionalism in his studies of the Trobriand Islanders, such as *Argonauts of the Western Pacific*.

ANSWER: Bronislaw Malinowski

<Weiner>

6. This adjective describes the cloud that lies below the “valley” and “sequence” of a galaxy magnitude diagram. Stellar objects described by this adjective lie above the turnoff point of a cluster’s Hertzsprung-Russell diagram and are known as “stragglers.” Examples of these kinds of giants include the Beta Cepheids, Rigel and Bellatrix, which comprise the constellation Orion. Typically, stars with this color can be found on the top left of the (*) HR Diagram. Thus, O class stars are typically of this color. The stars with the highest temperature emit this color of light. Since the Andromeda Galaxy is moving towards us, the Doppler Effect makes it appear to be more like this color. For 10 points, name this color of Neptune.

ANSWER: blue

<Jose>

7. One character in this play recounts his time living on Logan Street and discusses the merits of shopping at Bella’s versus the A&P. Another character in this play believes himself to be his namesake archangel and plays his trumpet for his dead brother in the final scene. Alberta dies giving birth to its protagonist’s love child (*) Raynell, who is subsequently raised by the main character’s wife, Rose. This play centers on a man who prohibits his son Cory from accepting a football scholarship because of his own inability to play professional baseball due to the color of his skin. For 10 points, name this play about the sanitation worker Troy Maxson, a work in the Pittsburgh Cycle by August Wilson.

ANSWER: Fences

<Bentley>

8. Eugen Jochum made an acclaimed recording of this piece with Dietrich Fischer-Dieskau as one of the soloists, which was endorsed by the composer himself. A chorus sings "Hail to the loveliest" in a section of this work titled after Blanzifor and Helena. The only tenor aria in this work is sung mostly in falsetto and from the point of view of a (*) roasted swan. The most famous section of this work compares the title figure to the changing phases of the moon, and pleads “everyone weep with me.” This work celebrates love and wine in the sections “In taberna” and “Cour d’amors,” and it is based on a medieval collection of poems in both Latin and German, including “O Fortuna.” For 10 points, name this secular cantata by Carl Orff.

ANSWER: Carmina Burana

<Rosenberg>

9. A page from this short story is used by Ashoke to signal rescue workers in Jhumpa Lahiri's novel *The Namesake*. The mother of this story's red-haired protagonist rejected the names Mokiya, Sossiya or Khozdazat for her son, who as an adult enjoys hand-copying documents. Its opening paragraph declares that "there is nothing more irritable" than "people in government departments". This story centers on a (*) "perpetual titular councilor" who uses his Christmas bonus to enlist the services of Petrovich before becoming a ghost and retrieving the title object from the "Very Important Personage". For 10 points, name this story in which the clerk Akaky Akakievich dies after losing the title piece of clothing, a work of Nikolai Gogol.

ANSWER: "The Overcoat" [accept "Shinel" or "The Cloak"]

<Bentley>

10. In spring 2013, one prisoner held by this country's government renounced nationalism after reading Benedict Anderson. In December 2011 this country launched an airstrike against smugglers in Uludere, which sparked protests in Diyarbakir. An ongoing trial in this country seeks to prove that members of "Operation Sledgehammer" were plotting a coup. More recently, popular outrage over a plan to reconstruct a historic military (*) barracks led to the occupation of Taksim Gezi Park and angry clashes between protestors and the ruling Justice and Development Party. This country's government continues to take a heavy hand with its Kurdish minority. For 10 points, name this country where many protestors have challenged Recep Tayyip Erdogan [air-doe-AHN] in Istanbul.

ANSWER: Republic of Turkey [or Turkiye Cumhuriyeti]

<Weiner>

11. Two opposing ones of these devices can be used to create a transistor. One type of these devices achieves microwave-frequency operation by using quantum tunneling. The current through one of these can be approximated as the saturation current times the exponential of the voltage divided by a constant times the thermal voltage, according to the (*) Shockley equation. One type can be used as a voltage-controlled capacitor, and the Zener type can safely conduct in the reverse direction when above the breakdown voltage. Under reverse bias, the depletion region widens, stopping the current. They consist of a p-n junction, and allow current to flow in one direction only. For 10 points, name these electronic components, some of which are "light-emitting."

ANSWER: diode [accept more specific answers, i.e. Esaki diode, tunnel diode, avalanche diode, Zener diode, etc]

<Chen>

12. A photo of one leader of this country kissing a more prominent world leader during its anniversary celebration was turned into the iconic graffiti painting "My God, Help Me to Survive This Deadly Love." Teenager Peter Fechter was controversially shot and allowed to slowly bleed out by this country's military. This country created cultural icons like Vita-Cola and the (*) Trabant car. This country's security service used the comprehensive harassment technique *Zersetzung*, was led in the 1980s by Erich Honecker, and was known as the Stasi. Guards in this country fired at people trying to escape through Checkpoint Charlie. For 10 points, name this Communist country which merged with its western neighbor shortly after the Berlin Wall was destroyed.

ANSWER: East Germany [or German Democratic Republic; or GDR; or Deutsche Demokratische Republik; or DDR; do NOT accept or prompt on "Germany", "West Germany", "Federal Republic of Germany", "FRG", "Bundesrepublik Deutschland" or "BRD"]

<Cheyne>

13. An RNA polymerase from one of these organisms is commonly used in *in vitro* transcription experiments, and one well-studied example of these organisms uses the Q antiterminator to transcribe its structural components. Benzer's rII system uses these organisms for single-nucleotide mutation mapping, and the Phi-X-174 example of these organisms was the first to have its genome (*) sequenced. These organisms carry genetic information between cells in transduction. These organisms were labeled with 32P and 35S in the experiment that showed that DNA is the substance that stores genetic information, performed by Hersey and Chase. These organisms use their tail proteins as an injection mechanism. For 10 points, name these viruses that infect bacteria.

ANSWER: bacteriophage

<Mukherjee>

14. This man thought that every mode must be conceived through an attribute, where attributes are the intellect's perception of substances. He claimed that people have "inadequate ideas" because they are stuck in their bodies, and opened one work by claiming "A substance is prior in nature to its affections" to start off a list of fifteen propositions. This man argued that the (*) Torah was compiled rather than revealed to Moses in his *Tractatus Theologico-Politicus* and described passions as "human bondage." He showed, using a "geometrical method," that the infinite God was one with nature. For 10 points, name this lensgrinder who was kicked out of Amsterdam's Jewry for his pantheistic *Ethics*.

ANSWER: Baruch Spinoza [or Benedictus de Spinoza]

<Jackson>

15. Gerald Vizenor's novel *Griever* is an adaptation of this book, in which a woman pretends to donate 100 pairs of shoes in order to speak to her real son, who'd proven his identity using a letter written in blood. One character in this novel often retreats to the Water Curtain Cave and gained notoriety by erasing his name from the Book of Life and Death. Another of its characters was beaten 800 times with a rod as punishment for breaking a vase, while a third carries a (*) nine-toothed muckrake and is regularly referred to as "idiot." Sandy and Pigsy accompany this novel's protagonist on a mission given by Guanyin. For 10 points, identify this Wu Cheng'en novel in which the monkey king Sun Wukong accompanies the monk Xuanzang on a trip to India.

ANSWER: Journey to the West [or Xi You Ji; or Monkey until it is read; or Adventures of the Monkey God; or Monkey to the West; or Monkey: A Folk Novel of China; or The Adventures of Monkey]

<Carson>

16. Shortly before stabbing herself, one character in this opera tells another that the ice she wraps herself in will be defeated by the fire of love. That character in this opera had previously pleaded with the hero in "*Signore, ascoti!*". At its premiere, Toscanini stopped the performance at the point in Act Three where he claimed the composer had (*) died writing it. It features "*Tu che di gel sei cinta*" and an aria that ends with the tenor declaring "*Vincero!*", because the title character doesn't know his name. A challenge in this opera is met by striking a gong three times, and invites the derision of Ping, Pang, and Pong. Liu aids Prince Calaf in, for 10 points, what opera about the title Chinese princess, the final work of Giacomo Puccini?

ANSWER: Turandot

<Lawrence>

17. This man was appointed to fill Salmon P. Chase's Senate Seat, but went on to serve as Treasury Secretary himself under Hayes. This man lost the Republican nomination to his own campaign manager, James Garfield, at the 1880 convention. As a senator, he sponsored legislation that supplemented the earlier Bland-Allison Act by having the government(*) purchase \$4.5 million more in silver each month. He also names a bill that was strengthened by a later piece of legislation sponsored by Henry Clayton. This senator's older brother led the infamous March to the Sea campaign in Georgia during the Civil War. For 10 points, name this sponsor of an 1890 anti-trust act.

ANSWER: John Sherman

<Bentley>

18. The subject of one portrait by this artist is depicted signing a decree to give the city of Liège money for reconstruction. A nymph begs the title god for intervention as Juno looks on from the left in one painting by this artist. This artist of *Napoleon Bonaparte, First Consul* and *Jupiter and Thetis* did a painting of a woman in red with a sword and a woman in green with an oar sitting beneath a writer being (*) crowned by Nike. A nude lady holds on to a peacock feather and the edge of a blue curtain as she looks back toward the viewer in another painting by this artist that famously gives her too many vertebrae. For 10 points, name this French Neoclassical painter of the *Apotheosis of Homer* and the *Grande Odalisque*.

ANSWER: Jean-Auguste-Dominique Ingres

<Kothari>

19. A character in this play describes his sister as a "tall, trapesing, trolloping, talkative maypole". This play opens with a woman complaining about her boring regular houseguests Mr. Cripplegate and Mrs. Oddfish, wishing instead to visit London like Mrs. Grigsby and the Hoggs family. A subplot in this play involves jewels that initially prevent Constance Neville and (*) Hastings from eloping. After asking for directions at the Three Pigeons alehouse, two characters in this play are sent to a house they do not know is owned by the Hardcastles by the mischievous Tony Lumpkin. For 10 points, name this play where Kate pretends to be a serving maid to attract the interests of Marlow, a work by Oliver Goldsmith.

ANSWER: *She Stoops to Conquer*

<Bentley>

20. These locations contain metal urns called afringans. A bell in these structures is rung five times to mark the boi ceremony. The middle grade of these structures requires an offering from soldiers, farmers, priests, and artisans, and is called Adaran. An offering made in these places mixes three twigs, water, milk, and pomegranate leaves. Attendance at these places is high during Nowruz. These structures are based on the idea that Atar is an agent of (*) purification. Offerings of the haoma plant are done by white-clad priests in these buildings, which must be built near water. People recite the Yasna in these structures while venerating Ahura Mazda. For 10 points, name these houses of worship in Zoroastrianism, which venerate an exothermic chemical process.

ANSWER: fire temples [accept Zoroastrian temples until "Zoroastrianism" is read; prompt on "temples"]

<Mukherjee>

21. Late in his life, this man was appointed by JFK to resolve an amateurism dispute that threatened to jeopardize the United States' participation in the 1964 Olympics. He followed a Joseph McCarthy speech by declaring Democrats had "set the national course" toward a "totalitarian state" during the 1952 Republican Convention. While serving as SCAP, this man prosecuted Class A War Criminals. This author of the (*) "Old Soldiers Never Die" speech led the Luzon Campaign to reconquer the Philippines. He later commanded UN forces during a behind-enemy-lines landing at Inchon, until being supplanted by Matthew Ridgway. For 10 points, name this general who was replaced by Harry S. Truman for refusing to pursue a limited war during the Korean War.

ANSWER: Douglas MacArthur

<Bentley>

22. The C2 form of this protein ADP-ribosylates actin in addition to its more well-known function, and this substance is used to treat spasmodic torticollis. This substance was first used medically to treat blepharospasm and strabismus. This substance includes both a non-hemagglutinin and hemagglutinin component, and its main body is encoded by a cluster of BONT genes. This substance, which cleaves the SNAP-25 component of the SNARE complex, leads to an inhibition of (*) acetylcholine release. This substance, which like tetanus toxin is produced by a bacterium of the Clostridium genus, causes paralysis by inhibiting nerve transmission. For 10 points, name this neurotoxin, a purified version of which is used to remove skin wrinkles.

ANSWER: botulinum toxin [or botox]

<Mukherjee>

23. Nine-year-old Maria Sautuola discovered some of the first known examples of these items in 1879 at Altamira. Those in El Castillo were produced by the Aurignacians during the Magdalen Occupation. Some of these items in the x-ray style were found at Arnhem Land, which is also home of one of these of the Genyornis bird. Some of these artifacts in the Chamber of Felines near (*) Montignac were damaged by black mold caused by tourists breathing on them. That same site is in a karst region in France and includes a Great Hall of Bulls. One of these items in Lascaux depicts a bull with its legs crossed, demonstrating perspective, and a moving herd of extinct aurochs on limestone. For 10 points, identify this form of prehistoric art found in underground chambers.

ANSWER: cave paintings [or cave art; or cave drawings]

<Weiner>

24. This work ends after the narrator cuts off a man who starts talking about a "yeller one-eyed cow that didn't have no tail". The protagonist of this story is described as the type of person who "would bet you how long it would take" a straddle-bug "to get wherever he was going". One character in this story judged Parson Walker to be "the best exhorter" and owned a dog known for its vise-grip tactics named (*) Andrew Jackson. The narrator of this work seeks information on a man named Leonidas at Angel's Camp, where Simon Wheeler tells him a story in which quail shot is used to frustrate the efforts of a creature owned by Jim Smiley. For 10 points, name this Mark Twain short story about a bet involving Dan'l Webster, the title amphibian.

ANSWER: "The Celebrated Jumping Frog of Calaveras County" [or "The Notorious Jumping Frog of Calaveras County"; or "Jim Smiley and his Jumping Frog"; or "The Jumping Frog"]

<Bentley>

1. It was structured around the bizarre Fifth Monarchist beliefs of Thomas Harrison, who modeled its size on the Sanhedrin. For 10 points each:

[10] Identify this body that included John Lambert, Francis Rous, and a much-derided leather-seller who had risen to prominence by wandering Fleet Street shouting about religion.

ANSWER: **Barebone's Parliament** [or the **Little Parliament**; or the **Parliament of Saints**; or the **Nominated Assembly**]

[10] This man became fed up with the Fifth Monarchists after the collapse of the Barebone's Parliament, which also led him to become Lord Protector of England.

ANSWER: Oliver **Cromwell**

[10] Cromwell was also pestered by this other group of the English Interregnum. This group's efforts to cultivate communal land on St. George's Hill were led by Gerrard Winstanley, who dubbed them the "True Levellers."

ANSWER: **Diggers**

<Bentley>

2. This man included the line "Ah, who heals the pains of him for whom balsam turned to poison?" in the text to his metaphysical *Alto Rhapsody*. For 10 points each:

[10] Name this German composer of *Variations and Fugue on a Theme by Handel*, the *Hungarian Dances*, and a symphony nicknamed "Beethoven's Tenth."

ANSWER: Johannes **Brahms**

[10] This work by Brahms for soprano, baritone, chorus and orchestra may have been inspired by the death of his mother. Its text is mostly derived from excerpts from the Luther Bible.

ANSWER: A **German Requiem**, *To Words of the Holy Scripture* [or Ein **deutsches Requiem**, *nach Worten der heiligen Schrift*]

[10] Brahms also composed a set of works of this type for vocal quartet and piano duet titled *Liebeslieder* these. Émile Waldteufel is best remembered for a piece of this type named for "Skaters."

ANSWER: **waltzes**

<Chonai>

3. These objects are multiplied by proceeding across the rows of the first object and down the columns of the second. For 10 points each:

[10] Name these rectangular arrays of numbers.

ANSWER: **matrices** [or **matrix**]

[10] This type of matrix is equal to its transpose. Real-valued matrices of this type are a specific case of Hermitian matrices, which are equal to their complex conjugate transposes.

ANSWER: **symmetric** matrices

[10] The spectral theorem states that any symmetric matrix is similar to a matrix of this type. The only nonzero entries of this type of matrix are its eigenvalues.

ANSWER: **diagonal** matrix

<Eltinge>

4. One god of this astronomical object, the consort of Ningal, was often depicted as an elderly man with a blue beard. For 10 points each:

[10] Name this celestial body ruled by the Sumerian god Sin. Selene was a Greek goddess of this object, which was also linked to Artemis.

ANSWER: the **moon** [or Earth's **moon**; or **Luna**]

[10] This chief god of Babylon helped get Sin's radiance back after a conspiracy involving Adad and Ishtar stripped it away. This son of Ea used the wind to defeat Tiamat.

ANSWER: **Marduk** [or **Merodach** or **Mardochoaios**]

[10] This Babylonian god of the sun was also involved in the plot to steal Sin's light. With Aya, this god fathered Kittu and Misharu.

ANSWER: **Shamash** [or **Utu**]

<Bentley>

5. Identify the following about rules and procedures in Congress, for 10 points each.

[10] Rule XIX [19], Section A(1) of the Standing Rules of the Senate allows for this technique, where a senator gives a speech to block a vote. Strom Thurmond delivered a 24-hour one to block the Civil Rights Act of 1957.

ANSWER: **filibustering** [accept word forms]

[10] One way to get around filibusters is to invoke this procedure, where the Senate votes to allow only 30 more hours of debate. Democrats used this procedure to pass the Affordable Care Act.

ANSWER: invoking **cloture**

[10] The popular 1800s tactic of the "disappearing quorum" was targeted by this 1890s Speaker of the House from Maine, whose forcible-countings led Democrats to hide under their desks and kick open doors to escape.

ANSWER: Thomas Bracket **Reed**

<Bentley>

6. In this country, children are told about "sausage-swiper" and "doorway-sniffer," among other members of the "yule lads." For 10 points each:

[10] Name this volcanic country in the North Atlantic, where the yule lads take the place of Santa Claus in Christmas folklore, and where the rotten shark dish *hákarl* is eaten.

ANSWER: **Iceland**

[10] The majority of Iceland's population believes that these creatures inhabit rock formations and can interfere with urban expansion projects.

ANSWER: **elves** [or **hidden folk**; or **Huldufólk**]

[10] The newest part of Iceland is this island, which began emerging from an undersea volcano in 1963. It is currently about half a square mile in area, and it is the southernmost portion of the country.

ANSWER: **Surtsey**

<Weiner>

7. He decorated the apse of St. Peter's in the Vatican and painted the *Stefaneschi Triptych*. For 10 points each:

[10] Name this student of Cimabue [CHEE-mah-BOO-eh] who is considered the most iconic early Renaissance artist. The Scrovegni [skrow-VAY-nee] family commissioned this artist to paint a fresco cycle on the ceiling of Padua's Arena Chapel.

ANSWER: **Giotto** di Bondone

[10] Cimabue is credited with breaking off from Byzantine art. The Byzantine style often featured flat depictions of Biblical figures, such as Christ Pantokrator, set against a background made from this substance.

ANSWER: **gold** foil

[10] Giotto's rival Duccio was the founder of this Italian city's school of art, known for its synthesis of High Gothic and Byzantine styles. Duccio also inspired later painters from this city, including the Lorenzetti brothers and Simone Martini.

ANSWER: **Siena**

<Kothari>

8. This author asserted that "the honest man, though e'er so poor, is a king o' men" in "A Man's a Man for a' That", and he wrote about Presbyterianism in "The Cotter's Saturday Night". For 10 points each:

[10] Identify this "Bard of Ayrshire" who wrote "The Jolly Beggars", "The Battle of Sherramuir", and "A Red, Red Rose".

ANSWER: Robert **Burns** [or Rabbie **Burns**; or **Robden of Solway Firth**]

[10] A Burns poem addressed to one of these animals described it as a "wee, sleekit, cow'rin, tim'rous beastie". The poem also notes that the "best laid schemes" of both these creatures and men "gang aft agley", a phrase which inspired the title of a Steinbeck novel.

ANSWER: a **mouse** [or **mice**]

[10] The title character of this long Burns poem is a companion of "Souter Johnny" who rides home with Meg only to encounter a witch to whom he proclaims, "Weel done, Cutty-sark!"

ANSWER: "**Tam o' Shanter**"

<Bentley>

9. LDA and imidazole are examples of these compounds, which typically have lone pairs. For 10 points each:

[10] Name this type of substance defined as a proton acceptor in the Bronstead definition, or an electron donor in the Lewis definition.

ANSWER: **base**

[10] A bulky base is used to abstract a proton in this class of pi-bond-forming reaction, which proceeds in a single step through an antiperiplanar transition state.

ANSWER: **E2** reaction [or **bimolecular elimination**]

[10] Though usually a poor leaving group, this species can be eliminated via E1cB under strongly basic conditions, such as in an aldol condensation. This functional group has a broad peak around 3300 inverse centimeters in IR spectroscopy.

ANSWER: **hydroxyl** group [or **hydroxide** anion; or **OH-** group; prompt on "alcohol"]

<Chen>

10. This poetic form usually consists of seventeen *mora*e, which are not to be confused with syllables, divided into a five-seven-five pattern. For 10 points each:

[10] Name this short Japanese poetic form. Matsuo Basho, who collected many examples in *Narrow Road to the Deep North*, is now recognized as the master of this form.

ANSWER: haiku [or hokku]

[10] One of Basho's most famous haiku describes the "splash of water" created when one of these creatures jumps into an old pond.

ANSWER: a frog [accept kawazu or kaeru]

[10] In that poem, *kawazu*, or frog, is a *kigo*, a word which indicates one of these phenomena. Along with a cutting word and the seventeen *mora*e, an indicator of one of them is necessary for a traditional haiku.

ANSWER: a season [accept seasonal word or other word forms]

<Mehigan>

11. This artist was inspired by Francesco Borromini's San Carlo alle Quattro Fontane to create his *Torqued Ellipses* series. For 10 points each:

[10] Name this American minimalist sculptor who created *Matter and Time*. He complained, "To remove the work is to destroy it!" during the controversy over his installation *Tilted Arc*.

ANSWER: Richard Serra

[10] Richard Serra's *Matter and Time* was created for the Guggenheim in this Spanish city, which was designed by Frank Gehry to resemble fish scales.

ANSWER: Bilbao

[10] Jeff Koons created a sculpture of one of these animals now standing outside the Guggenheim Bilbao. One of these animals titles a Luis Bunuel film that features a close-up on a woman's eye being slit by a razor.

ANSWER: a dog [or an Andalusian dog]

<Bollinger>

12. This text, composed before 1100 BCE, focuses on seven deities called the Adityas, and many of its *sukta* hymns are found in its "family books." For 10 points each:

[10] Name this sacred text from a four-member set. Its second of ten sections called mandalas focuses on Indra's slaying of the serpent Vritra, and the first word of its first hymn invokes Agni.

ANSWER: Rig Veda [or Rgveda; prompt on "Vedas"]

[10] This classical language of India was used to compose the Vedas and the great Indian epic *Mahabharata*.

ANSWER: Sanskrit [or samskrta]

[10] These priestly figures, whose name means "seer," "hearer," or "mover" depending on which linguist you ask, received the special divine messages transcribed in the Vedas. They include Vishvamitra.

ANSWER: rishis [or rsi]

<Jackson>

13. William IX of Aquitaine is held to be one of the earliest of these people, who proliferated in the Languedoc region of France in the 12th century. For 10 points each:

[10] Identify these courtly musicians and poets, whose songs are recorded in chansonniers.

ANSWER: **Troubadours** [of **trobairitzes**]

[10] This wife of both Louis VII of France and Henry II of England was a noted patron of troubadours. She was the daughter of William X of Aquitaine.

ANSWER: **Eleanor** of Aquitaine [or **Eleanor** of Guyenne or **Éléonore** d'Aquitaine or **Aliénor** de Guyenne]

[10] Eleanor transformed the court of this city into a hub for troubadours. A battle named for this city ended with King John the Good being taken prisoner.

ANSWER: **Poitiers**

<Bentley>

14. In their simplest case, they consist of a mass tied to either end of a string that is hung around a pulley. For 10 points each:

[10] Name these devices, invented to study the laws of motion in classical mechanics.

ANSWER: **Atwood's** Machine [or **Atwood** Machine]

[10] An Atwood Machine is in equilibrium, with neither mass accelerating, if this condition is satisfied.

ANSWER: the two **masses** are the **same** [or obvious equivalents, or **m_1 equals m_2**]

[10] An accelerating Atwood Machine results in the rotation of the pulley. If the pulley is approximated as a thin disk rotating around its center, this is the formula for its rotational moment of inertia.

ANSWER: **m** times **r squared over 2** [or **half m** times **r squared** or equivalents]

<Nutter>

15. [Moderator: Do not reveal the alternate answers to Part 1]

This group orchestrated the Tarata Bombing in 1992. For 10 points each:

[10] Identify this Maoist-influenced terrorist group that was largely defeated by the government of Alberto Fujimori.

ANSWER: The Communist Party in the **Shining Path** of Mariategui [or **Sendero Luminoso** or **Communist Party of Peru**]

[10] The Shining Path began its operations from the Andean region of this country. This nation contains the site of Machu Picchu.

ANSWER: Republic of **Peru** [or Republica del **Peru**]

[10] The Shining Path was founded by this man after he left a teaching position in Ayacucho. Also known as Presidente Gonzalo, he sought to fight a “people’s war” against the Peruvian government after visiting China.

ANSWER: (Manuel Ruben) Abimael **Guzman** Reynoso

<Bentley>

16. One work about this discipline urged its practitioners to create *enthymemes* and pay attention to categories of knowledge called *topoi*. For 10 points each:

[10] Name this discipline, a member of the medieval *trivium* often divided into “Five Canons.” Its three classical modes are *pathos*, *ethos*, and *logos*.

ANSWER: **rhetoric** [or **oratory**; prompt on “argument” or “speech”]

[10] This Greek author of the *Rhetoric* influenced Thomas Aquinas with his *Metaphysics* and *Nicomachean Ethics*. He tutored Alexander the Great.

ANSWER: **Aristotle** of Stagira [or **Aristoteles**]

[10] Aristotle claimed that “man is by nature” an animal devoted to this practice. A life devoted to it is second only to the contemplative life according to his *Ethics*, and his treatise on this practice made the controversial natural slave argument.

ANSWER: **politics** [or being a **political** animal]

<Jackson>

17. One character in this book eats nothing at lunch and eventually faints, disrupting her boyfriend Lane Coutell's plans to attend the Yale football game. For 10 points each:

[10] Name this 1961 novella dedicated to *New Yorker* editor William Shawn. The title characters of its two sections are the youngest members of the Glass family.

ANSWER: **Franny and Zooey**

[10] *Franny and Zooey* was written by this reclusive author of *Nine Stories* and *The Catcher in the Rye*.

ANSWER: Jerome David **Salinger**

[10] In *Franny and Zooey*, Franny becomes obsessed with constantly performing this action after reading *The Way of the Pilgrim*, which tells of a Russian mendicant who did this "without ceasing".

ANSWER: **praying** [or "saying the Jesus **Prayer**"]

<Cheyne>

18. In the US, these areas usually have separate commercial zones and lower population density than nearby cities. For 10 points each:

[10] Name these communities exemplified by Irvine, California and Scottsdale, Arizona that are residential offshoots of urban centers like Chicago and Los Angeles.

ANSWER: **suburbs**

[10] Suburban development increased partially due to this phenomenon, in which middle-class populations left cities to escape failing infrastructure, overcrowding, and minorities.

ANSWER: **white flight**

[10] White flight was exacerbated by this practice, in which realtors used to convince entire neighborhoods of white homeowners to quickly sell their houses. This practice caused whites to believe their property values had decreased due to blacks moving in nearby.

ANSWER: **blockbusting**

<Spencer>

19. St. Lucia transports one character to this place, whose gatekeeper inscribes the letter "P" seven times on that character's forehead. For 10 points each:

[10] Name this literary locale, a mountain in the Southern Hemisphere which has seven terraces that correspond to the seven deadly sins.

ANSWER: **Purgatorio** [or **Purgatory**]

[10] *Purgatorio*, along with *Inferno* and *Paradiso*, comprises this Italian author's *Divine Comedy*.

ANSWER: **Dante Alighieri** [accept either underlined portion; accept Durante degli **Alighieri**]

[10] After visiting the seventh terrace of Purgatory, Dante passes through flames to this place, where he meets Matilda, witnesses a heavily allegorical procession, and finally sees Beatrice.

ANSWER: **Earthly Paradise** [or **Paradise on Earth**; or the **Garden of Eden**; or **Giardino dell'Eden**; or **Gan Eden**; or **Paradiso terrestre**; prompt on answers like the "summit of Purgatory"]

<Gupta>

20. One example of this phenomenon is the replacement of a nucleotide with a different one, which is called substitution. For 10 points each:

[10] Give this term which describes a change in DNA. The "point" variety of them affects a single nucleotide.

ANSWER: **mutation**

[10] This type of mutation occurs when an insertion or deletion mutation changes the reading frame of the DNA. They affect the entire amino acid sequence after the mutation.

ANSWER: **frameshift** mutation

[10] These short sequences contain 2-6 base pair repeated units. In people with defective mismatch repair, they become unstable and are subject to length changes.

ANSWER: **microsatellites** [or simple sequence repeats or short tandem repeats; prompt on "variable number tandem repeats," "tandem repeats," "repeats," "repetitive regions," "repetitive sequences," or "VNTRs"]

<Morlan>

21. Answer some questions about accelerating bodies, for 10 points each.

[10] This law states that an object's acceleration is dependent upon the force acting upon it and its mass. It is written as $F = ma$.

ANSWER: **Newton's second** law [prompt on partial answer]

[10] Newton's second law was originally written equating this quantity to the integral of force over time. It is equal to the change in momentum.

ANSWER: **impulse** [prompt on "J" or something stupid like "delta p"]

[10] Newton's second law does not hold for variable mass systems, like rockets. Thus, systems of this type must be modeled with this equation, which states $\Delta v = v_e \ln \left(\frac{m_0}{m} \right)$.

ANSWER: **Tsiolkovsky's** rocket equation

<Nutter>

22. At the beginning of this story, one character, who has a habit of lighting cigarettes with strips torn from pasteboard cards, exchanges chatter with the caretaker Old Jack. For 10 points each:

[10] Name this story in which several political canvassers speculate that Joe Hynes is a spy and celebrate the life of Charles Parnell after the politician's sudden death.

ANSWER: **"Ivy Day in the Committee Room"**

[10] "Ivy Day in the Committee Room" is found alongside "Araby", "A Little Cloud", and other short stories in this 1914 collection. Gabriel Conroy has an epiphany after his wife Gretta tells him a story about Michael Furey in its final entry, "The Dead".

ANSWER: **Dubliners**

[10] The stories in *Dubliners* were written by this Irish author, who related Leopold Bloom's adventures on June 16, 1904 in his voluminous stream-of-consciousness novel *Ulysses*.

ANSWER: James Augustine Aloysius **Joyce**

<Gupta>

23. This scandal led to the formation of the second Canadian ministry, which was also the first Liberal ministry. For 10 points each:

[10] Name this 1873 scandal that revolved around Sir Hugh Allan using American money as bribes to win the contract for the Canadian transcontinental railway project.

ANSWER: **Pacific** Scandal

[10] The Pacific Scandal caused the resignation of this frequently-intoxicated Scotsman, Canada's first prime minister.

ANSWER: Sir John Alexander **Macdonald**

[10] The Supreme Court, the Royal Military College, and the secret ballot were all accomplishments of this other Scottish-Canadian, Canada's second Prime Minister. He shares his name with an explorer who became the namesake of Canada's longest river.

ANSWER: Alexander **Mackenzie**

<Liao>