

1. This author created Rotpeter, a former circus ape who learns to talk, in "A Report to an Academy." Frieda's fiancee K is not able to take his job as a surveyor in this man's novel *The Castle*. Another protagonist of a work by this man is killed in a quarry for an unknown crime in *The* (*) Trial . In one story by this author, a man who was trying to raise money to send his sister to the conservatory has apples thrown at him. For 10 points, name this author, who described Gregor Samsa's transformation into a bug in "The Metamorphosis."

ANSWER: Franz Kafka

019-09-10-12102

2. One of this artist's paintings shows three older women, one holding a teacup, in front of Emanuel Leutze's (LOYT-zuh's) Washington Crossing the Delaware. Another of his paintings depicts a man pushing back a red curtain to reveal Washington chopping down a cherry tree. This artist used his (*) sister and dentist as models for another painting whose background shows a white house with a cathedral-like upper window. For 10 points, name this Iowa painter, who depicted a pitchfork-wielding farmer in American Gothic.

ANSWER: Grant DeVolson Wood

026-09-10-12103

3. The pro-trade Walker Tariff was passed during the term of this President, who was asked to demonstrate the location of spilled blood by Abraham Lincoln's Spot Resolutions. After this man's ambassador John Slidell failed to negotiate a purchase, this President sent the army across the (*) Nueces (new-EY-seys) to initiate a war. During his term, the U.S. annexed Texas and gained the Oregon Territory. For 10 points, name this dark horse President who fought with Mexico.

ANSWER: James Knox Polk

020-09-10-12104

4. Ken Ribet proved the Epsilon conjecture by proving that this other theorem could be translated into a non-modular elliptical curve. As a result of that work, any counterexample of this would also serve as such for the (*) Taniyama-Shimura (taa-nee-YAA-maa she-MOO-rah) Conjecture. This theorem was eventually proven by Andrew Wiles. For 10 points, name this theorem that states that it is impossible to separate any power higher than the second into two like powers.

ANSWER: <u>Fermat's Last</u> Theorem [or <u>Fermat's Great</u> Theorem; prompt on <u>Fermat's theorem</u>]

002-09-10-12105

5. This poet acknowledged that "if little by little you stop loving me I shall stop loving you little by little" in "If You Forget Me." This man noted "maybe January light will consume my heart" in his poem "I Do Not Love You Except Because I Love You." This poet wrote of a "body of a woman" with "white hills, white thighs" in the first of his (*) Twenty Love Poems and a Song of Despair. He included the section "The Heights of Macchu Picchu" in his collection Canto general. For 10 points, name this communist Chilean poet.

ANSWER: Pablo Neruda [or Neftali Ricardo Reyes Basoalto]

6. During this war, one side built a long pontoon bridge over the Genitchi Strait. One side in this war defended Home Hill during the Battle of Inkerman. (*) Florence Nightingale earned the moniker "Lady with the Lamp" for tending to wounded soldiers during this war. At one of its battles, Cardigan and Raglan sent a unit headlong into Russian artillery at Balaclava. For 10 points, name this war which pitted the French, British, and Ottomans against the Russians from 1853 to 1856.

ANSWER: Crimean War

015-09-10-12107

7. This main explained his opposition to the Vietnam War in American Power and the New Mandarins, which developed ideas he first published in "The Responsibility of Intellectuals." This creator of a namesake hierarchy for categorizing formal languages coined the phrase "poverty of the stimulus." He demonstrated a syntactically correct yet (*) meaningless sentence with the sentence "colorless green ideas sleep furiously" in "The Independence of Grammar," a chapter from his most famous work. For 10 points, name this MIT linguist who created the theory of generative grammar and wrote Syntactic Structures. ANSWER: Noam Chomsky

032-09-10-12108

8. In *Plasmodium*, proteases (PRO-tee-aze-iz) are found in the "food" type of these organelles. In one form, they contain a substance called cell sap. In plants, proteins called aquaporins (ock-wuh-PORE-inz) are found in the membrane surrounding this organelle, called the (*) tonoplast (TOE-noh-plast). This organelle can take up as much as ninety percent of a plant cell. This organelle maintains the plant's rigidity by causing a pressure called turgidity that is determined by its water content. For 10 points, name these storage organelles found in many cells.

ANSWER: vacuole

064-09-10-12109

9. One figure with this animal as its surname was depicted as the rival of Lewis Baboon in pamphlets by John Arbuthnot. Frescoes at the palace of Knossos (kuh-NAW-siss) show that "leaping" over this animal was a sport in ancient Minoan culture. A portly man with a Union Jack waistcoat, who is the national symbol of Britain, is known as (*) "John" with this surname. This animal's name also denotes a stock market with rising prices. For 10 points, during every July's Festival of San Fermin in Pamplona, daring participants "run" with what male cattle?

ANSWER: <u>bull</u>s [or <u>male cattle</u> before "male" is read; prompt on <u>cattle</u>; do not accept or prompt on <u>cow</u>s, as all clues refer to bulls only]

019-09-10-12110

10. This goddess punished the stingy Alcinoe (al-SEE-know), who ultimately leapt into the sea. Punishment for watching this goddess bathe may have been the cause of Tiresias's (tye-REE-see-us) blindness. This goddess won a contest when her (*) olive tree was deemed more useful than Poseidon's salty well. This daughter of Metis turned Arachne into a spider after losing a weaving contest. She was born when Hephaestus split Zeus's head open. For 10 points, name this Greek goddess of wisdom and war.

ANSWER: Athena [or Minerva; or Pallas]

015-09-10-12111

11. Surrounding this city are Yerba Buena Island and a revitalized neighborhood called Treasure Island. Hunter Point was the site of its large naval shipyard and tourists typically enjoy seafood at its (*) Fisherman's Wharf. One section of this city is known as the Castro District and it contains the oldest Chinatown in North America. For 10 points, name this California city whose other major sites include Alcatraz Island and the Golden Gate Bridge.

ANSWER: San Francisco

12. Calculations involving these mixtures often involve rearranging an equation with negative log of the acid dissociation constant, or pKa [pee-kay-ay]. That Henderson-Hasselbalch equation can then be used to find the strongest point for these mixtures, which is often when pKa is equal to pH. These solutions are made by mixing together a (*) weak base and its conjugate acid or a weak acid and its conjugate base. For 10 points, name this type of solution, that used in chemistry when adding acids or bases to a solution to make sure there is only a small change in pH.

ANSWER: buffer solutions

023-09-10-12113

13. According to the Talmud, these people worshipped the figure of a dove, which they built on Mount Gerizim. Though these people do not recognize the book of Psalms as canonical, they do celebrate Purim. This is the ethnicity of the woman from Sychar that Jesus talked to at Jacob's (*) Well, and of a person who ministered to a wounded traveler after a priest and a Levite had already passed by. For 10 points, give this ethnic group that split from the Jews, one of whom features in a parable about a "good" one. ANSWER: Samaritans

003-09-10-12114

14. This man was nearly assassinated with a hand grenade in the Sakuradamon (sack-oor-ah-DAH-moan) Incident. As a marine biologist, this person discovered several species of hydrozoa. This leader was advised by a council known as the Big Six against giving the Jewel Voice Broadcast, during which he declared his intentioned to accept the (*) Potsdam declaration. This leader's reign followed the Taisho period and was known as the Showa Period. For 10 points, name this father of Akihito who served as Emperor of Japan during World War II.

ANSWER: **Hirohito** [accept **Showa** before it is read]

015-09-10-12115

15. Arcangelo (ar-CAN-jel-oh) Corelli wrote in this kind of composition's "grosso" variant. Johannes Brahms's opus 102 is a "double" one for cello and violin. They are usually written in three movements that are fast, slow, and fast, and performers often improvise a (*) cadenza in them. Mstislav (MIS-ti-slahv) Rostropovich was the dedicatee of two of these kinds of compositions by Shostakovich with a cello solo part. They are often written for a soloist to be accompanied by an orchestra. For 10 points, name these works, which include "Brandenburg" ones by Bach.

ANSWER: concertos

027-09-10-12116

16. One queen from this family is believed to have ordered the Huguenot Gaspard de Coligny's (gahs-PARD day co-LIN-yeez) assassination. One Pope from this family refused to annul Henry VIII's first marriage. A woman from this family is blamed for the (*) St. Bartholomew's Day massacre. A different Pope from this family was in power when Martin Luther began the Reformation. Savonarola was a monk who gained control of a city from this family. For 10 points, name this family that produced Clement VII, Leo X, and Lorenzo the Magnificent, and ruled Florence.

ANSWER: de Medicis

17. Along with James Freed, this man designed a building in which forty-five-degree angle beams support dark tinted glass. This designer of the Jarvits Center also worked on projects like the Fragrant City Hotel and Hancock Tower. One of his buildings is supported by five steel columns to resemble growing (*) bamboo shoots. He consulted Feng Shui masters for his Bank of China Tower. He truncated a pyramid for his design to the Rock and Roll Hall of Fame. For 10 points, name architect who designed the pyramid entrance at the Louvre, who is Chinese-American.

ANSWER: I. M. **Pei** [or Ieoh Ming **Pei**]

020-09-10-12118

18. This author wrote, "Perfection is terrible, it cannot have children," in a poem that discusses pregnancy. This author of the poem "The Munich Mannequins" also wrote about "you do not do, you do not do" to open a poem about a man "with a Meinkampf look." Philomena Guinea provides financial support for the protagonist of this writer's (*) only novel, in which a girl obsessed with the Rosenbergs undergoes psychiatric treatment with Dr. Nolan. For 10 points, name this American author who wrote about magazine intern girl Esther Greenwood in *The Bell Jar*.

ANSWER: Sylvia Plath

036-09-10-12119

19. In light atoms, the spin and orbital types of this quantity are coupled by Russell-Saunders coupling. Clebsch-Gordan coefficients are used in the addition of this quantity. According to Noether's [NUH-ters] theorem, this quantity is conserved in (*) rotationally invariant systems. The time derivative of this quantity is equal to torque. For 10 points, name this quantity that is symbolized L and is the rotational analogue of linear momentum.

ANSWER: angular momentum [do not accept or prompt on "momentum"]

024-09-10-12120

20. This author wrote about "thy kind voice call[ing her] back again" in the poem "To Imagination." One novel by this author tells of how the antagonist is bullied by Hindley before raising and abusing Hindley's son Hareton. That work by this author starts with the arrival of Mr. (*) Lockwood at Thrushcross Grange. The antagonist of that work by this author persecutes Edgar Linton for marrying Catherine Earnshaw and is named Heathcliff. For 10 points, name this author of *Wuthering Heights*, who was the sister of Anne and Charlotte.

ANSWER: Emily Jane Brontë [prompt on Brontë]

059-09-10-12121

21. One obstacle to the completion of this project was the traversal of Montezuma Marsh, where at least a thousand workers died from swamp fever. This project's completion was celebrated by Mayor Wilkeson, who poured a keg of (*) Atlantic Ocean water into this structure. This project ended in the Commercial Slip of Buffalo, was advocated by Dewitt Clinton, and started in Albany. For 10 points, identify this crucial nineteenth-century shipping route, which extends to the namesake Great Lake.

ANSWER: Erie Canal



1. Radon is a radioactive one. For 10 points each:

[10] Name this term given to group 18 of the periodic table.

ANSWER: **noble** gas [prompt on **inert** gas]

[10] With the exception of helium, noble gases contain this many electrons in their valence shell.

ANSWER: eight

[10] Despite being a member of group 18, this heaviest known synthetic element, discovered in Russia in

2002, is probably not a noble gas. ANSWER: **ununoctium** [or **Uuo**]

001-09-10-12201

2. On July 2nd, 1881, President James A. Garfield was assassinated, For 10 points each:

[10] This disappointed office seeker shot Garfield in a train station, after feeling largely responsible for Garfield's victory but not being given a job.

ANSWER: Charles **Guiteau** (goo-TOE)

[10] Chester Arthur quickly signed this legislative backlash from Garfield's death established the Civil Service Commission, marking the end of the "spoils system."

ANSWER: Pendleton Act

[10] George Pendleton had previously run for Vice-President on the ticket of this removed Union general, who was the Democratic nominee against Lincoln in 1864.

ANSWER: George Brinton McClellan

002-09-10-12202

3. This substance has the flavor of strawberry ice cream and is ritually consumed in a circle of twelve people who proclaim "I drink to my annihilation." For 10 points each:

[10] Name this fictional drug, which induces namesake "holidays" but can cause deaths from overdose, as it does to Linda.

ANSWER: soma

[10] Soma is used to sedate workers in this dystopian novel by Aldous Huxley, which follows Bernard Marx's questioning of society "after Ford."

ANSWER: Brave New World

[10] At the beginning and end of *Brave New World*, this World Controller appears to lecture on the benefits of an emotionless society.

ANSWER: Mustapha Mond [or Mustapha Mond]

019-09-10-12203

4. The story of the Hero Twins from this mythology is contained in its most important codex, which is written in Quiche (KEE-chay). For 10 points each:

[10] Name this Mesoamerican people of northern Central America.

ANSWER: Mayan myth

[10] This is the name of that book, which was translated by Francisco Jimenez and contains the entirety of the Mayan creation myth.

ANSWER: Popol Vuh

[10] The Mayans had multiple gods of this food substance, which was used to create man when its kernels were ground and mixed with water to form a dough.

ANSWER: corn [or maize]

- 5. This man is tricked by a Union soldier dressed as a Confederate into burning the title structure. For 10 points each:
- [10] Name this protagonist of "An Occurrence at Owl Creek Bridge".

ANSWER: **Peyton Farquhar** [accept either name]

[10] "An Occurrence at Owl Creek Bridge" was a work by this American satirist who defined lawyers as those "skilled in circumvention of the law" in *The Devil's Dictionary*.

ANSWER: Ambrose Bierce

[10] This other American satirist wrote about baseball players in his short story "Alibi Ike" and his collection *You Know Me Al.*

ANSWER: Ring Lardner

064-09-10-12205

- 6. To become one of these warriors, boys usually had to serve apprenticeships as pages and squires. For 10 points each:
- [10] Name these medieval European warriors who wore heavy plate armor and rode horses into battle.

ANSWER: knights

[10] During the Hundred Years War, French knights were slaughtered by English archers using this weapon at the Battle of Crecy.

ANSWER: English **longbow**s [prompt on "bows and arrows" or similar answers]

[10] Knights were also countered by infantry using these weapons, which consisted of a long pole and a large steel tip. Scotch forces used these weapons to defeat English knights at the Battle of Bannockburn.

ANSWER: pikes

004-09-10-12206

- 7. This statue was rediscovered in two pieces in 1820. For 10 points each:
- [10] Name this iconic statue, currently in the Louvre, that depicts the goddess of love with her lower half covered by a toga, baring her breasts, and with missing arms.

ANSWER: the **Venus de Milo** [or **Aphrodite of Milos**]

[10] This Greek master sculptor executed a gold-and-ivory Aphrodite for Elis, in addition to sculpting the *Athena Parthenos* and one of the Seven Wonders, the *Olympian Zeus*.

ANSWER: Phidias

[10] Aphrodite holds a robe over an urn in a sculpture that depicts her "of Cnidus," by this Greek sculptor who also carved *Hermes Bearing the Infant Dionysus*.

ANSWER: **Praxiteles**

026-09-10-12207

- 8. His magnum opus is entitled *Social Choice and Individual Values*. For 10 points each:
- [10] Name this American economist who is best known for his namesake "impossibility theorem."

ANSWER: Kenneth Joseph **Arrow**

[10] Arrow's impossibility theorem states that it is impossible for certain criteria to all be satisfied by a fair system for this activity, which takes place during elections.

ANSWER: voting

[10] This Indian economist extended Arrow's impossibility theorem to what he called the "liberal paradox." He won the 1998 Nobel Prize in Economics.

ANSWER: Amartya Kumar Sen

9. The singer of this song claims she wants "your ugly," "your disease," and "your love." For 10 points each:

[10] Name this 2009 song in which the speaker is "caught in" the titular predicament.

ANSWER: "Bad Romance"

[10] This singer and performance artist of "Bad Romance" also scored hits with songs like "Just Dance" and "Poker Face."

ANSWER: Lady Gaga [or Stefani Germanotta]

[10] "Just Dance" features lyrics by this singer whose album *Konvicted* contains the song "Smack That."

ANSWER: Aliaune Badara Akon Thiam

032-09-10-12209

10. A critical characteristic of this phenomenon is that it bounces when hitting the ground. For 10 points each:

[10] Name this wintry precipitation that occurs when snow melts and then refreezes before hitting the ground.

ANSWER: sleet

[10] Snow has a high value for this quantity, which is the ratio of reflected light to incident light from the sun.

ANSWER: albedo

[10] This term refers to snowflakes that have had supercooled water droplets freeze on them to create a rimed surface.

ANSWER: graupel

001-09-10-12210

11. This second-most-populous country in the world features the mountain ranges of the Eastern and Western Ghats. For 10 points each:

[10] Name this nation whose western part contains the Thar Desert.

ANSWER: Republic of **India** [or **Bharat** Ganarajya]

[10] This city, formerly known as Bombay, has the largest population of any city in India.

ANSWER: Mumbai

[10] India features this plateau in its south.

ANSWER: Deccan Plateau

022-09-10-12211

12. W. S. Gossett developed this test while working for Guinness. For 10 points each:

[10] Name this test known by a single letter which is used to see if two normally distributed populations differ.

ANSWER: student's t test

[10]R. A. Fisher introduced this sort of hypothesis which is assumed to be true, but statistical tests are used to prove wrong.

ANSWER: **null** hypothesis

[10] This class of tests is used to used to compare different groups separated by independent variables by looking at the partitioning of variance.

ANSWER: ANOVA [or Analysis of Variance]

- 13. This entity's multinational character was the target of the pro-German Linz Program. For 10 points each:
- [10] Name this "dual monarchy," formed by the Ausgleich of 1867, which gave equal status to the two largest components of the Hapsburg empire until it was dissolved after World War I.

ANSWER: <u>Austria-Hungary</u> [or <u>Austro-Hungarian Empire</u>; or <u>Austro-Hungarian Monarchy</u>; or <u>Österreich-ungarn</u>; or <u>Österreichisch-ungarisches Reich</u>; or <u>Österreichisch-Ungarische Monarchie</u>; prompt on <u>Doppelmonarchie</u>]

[10] This ruler, who had become emperor of Austria in 1848 as Lajos Kossuth (LIE-os ko-SOOT) was agitating for Hungarian independence, was the monarch of Austria-Hungary until his 1916 death.

ANSWER: Franz Josef I [or Francis Joseph I; or Ferenc József I]

[10] A later advocate for Hungarian autonomy was this premier of the anti-Soviet communist government which attempted to break Hungary away from Russian control in 1956.

ANSWER: Imre Nagy (NAJ)

019-09-10-12213

- 14. Name some twentieth-century American poets, for 10 points each.
- [10] This poet explored the nature of time in *Four Quartets* and used a quote from *Heart of Darkness* as an epigraph to his poem "The Hollow Men."

ANSWER: Thomas Stearns Eliot

[10] This poet wrote the epic *Paterson*, as well as a poem that states "so much depends upon the red wheelbarrow."

ANSWER: William Carlos Williams

[10] This poet of "Nothing Gold Can Stay" wrote that "Good fences make good neighbors" in "Mending Wall" and about two roads diverging in a yellow wood in "The Road Not Taken."

ANSWER: Robert Lee Frost

024-09-10-12214

- 15. The composer of this work feuded with Arturo Toscanini about its proper tempo. For 10 points each:
- [10] Name this one movement piece named for a Spanish dance which includes a repetitive ostinato on snare drums as it gradually crescendos.

ANSWER: **Bolero**

[10] Bolero was written by this French composer of Pavane for a Dead Princess and Gaspard de la Nuit.

ANSWER: Maurice Ravel

[10] Ravel composed the music to this Michel (me-SHELL) Fokine ballet which was based on a Longus work about a goatherd and a shepherdess.

ANSWER: Daphnis and Chloe [or Daphnis et Chloe]

015-09-10-12215

- 16. He reveals his origins to Captain Harding's party of Civil War refugees, who escaped the fall of Richmond in a balloon and landed on *The Mysterious Island*. For 10 points each:
- [10] Name this character, a onetime Muslim prince who resolved to hate the governments of the world and wreak havoc with his advanced submarine, the *Nautilus*.

ANSWER: Captain **Nemo** [or Prince **Dakkar**]

[10] Captain Nemo first appeared in *Twenty Thousand Leagues Under the Sea*, a novel by this French author of *Journey to the Center of the Earth*.

ANSWER: Jules Verne

[10] Assisted by Passepartout, this protagonist rescues Princess Aouda and wins a bet with the Reform Club in Verne's *Around the World in Eighty Days*.

ANSWER: Phileas Fogg [or Phileas Fogg]

- 17. Among the events that took place on this date were the expulsion of the Jews from England and the deportation of Jews from the Warsaw ghetto. For 10 points each:
- [10] Name this date in Judaism that commemorates the destruction of both temples along with other tragic events.

ANSWER: Tisha B'av [or the Ninth of Av]

[10] Tisha B'av is commemorated by performing this action, also performed on Yom Kippur, the Jewish day of repentance. Muslims do it in the daytime during Ramadan.

ANSWER: **fast**ing [accept equivalents like **not eat**ing]

[10] During Yom Kippur, Jews read the story of this prophet, who runs away to Tarshish before convincing the people of Nineveh to repent.

ANSWER: Jonah

064-09-10-12217

- 18. His painting *Continence of Scipio* is displayed in the Hermitage and his *George Clive and his Family with an Indian Maid* is at Berlin's Staatliche. For 10 points each:
- [10] Name this painter of a portrait of August Keppel, who immortalized an actress in *Sarah Siddons as the Tragic Muse*.

ANSWER: Joshua Reynolds

[10] This rival of Reynolds painted a colorful portrait of Jonathan Buttall in the 1770 painting *Blue Boy*. He also painted *Heneage Lloyd and his Sister*.

ANSWER: Thomas **Gainsborough**

[10] A couple stands on the left of this Gainsborough portrait, the man scowling and holding a gun, the wife on a green bench. A landscape of fields and trees is on the right.

ANSWER: Mr. and Mrs. Andrews

063-09-10-12218

- 19. The conclusion of this war led to the transfer of Louisiana to Spain. For 10 points each:
- [10] Identify this conflict, the North American analog of the Seven Years' War.

ANSWER: French and Indian War

[10] This Ottawa chief, unhappy with Native American treatment at the hands of the British following the French and Indian War, began his namesake rebellion with a siege of Fort Detroit and attack at the Battle of Bloody Run.

ANSWER: Chief **Pontiac** [or **Obwandiyag**]

[10] This chief, who sided with the British in the War of 1812, led the Sauk and Fox Native Americans of Illinois in his namesake war against the United States.

ANSWER: Black Hawk

032-09-10-12219

- 20. The Meselson-Stahl experiment confirmed that this process is semiconservative. For 10 points each:
- [10] Name this process that occurs during the S phase of the cell cycle, during which more copies of the genetic material are made.

ANSWER: **DNA replication** [prompt on **replication**]

[10] These "fragments" are synthesized on the lagging strand because DNA polymerase (puh-LIM-er-ase) only works in the five prime to three prime direction.

ANSWER: Okazaki fragments

[10] This is the enzyme that catalyzes the formation of the phosphodiester (FOSS-fo-die-ESS-ter) bond that joins together the Okazaki fragments.

ANSWER: **DNA ligase** I [prompt on **ligase**]

21. The CIA attempted to assassinate this dictator by getting him to light an exploding cigar. For 10 points each:

[10] Name this dictator who rose to power after overthrowing Fulgencio Batista.

ANSWER: Fidel Alejandro Castro Rúz

[10] Fidel Castro ruled this Caribbean country until ceding power to his brother Raúl.

ANSWER: Republic of <u>Cuba</u> [or República de <u>Cuba</u>]

[10] After coming to power in 1959, Castro nationalized the holdings of this American company.

Throughout Latin America, it was nicknamed "El Pulpo."

ANSWER: **<u>United Fruit</u>** Company