



1. One play by this author features a man with "all the nations of the old world at war in his veins" arriving to sort out the plot in the final act; that character created by him is the American naval captain Hamlin Kearney. This author wrote a play that includes a Moroccan sheikh who kills Christians until stopped by the lady-explorer Cicely Waynflete and the crusty title guide. In another play by this man, Essie is invited to stay in the new home of a man that Judith Anderson hates, after uncle Peter is hanged, and Westerbridge, New Hampshire is sent into a tizzy when Dick Dudgeon is sentenced to death. In another play by him, a chain of murders leads to the death of Pothinus and then, at the hands of Rufio, Ftatateeta, after one title character finds the other between the paws of the Sphinx and then in a rolled-up carpet. This author of *Captain Brassbound's Conversion* included John Burgoyne as an antagonist in his *The Devil's Disciple*; those two dramas, along with *Caesar and Cleopatra*, make up his *Three Plays for Puritans*. For 10 points, name this playwright of *Man and Superman* and *Pygmalion*.

ANSWER: George Bernard Shaw [or GBS]

019-13-64-07101

2. Magallis and Damophilus of Enna are particularly blamed for behavior leading to an event of this type by Diodorus Siculus. One of these events was organized by a Syrian man who had entertained party guests by breathing fire and making humorous prophecies about an event of this kind. Another of these events was triggered after confusion over who was affected by an order denouncing certain tax collectors during the war against the Cimbri, and was led by Athenion and Salvius, who took the name Tryphon. In the 130s, Eunus organized one of these events on Sicily. One of these events erupted among Italian allies responding to a decree of Gaius Marius, and a later event of this kind was ended at the Silarus River by Crassus. Participants in that one of these events camped out at Mount Vesuvius and were crucified along the Appian Way. For 10 points, identify this kind of event in Roman history in which members of a class composed of war captives and other owned persons took up arms.

ANSWER: Roman slave revolts [or the Servile Wars]

019-13-64-07102

3. The interval between two of these things is proportional to the larger of their J values according to the Landé interval rule. On Grotrian, or term, diagrams, these things are graphed based on the y-axis. The existence of these things was confirmed by the Franck-Hertz experiment. When more than one independent eigenstate corresponds to one of these things, they are known as degenerate. These things are given by $h\text{-bar squared times } n \text{ squared times } \pi \text{ squared over two times mass times length squared}$, for an infinite square well. For hydrogen, they can be found by dividing -13.6 by $n \text{ squared}$ according to the Bohr model and the lowest one is the ground state. For 10 points, identify these things that electrons can transition between by absorbing or emitting photons, creating spectral lines.

ANSWER: discrete, quantized energy levels [or energy states; or electronic states; prompt on spectral lines; prompt on atomic orbitals]

066-13-64-07103

4. After the dress rehearsal of this opera, a royal decree forced a hasty rewrite to compose the disastrous *Buondelmente*, and the composer of this opera supposedly dismissed a possible rewrite by scribbling in the margins "But it's ugly!" Roberto announces his love for the title character of this opera in the duet "She was the picture of love," and the queen realizes that he is in love when she reveals she intends to marry Francois I. The female lead in this opera is considered to be one of the composer's namesake "Three Queens," and that character declares that the English throne is tainted by a "vile bastard" and an "impure daughter of Boleyn." For 10 points, name this opera by Gaetano Donizetti adapted from a Schiller play about the title "Queen of Scots."

ANSWER: **Maria Stuarda** [or **Mary Stuart**]

002-13-64-07104

5. This man recounted encountering a vagina dentata while in bed with a woman who then turns into the politician Johan Archenholtz as part of his vivid *Journal of Dreams*. He attempted to prove the physical reality of the soul in his *On the Economy of the Animal Kingdom*, prior to having a vision of Jesus which told him to abandon secular scientific pursuits. His theological works all attempt to prove his postulated "correspondence" between spiritual realities and physical objects, as in the *Heavenly Arcana*. His disciples took up his system from his numerous anonymous treatises written in Latin, especially *On Heaven and its Wonders* and *On Hell*. For 10 points, name this founder of the Church of the New Jerusalem, who picked up a variety of Christian followers in the late eighteenth century, including Johnny Appleseed and the transcendentalists.

ANSWER: Emanuel **Swedenborg** [or Emanuel **Svedberg**]

019-13-64-07105

6. This man is not a member of AIM, but he once believed the universe had made him the "Scientist Supreme". In one series, this founder of the Avengers Academy was aided by the cybernetic Jocasta as he led a team of Avengers from the "Infinite Mansion" he designed. Wolverine traveled back in time and killed this man to prevent a robot from wiping out humanity, but instead this man brought an end to the "Age of Ultron". He lost his temper while in the guise of "Yellowjacket", causing him to strike his wife, which led to his expulsion from the Avengers. For 10 points, name this scientist and husband of Janet Van Dyne, who discovered a namesake particle that allows him to change size and be Ant-Man.

ANSWER: Henry "Hank" **Pym**

002-13-64-07106

7. This poem describes a sort of person who, "whatever the survey, whatever the sea and sail" "strikes soundings at last only here." An earlier section of this poem distinguishes love "by allowance" from love "with personal love," saying of "a common farmer -- the father of five sons" that "you would wish to sit by him in the boat, that you and he might touch each other." The speaker of this poem wishes to "swim with the swimmers, wrestle with the wrestlers, march in line with the firemen, pause, listen and count." Later, it describes the auction of the male and female forms, then launches into an exhaustive anatomical catalogue, concluding that these are "parts and poems" of the soul, and, indeed "these are the Soul!" This poem's speaker states that "the armies of those I love engirth me, and I engirth them." For 10 points, name this celebration of the physical human being, a poem by Walt Whitman.

ANSWER: **"I Sing the Body Electric"**

020-13-64-07107

8. A eunuch with this name was made parakoimomenos by Constantine VII and served in that position under John Tzimiskes. That man with this name, the illegitimate son of Romanos I Lekapenos, was accused of sympathizing with Bardas Phokas by another man with this name. A man with this name, in return for converting to Christianity, gave his sister Anne to Vladimir the Great. Botaneiates and Nikephoros Xiphias fought for one king with this name. That king with this name failed to marry off Zoe to Otto III, after Otto III died. That king won the Battle of Kleidion against Samuel, many of whose troops were subsequently blinded. For 10 points, what name is shared by the first ruler of the Macedonian dynasty as well as a "Bulgar-slayer"?

ANSWER: **Basil**

149-13-64-07108

9. A toddler holds blocks and a toy horse has a red wagon attached to it in this artist's *Baby at Play*. A chaperone sits and watches as William Rush copies a nude model in a painting by this man. Three men lean to counter the wind in this man's painting of sailboats racing in a river. Weda Cook sings an excerpt from Mendelssohn's *Elijah* in his *The Concert Singer*. This man created a "motion study" in which a nude pole vaulter is depicted at multiple positions in his jump. He depicted the title friend rowing in the Schuylkill River in his *Max Schmitt in a Single Scull*. For 10 points, name this artist that depicted anatomy lectures at Jefferson Hospital in his paintings *The Agnew Clinic* and *The Gross Clinic*.

ANSWER: Thomas **Eakins**

002-13-64-07109

10. These complexes are inhibited when threonine-14 and tyrosine-15 in their ATP-binding pocket are phosphorylated, which is done by the Wee1 kinase. The binding domain of these complexes often contains the PSTAIRE motif. Inhibitors of these complexes are divided into two classes: INK4 and Cip/Kip. Ubiquitination of the regulatory subunit of these complexes by APC/C prevents their formation. The tumor suppressor protein p53 works by binding to these complexes and inactivating them. The maturation-promoting factor is an example of these complexes. These complexes phosphorylate retinoblastoma protein, which allows cells to enter the S phase. For 10 points, identify these complexes that regulate cell cycle progression.

ANSWER: cyclin-**CDK** complexes [or **cyclin-dependent kinase** complexes; or **CDKC**]

066-13-64-07110

11. In one short story by this author, a man visits a home where a woman wears a magnetic crown to cure headaches and her husband clucks along with the chickens in the yard, before a passage from Lampridius about the birth of Alexander Severus causes their son to go insane and begin eating floor-wax and sponges. In another of his short stories, Madame Cornouiller accuses a gardener of stealing three melons, and all of Saint-Omer is soon abuzz with stories about a dastardly laborer who was made up to avoid a dinner invitation. This author collected short stories such as "The Red Egg" and "Putois" in his volumes *The Merry Tales of Jacques Tournebroche* and *The Well of Saint Clare*. Another story by him features a man recalling a rebellion against the emperor's insignia and a crowd trying to block the construction of an aqueduct; that man discourses on why Jews do not build statues of Jupiter before saying he cannot recall any person named Jesus. For 10 points, name this author of "The Procurator of Judea," who also wrote novels such as *The Revolt of the Angels*, *The Crime of Sylvester Bonnard*, and *Penguin Island*.

ANSWER: Anatole **France** [or Jacques-Anatole-François **Thibault**]

019-13-64-07111

12. A book about the founding of this country entitled *Dancing with Strangers* was written by Inga Clendinnen. A photograph of the 36 "faceless men" standing alongside Arthur Calwell helped one Prime Minister of this country win an election. "The light on the hill" was used by Ben Chifley to describe the goal of this country's Labour Party. A Prime Minister of this country announced the defection of Vladimir Petrov and declared the middle class to be the "backbone" of this country in his speech about "The Forgotten People". This country was once led by Robert Menzies. After winning a 2007 election in this country, a man who had beaten Kim Beazley for head of his party ratified the Kyoto Protocol. For 10 points, Julia Gillard was replaced as Prime Minister of what country by Kevin Rudd, in 2013?

ANSWER: Commonwealth of **Australia**

149-13-64-07112

13. Block codes are often described using one of these structures over $GF(2)$. A prominent example of a contravariant functor is the duality on the category of these structures. A generalization of these structures is defined over a ring and is a module. A subset of these structures is the subject of the Steinitz exchange lemma. Over a field F , they can be defined as an abelian group, A , and a ring homomorphism from F to the endomorphism ring of A , which maps the identity to the identity. One property of these structures can be found by adding the dimension of the image and kernel of a linear transformation according to the rank-nullity theorem. These structures are closed under addition and scalar multiplication. For 10 points, identify these spaces studied in linear algebra.

ANSWER: **vector spaces** [or **vector** spaces after "spaces" is read]

066-13-64-07113

14. This work was transcribed for string trio and string orchestra by Dmitry Sitkovetsky. This work may have been modeled on Dietrich Buxtehude's *La Capricciosa* as its composer also used the tune from "Cabbage and beets have driven me away". Nine of the pieces in this work are strict canons separated by two other pieces. This work was paired with the composer's *Chromatic Fantasia and Fugue* and *Italian Concerto* in a seminal recording by Wanda Landowska. The last piece of this work is an exact repeat of the beginning aria. This work was recorded in 1955 and 1981 by Glenn Gould and its second-to-last piece is a quodlibet. For 10 points, identify this set of works composed by Johann Sebastian Bach to soothe the insomnia of Baron von Keyserling.

ANSWER: **Goldberg Variations**, **BWV 988** [accept either; or **Clavierübung IV**]

066-13-64-07114

15. David Lewis-Williams extensively studied the rock art found in this mountain range, which often depicts elands; that rock art was deciphered after one was viewed in the Kamberg Reserve. The endemic range of the Mountain Pipit is mostly in this mountain range. Notable peaks in it include Giant's Castle and Thabana Ntlenyana. A shelter for the rare white rhinoceros located on the foothills of this mountain range is near the historically important town of Ladysmith. This mountain range contains the world's second-highest waterfall, Tugela Falls, in the province of KwaZulu-Natal. This range is the source of the Orange River. For 10 points, identify this South African mountain range.

ANSWER: **Drakensberg** Mountains [or **Barrier of Spears**; or **Maluti**; or **uKhahlamba**; or **Quathlamba**]

066-13-64-07115

16. One of these two men collaborated with David Schkade on the paper "Does Living in California Make People Happy?" which used Californian and Midwestern appraisals of the other groups' happiness to illustrate the focusing illusion. The second of these two men developed a comparison statistic that shows the similarity between a prototype and a variant. These two people coined a term for a fallacy in which the first piece of information received is given undue weight, anchoring, in their paper "Judgment Under Uncertainty." Their major work showed that people use heuristics to make complex decisions instead of analyzing probabilities of risk and reward. For 10 points, name these co-developers of prospect theory.

ANSWER: Daniel **Kahneman** and Amos **Tversky** [either order]

019-13-64-07116

17. In a humorous story, this object was once tossed at a sad animal, who then immediately prophesied the end of the world, advising the tosser to prepare food for five days. Depictions of several gods of this substance symbolize the numeral eight. Young women wore necklaces and people sprinkled their houses with blood to honor a green-scepter-wielding god of this substance, which was personified by two male deities, a tonsured and a foliated god, in Mayan art. Quetzalcoatl transformed into an ant to retrieve a sample of this substance to give to humanity. In Aztec mythology, it was presided over by the goddess Chicomecoatl and her male counterpart Centeotl, whose ears and headdress resemble this substance. For 10 points, name this staple crop in many Mesoamerican cultures.

ANSWER: **maize** [or *Zea mays*; accept **corn**]

020-13-64-07117

18. One act named for this man was based on the advice of Henry Carey and was supported by William Bigler, the only Democrat senator to vote for it. Another act named for this man was upheld by the Waite court, who decided that religious obligations were not valid defenses against criminal indictment. That act named for this man imposed a five hundred dollar fine and a maximum of five years in prison for engaging in polygamy. In addition to naming the Anti-Bigamy Act upheld in *Reynolds v. US*, this man names a tariff that was signed into law by James Buchanan in 1861. An act named for this man set aside land based on the number of senators and representatives that a state had in Congress. For 10 points, name this Vermont Senator whose namesake Land Grant Act led to the creation of many public universities in the US.

ANSWER: Justin Smith **Morrill**

149-13-64-07118

19. One character in this novel begins to fantasize about being a police detective after hearing about an incident in which a man exposed himself to teenage girls at the Water of Leith. In this novel, a character who finds a nightgown under a pillow gets a choirmaster removed from a church, and another person who reveals malfeasance writes *The Transfiguration of the Commonplace* after taking the name Sister Helena. The Kerr sisters, who are supposed to teach sewing, keep house for Gordon Lowther in this novel, in which Mary McGregor works as a typist before dying in a hotel fire and Sandy Stranger ultimately snitches on the title character to Miss Mackay. Of the title character's "set," which she refers to as the "creme de la crème," only Joyce Hammond takes the advice to go fight for the Francoists in the Spanish Civil War. For 10 points, name this novel in which the Fascist-sympathizing lover of Teddy Lloyd is fired from the Marcia Blane School for Girls, written by Muriel Spark.

ANSWER: *The **Prime of Miss Jean Brodie***

019-13-64-07119

20. One reaction used to create these compounds, which uses tributyltin hydride, was applied to the total synthesis of gelsemine and aspidophytine. In another reaction used to create these compounds, O-substituted nitroarenes are reacted with vinyl Grignard reagents. This compound reacts with Kovac's reagent to produce a cherry red color. In yet another reaction used to create these compounds, ene-hydrazine undergoes a metal halide-catalyzed [3,3] sigmatropic rearrangement to form a double imine. Those aforementioned reactions are named for Fukuyama, Bartoli, and Fischer. A compound consisting of acetic acid and this functional group is the most common auxin. This abundant heterocyclic compound that consists of benzene fused to pyrrole. For 10 points, identify this compound that is substituted on the beta-carbon of alanine to form tryptophan.

ANSWER: indoles

066-13-64-07120

21. This philosopher compared the sentence "Satan does not exist" to the sentence "I am sleepy" in a paper which lists several distinguishing attributes of Mr. Baldwin and Mr. Pickwick. This author of "Systematically Misleading Expressions" advocated "removing conceptual roadblocks" and "freeing conceptual traffic jams" in a book about the need to analyze what can be said without absurdity and determine the "logical geography" of language, *Dilemmas*. He claimed that linguistic ambiguity can mislead one into thinking that mental and physical activities are both separate and on par with each other, thus committing a "category mistake" that leads to a belief in Cartesian dualism or the conception of the mind-body relationship as a "ghost in the machine." For 10 points, name this author of *The Concept of Mind*.

ANSWER: Gilbert Ryle

019-13-64-07121



1. Massive protests in this country over a nine-cent hike in bus fare became radically more popular after the Movement for Free Travel was brutally repressed. For 10 points each:

[10] Name this country where June 2013 protests broke out over cuts to services such as education and transportation.

ANSWER: Federative Republic of **Brazil** [or República Federativa do **Brasil**]

[10] This leftist President of Brazil has said she is proud of the protesters's fight to improve the country. A mocking chant by the protesters asked this leader "what's the point? / To ride the bus / we're paying more than for a joint".

ANSWER: Dilma **Rousseff**

[10] This movement led a March for [its namesake substance's] Legalization after journalist Piero Locatelli was arrested for carrying said substance.

ANSWER: **V for Vinegar** [do not accept or prompt on "Salad Uprising"]

002-13-64-07201

2. This queen abdicated in favor of her son, James VI, while at Loch Leven. For 10 points each:

[10] Name this Scottish queen who was Queen Elizabeth I's first cousin once removed. She was killed after the Babington plot failed.

ANSWER: **Mary**, Queen of Scot [or **Mary** Stuart; or **Mary** I of Scotland]

[10] This man was Mary, Queen of Scots' second husband. According to the Casket letters, Mary colluded with James Hepburn to murder this man.

ANSWER: **Henry Stuart**, Lord Darnley [or **Lord Darnley**]

[10] Lord Darnley may have aided in the conspiracy to kill this personal secretary of Mary. This man was stabbed to death in front of Mary by men led by Patrick Ruthven.

ANSWER: David **Rizzio**

149-13-64-07202

3. It's time for the dreaded bonus on thermodynamic diagrams, for 10 points each:

[10] This diagram is used with steam or humid air. It has curves of constant temperature, constant pressure, constant moisture and constant superheat.

ANSWER: **enthalpy-entropy** chart [or **h-s** chart; or **Mollier** diagram; prompt on **psychometric** chart]

[10] A graph of this quantity versus entropy is the most frequently used diagram in thermodynamic process analysis because the heat transferred by a process is the area under a curve.

ANSWER: **temperature**

[10] The curve for this process on P-V diagrams asymptotically approaches the P and V axes, like isotherms, and crosses each isotherm only once. A Carnot cycle consists of isothermal compression and expansion connected by two of these processes, in which no heat is transferred.

ANSWER: **adiabatic** process

066-13-64-07203

4. This photographer depicted a line of people in front of a billboard claiming “There’s No Way Like the American Way!” in “Kentucky Flood.” For 10 points each:

[10] Name this photographer that established the first photography lab at the magazine *Life*.

ANSWER: Margaret **Bourke-White**

[10] Bourke-White famously photographed this man on the day of his assassination. An earlier picture of this figure by Bourke-White showed him sitting, with a spinning wheel in the foreground.

ANSWER: Mohandas Karamchand **Gandhi**

[10] Among her photographs for *Life*, Bourke-White took photos of the construction of this project in Montana; one of those photos would grace the cover of the first issue.

ANSWER: **Fort Peck Dam**

002-13-64-07204

5. These events include Hina-matsuri, in which family heirloom dolls are dressed up, and Nagoshi-no-oharai, in which farmworkers purify themselves by walking through a circle of rope. For 10 points each:

[10] Identify this general group of observances that also includes the coming-of-age day Seijin-no-hi and the new year, Oshogatsu.

ANSWER: **Shinto festivals** [or **Matsuri**; or **Shinto holidays**, etc.]

[10] Each Shinto festival is divided into three parts, the "welcoming," the "procession," and this final part, which shares its name and procedure with a funeral service or the prayer said over a broken object.

ANSWER: **sending the kami back** [or equivalents; or **Kami-Okuri**]

[10] The Dosojin festival is held in honor of this phenomenon, which was venerated at the three great sites of Farnbag, Gushnasp, and Burzen-Mihr in another religion.

ANSWER: **fire**

019-13-64-07205

6. A month after being fired by a college team, this man managed to fall upwards right into a job as the Dolphins offensive coordinator. For 10 points each:

[10] Name this former Packers head coach. The Dolphins drafted Ryan Tannehill in part because this man had been his college coach.

ANSWER: Mike **Sherman**

[10] This defensive tackle blindsided Chad Clifton in a 2002 game, leading to a profanity laced confrontation with Mike Sherman. He announced his retirement in 2008 by posting “I’M DONE!” on his website qbkill.com.

ANSWER: Warren **Sapp**

[10] Sapp proved to be out of his mind when he tried to argue on air that this former teammate was better than Michael Strahan, saying he was better “every day of the week and twice on Sunday.” This rusher set the University of Illinois single season record with 16 sacks.

ANSWER: Simeon **Rice**

002-13-64-07206

7. Members of this literary family included Erika, who wrote *The School for Barbarians*; Klaus, who penned the story of Hendrik Höfgen in *Mephisto*; and Golo, the author of *Wallenstein, His Life Narrated*. For 10 points each:

[10] Name this family, which also included Heinrich, the author of *The Subject* and the basis for the film *The Blue Angel*, *Professor Unrat*.

ANSWER: **Mann** family

[10] Heinrich Mann collaborated with Albert Einstein to write an open letter upon the murder of this author of the first Croatian science fiction novel, *On the Pacific in 2255*. He was killed with a hammer by Serbian policemen for denouncing abuses of Croats within Yugoslavia.

ANSWER: Milan **Sufflay**

[10] Heinrich Mann's brother and Erika, Klaus, and Golo Mann's father, Thomas Mann, created this character, who spends seven years at the International Sanatorium Berghof as the protagonist of *The Magic Mountain*.

ANSWER: **Hans Castorp** [accept either]

019-13-64-07207

8. The largest class of these proteins has a nucleotide binding domain and a leucine rich repeat domain. For 10 points each:

[10] Identify these proteins integral to the plant immune system. They recognize the products of *avr* genes and respond appropriately.

ANSWER: **R** proteins [or **resistance** proteins]

[10] R proteins are but one branch of the plant immune system; the other branch uses PRRs that respond to PAMPs, such as the TLR5-recognized protein constituent of this structure. This structure consists of a helical filament attached to a prokaryotic cell by means of a hook-like structure and basal body embedded in the membrane.

ANSWER: **flagellum** [or **flagella**; the protein is flagellin, like Magellan]

[10] The NB-LRR protein Mi in the tomato plant confers resistance to nematodes and these insects. They have a notable mutualism with ants, which farm and protect them.

ANSWER: **aphids** [or **Aphidoidea**; or **plant lice**; or **greenflies**; **blackflies**; or **whiteflies**; do not accept "jumping plant lice" or "true whiteflies"]

066-13-64-07208

9. An anarchist “guard” of this type was created by Maria Nikiforova. For 10 points each:

[10] Give this color that lent its name to the army led by Nestor Makhno in his Free Territory, which was located in Ukraine.

ANSWER: **black**

[10] The “green army” is the name sometimes given to Aleksandr Antonov’s forces during this rebellion. This peasant rebellion took place during the Russian Civil War and was ended by Mikhail Tukhachevsky.

ANSWER: **Tamboy** rebellion [or **Antonovshchina**]

[10] Both the Black and Green Armies fought against this colorfully named army of the Soviet Union. This army was largely organized by Leon Trotsky.

ANSWER: The Workers’ and Peasants’ **Red** Army [or **RKKA**]

149-13-64-07209

10. This author drew from "East Coker" to title a selection from his lengthy journals *A Lifetime Burning in Every Moment*. For 10 points each:

[10] Name this author who described his boyhood in Brooklyn in *A Walker in the City*, and explored four decades of American literature, starting from Theodore Dreiser, in *On Native Grounds*.

ANSWER: Alfred **Kazin**

[10] In the preface to one volume of criticism, Kazin wrote that the extant pages of this unfinished novel "have the eerie clarity of a man writing from hell". Irving Thalberg was the basis for its protagonist, the film producer Monroe Stahr.

ANSWER: *The Love of the* **Last Tycoon** [or *The* **Last Tycoon**]

[10] Kazin's denunciation of the "Axis Ministers of culture" is eerily similar to this critic's obsession with the moral failure of the "school of resentment", demonstrated in books like *The Western Canon* and *The Anxiety of Influence*.

ANSWER: Harold **Bloom**

020-13-64-07210

11. This war broke out in 672 after the death of Emperor Tenji. For 10 points each:

[10] Name this civil war between Prince Otomo and Prince Oama. Prince Oama won this war and went on to become Emperor Temmu.

ANSWER: **Jinshin** war

[10] The Jinshin war occurred during the pre-Meiji era of this Asian nation.

ANSWER: **Japan**

[10] Emperor Temmu constructed the first version of this shrine at Naiku. This shrine is rebuilt every twenty years and is supposedly home to the Sacred Mirror used to lure Amaterasu out of a cave.

ANSWER: **Ise** Grand Shrine [or Grand Shrine of **Ise**]

149-13-64-07211

12. The protagonist of this story encounters a gang of punks who make lewd comments about using the title object on a young beggar-girl. For 10 points each:

[10] Name this 1924 short story in which Si-Ming buys the title scented hygienic object for his wife.

ANSWER: "**Soap**"

[10] The title character is executed at the end of this short story, after plotting to use the Republican revolution for vengeance on his enemies and praising himself for "moral victories." It was the first story written in vernacular Mandarin after the start of the May 4th Movement.

ANSWER: "The **True Story of Ah Q**"

[10] This author of "Regret for the Past" and "Medicine" wrote "Soap" and "The True Story of Ah Q."

ANSWER: **Lu Xun**

019-13-64-07212

13. A quadruply eponymous variant of this effect is the YORP effect, from whence the name of Zorp the Surveyor is likely derived. For 10 points each:

[10] Identify this effect which affects the orbit of smaller bodies like asteroids. It results from the anisotropic reradiation of thermal radiation and causes asteroids with retrograde rotation to enter an increasingly small orbit.

ANSWER: **Yarkovsky** effect

[10] The Yarkovsky effect was rescued from the dustbin of history by Ernst Öpik, an Estonian astronomer, who was the first to propose the existence of a cloud of comets that encircles the solar system, which is usually named for this Danish astronomer.

ANSWER: Jan **Oort**

[10] Oort's B constant characterizes this property of the Milky Way. Rather appropriately, it is the curl of the velocity field.

ANSWER: local **vorticity** [or local **rotation**]

066-13-64-07213

14. Arthur Benjamin orchestrated some of this composer's keyboard sonatas into an oboe concerto. For 10 points each:

[10] Identify this composer of the comic opera *Il matrimonio segreto*.

ANSWER: Domenico **Cimarosa**

[10] Cimarosa was part of the musical school named for this Italian city, which also includes Alessandro Scarlatti. Particularly associated with opera buffa, this city also names a chord that is the major triad built on the lowered second degree of the prevailing key.

ANSWER: **Naples** [or **Napoli**]

[10] In his monograph *Dies Irae*, Robert Chase has high praise for Cimarosa's work of this type in G minor. Another monograph on these works, by Alec Robertson, is subtitled *Music of Mourning and Consolation*.

ANSWER: **requiem** mass [or **mass for the dead**; or **mass of the dead**; or **Missa pro defunctis**; or **Missa defunctorum**]

066-13-64-07214

15. These creatures, whose dung was toxic, also had steel-tipped feathers. For 10 points each:

[10] Name these birds, which were defeated after a rattle made by Hephaestus frightened them out of their swamp, allowing them to be shot with poisoned arrows.

ANSWER: **Stymphalian** Birds

[10] After Erysichthon was cursed to constant hunger for angering Demeter, he sold this daughter of his into slavery. Poseidon gave this girl the power to change into a bird so that she could repeatedly escape.

ANSWER: **Mestra**

[10] This young man was transformed into a rooster because he fell asleep at his post and failed to stop Helios from walking in on Ares and Aphrodite.

ANSWER: **Alectryon**

105-13-64-07215

16. This language family is found in the Texas-New Mexico area and the Pacific Northwest of the United States, and it completely dominates Western Canada. For 10 points each:

[10] Name this family of Native American languages, typified by the use of classifying prefixes before the verb root that mark degree of transitivity, which includes Athabaskan, Eyak, and Tlingit.

ANSWER: **Na-Dene** family

[10] This linguist erroneously included Haida in the Na-Dene family. This instructor of Hortense Powdermaker documented the Yahi language by working with Ishi, and lends his name to a principle of linguistic relativity.

ANSWER: Edward **Sapir**

[10] A 2008 paper by Edward Vajda demonstrates the link between the Na-Dene languages and languages such as Ket, Yuhh, and Pumpkol, which comprise this Siberian family named for the river valley where it was spoken; the proposed new family will incorporate its name with that of Na-Dene.

ANSWER: **Yeniseian** languages [or word forms of **Yenisei**]

019-13-64-07216

17. Supposedly this person's last words were "My god, don't shoot." For 10 points each:

[10] Name this con artist who was killed by Frank Reid at the Shootout on Juneau Wharf. This person first gained fame for establishing the Tivoli Club in Denver, Colorado.

ANSWER: Jefferson Randolph "Soapy" **Smith**

[10] Soapy Smith was killed while living in this state. It joined the Union several months before Hawaii did in 1959.

ANSWER: **Alaska**

[10] Soapy Smith moved to Alaska in response to this event. Many participants in this event arrived at Dyea or Skagway before travelling along the Chilkoot or White Pass trails to reach their final destination.

ANSWER: **Klondike Gold Rush** [or Alaska-**Yukon Gold Rush**; or **Last Great Gold Rush**; prompt on "Alaska Gold Rush"]

149-13-64-07217

18. All the elements in this group have two electrons in the 6s orbital and most have electrons in the 4f orbital. For 10 points each:

[10] Identify this group of elements that is usually paired with the actinides and whose ionic radius decrease with increasing mass in a namesake contraction.

ANSWER: **lanthanides**

[10] All lanthanides form cations with this charge, which is always their most stable oxidation state.

ANSWER: **three-plus** [or **trivalent**]

[10] Lanthanide contraction was first observed by this founding father of geochemistry, who developed the mineralogical phase rule, a variation of the Gibbs phase rule.

ANSWER: Victor **Goldschmidt**

066-13-64-07218

19. Name these seventeenth-century women of British literature, for 10 points each.

[10] This author of the plays *The Comical Hash* and *A Comedy of the Apocryphal Ladies* attached her *Observations Upon Experimental Philosophy* to her early science-fiction novel *The Blazing World*.

ANSWER: Margaret **Cavendish**

[10] This member of the "fair triumvirate of wit" wrote about Doctor Baliardo being convinced that his daughter and niece's paramours are aliens in *The Emperor of the Moon* and about a slave renamed Caesar being dismembered while alive in *Oronooko*.

ANSWER: Aphra **Behn**

[10] This member of the Society of Friendship was known as "Orinda" to the subjects of her "friendship lyrics," and is also known for her *Letters to Poliarchus* and *Upon the Double Murder of King Charles*.

ANSWER: Katherine **Philips**

019-13-64-07219

20. An implied shape of a crossbow in this painting is supposed to reference its commission by a guild of archers, and a man in red catches a swooning woman in a bright blue robe. For 10 points each:

[10] Name this T-shaped painting in which Joseph of Arimathea and Nicodemus facilitate the title action occur.

ANSWER: *The **Descent** of Christ **from the Cross*** [or *The **Deposition** of Christ*]

[10] *The Descent from the Cross* was painted by this Flemish artist of the *Seven Sacraments Altarpiece*.

ANSWER: Rogier **van der Weyden** [or Roger **de la Pasture**]

[10] Among the other multi-paneled works of van der Weyden is this altarpiece that contains panels of the birth, death, and resurrection of Jesus. It was named for its donation to a Spanish church.

ANSWER: ***Miraflores Altarpiece*** [or ***Triptych of the Virgin***; or *The **Altar of Our Lady***; or the ***Mary Altarpiece***]

002-13-64-07220

21. In *The Selfish Gene*, Richard Dawkins cited this story as an example of a "meme." For 10 points each:

[10] Name this ridiculous story whose narrator loses his ability to focus on daily tasks because a catchy jingle, addressed to train conductors, that he reads in a newspaper gets stuck in his head.

ANSWER: "A **Literary Nightmare**"

[10] This author of "A Literary Nightmare" penned "The Man that Corrupted Hadleyburg" and "The Celebrated Jumping Frog of Calaveras County".

ANSWER: Mark **Twain** [or Samuel Langhorne **Clemens**]

[10] In another Twain story, Chief Inspector Blunt tracks down Hassan Ben Ali Ben Salim Abdallah Mohammed Moist Alhammal Jamsetjeebhoy Dhuleep Sultan Ebu Bhudpoor, an escaped animal of this kind.

ANSWER: an **elephant** [or "The Stolen White **Elephant**"; or Indian **elephant**; or ***Elephas maximus indicus***]

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