

1. The phrase "sub rosa" derives from Roman depictions of this god with his finger to his lips holding a rose; that version of this god, which the Romans interpreted as a god of silence, represents the rising sun. This god was the father of Hapi, Imsety, and their two brothers, the protectors of the four cardinal directions. During a long-running conflict, he painted his wooden boat (\*) gray to get his opponent to use an actual stone boat, which then sunk. This god's right and left eyes were the sun and moon, which may be because his eye was gouged out by a deity he relegated to rule over storms and deserts. This god engaged in a series of contests with his uncle, Set. For 10 points, name this falcon-headed son of Osiris in Egyptian myth.

ANSWER: Horus [or Harpocrates]

<Bollinger>

2. Bruno Taut wrote three books on the architecture of this country, the home of the mid-20th-century Metabolist school. An architect from this country designed a peace memorial containing a concrete hyperbolic paraboloidal arch. The Wing Shuttle was created to move people through an airfoil-shaped airport terminal on an artificial island in this country designed by (\*) Renzo Piano. A Mayan Revival building in this country was designed to "float" on alluvial mud, allowing it to survive a 1923 earthquake. Parts of a religious complex in this country are torn down and rebuilt every twenty years, in an example of *wabi-sabi*. For 10 points, Frank Lloyd Wright's Imperial Hotel was once located in which Asian country, home to the Ise-Jingu Shinto shrine?

ANSWER: Japan [or Nippon-koku; or Nihon-koku]

<Carson>

3. This leader set up a network of People's Houses to encourage the growth of homegrown theater and opera. This leader delivered a speech over six days that justified the arrest of opponents under the Law on the Maintenance of Order and used the text of the Swiss law code as a basis for an overhauled legal system. Troops under this man entered Smyrna shortly before that city's Great Fire. This founder of the CHP, the chronologically-first signatory of the Treaty of (\*) Lausanne, picked Ismet Inonu as his successor. This man's principles, the Six Arrows, included a commitment to secularism which led him to mandate use of the Latin alphabet and ban the fez. For 10 points, name this founder of the Republic of Turkey and so-called "Father of all Turks."

ANSWER: Mustafa Kemal [or Kemal Ataturk]

<Jackson>

4. This man divided certain critics into "amazed", "peevishly hostile", and "universalist" groups in his essay "Where Angels Fear to Tread", which was later collected in his book *Morning Yet on Creation Day*. A line from Eliot's "Journey of the Magi" titles a novel by this man whose protagonist befriends William Green's secretary Marie Tomlinson and is arrested for taking a bribe in order to pay for an (\*) abortion for his girlfriend Clara, an osu. The protagonist's son takes the name Isaac after a religious conversion in a novel by this man about a son of Unoka who commits suicide after observing the colonization of Umuofia. For 10 points, name this author who wrote about the Okonkwo family in *No Longer At Ease* and *Things Fall Apart*.

ANSWER: Chinua Achebe [or Albert Chinualumogu Achebe]

<Carson>

5. This artist illustrated the effects of his own late-life intraocular hemorrhage in *The Artist's Retina*. His fondness for strong diagonal lines can be seen in paintings like *Girls on the Bridge*, and his other late works include *Self-Portrait Between Clock and Bed*. A series by this man includes a painting of a mother bowing her head in anguish over her title (\*) *Sick Child* and a depiction of a red-headed woman at three different ages called *The Dance of Life*. This painter also included his *Vampire* in his *Frieze of Life*. A swirling red and yellow sky tops his best-known painting, whose central figure stands on a bridge and puts his hands to his face. For 10 points, name this Norwegian artist of *The Scream*.

ANSWER: Edvard Munch

<Bentley>

6. In the field, this man interviewed Sioux children at Pine Ridge and assisted Alfred Kroeber in examining the Yurok. He examined "The Meaning of Meaning It" in a book that uses incidents such as the "revelation in the tower" and "the fit in the choir" to connect theological positions to the individual ego and developed his method of "psychohistory." This author of (\*) *Young Man Luther* also proposed industry and inferiority, intimacy and isolation, and integrity and despair as fundamental conflicts of existence. For 10 points, name this psychologist who developed an eight-stage model of personal development and described the tension at each stage with the term "identity crisis."

ANSWER: Erik Homburger Erikson

<Weiner>

7. A four-volume history of this war was written by Yale professor Donald Kagan. An earlier account of this war says that "words lost their meaning" during an uprising, and features the claim "The strong do what they can, while the weak suffer what they must" from the Melian debate. Superstition over a lunar eclipse led to a harbor massacre in this war after a general on the losing side was recalled on charges of defacing and castrating sacred (\*) statues. The Thirty Tyrants took power after this war, which began with a dispute at Corcyra. Its first twenty-three years were covered by Thucydides. For 10 points, name this war which included the Sicilian expedition of Alcibiades, and ended at Aegospotami when the Delian League's ships lost to Sparta.

ANSWER: Peloponnesian War [prompt on "Sicilian Expedition"]

<Jackson>

8. In 1986, the Giotto space probe was launched to study these phenomena, such as the Grigg-Skjellerup one. NASA's Stardust probe found the amino acid glycine in one of these named Wild 2. These phenomena's atmospheres give their name to a parabolic aberration in which off-axis point sources are distorted. When earth passes by one named Swift-Tuttle, the Perseid meteor shower occurs. One of these named (\*) Shoemaker-Levy 9 crashed into Jupiter in 1994. Long period ones may originate from the Oort Cloud. They are characterized by a core called the nucleus and a thin atmosphere referred to as a coma. For 10 points, name these "dirty snowballs" of the Solar System, one of which is named for Edmund Halley.

ANSWER: comets

<Jose>

9. One poem by this author begins with the Bellman noting thrice that where he landed his crew was "just the place" for the title activity, and that "What I tell you three times is true." The Baker mysteriously disappears at the end of that poem, which is subtitled "An Agony in 8 Fits". In another of this author's poems, after chasing his fiery-eyed "manxome" foe, a character stands by a Tumtum tree in "uffish thought." That poem opens with the line "twas (\*) brillig, and the slithy toves did gyre and gimble in the wabe," and sees the title creature slain with a vorpal blade. For 10 points, identify this British author of nonsense poems like "The Hunting of the Snark" and "Jabberwocky," which appeared in the sequel to *Alice's Adventures in Wonderland*.

ANSWER: Lewis Carroll [or Charles Lutwidge Dodgson]

<Schindler>

10. The residual of this quantity equals  $RT$  times the log of the fugacity coefficient. This quantity is used as a generating function since its canonical variables are temperature and pressure. The change in this quantity at non-standard state equals its change at the standard state, plus  $RT$  times the log of the reaction quotient, which can be used to derive the Nernst equation. This extensive quantity can be calculated by summing (\*) chemical potential over particle number. The change in this quantity at standard state equals negative  $RT$  times the log of the equilibrium constant. In general, it equals enthalpy minus temperature times entropy. For 10 points, name this quantity which determines if a process is spontaneous, named for an American chemist.

ANSWER: Gibbs free energy [or G; prompt on free energy]

<Silverman>

11. In one book, this man argues that the fall of the Roman Empire led to the rise of townsfolk with privileges over country folk. He argued for mandated universal education up to age ten in a book which worried that the repetition of one continuous task would dull laborers' minds. This man used the "sympathy" of an "impartial spectator" as the basis for a 1759 work of (\*) ethics that was inspired by his teacher Francis Hutcheson. This author of *A Theory of Moral Sentiments* discussed the "natural progress of opulence" in a huge book which noted the self-interest of brewers, butchers, and bakers in critiquing mercantilism. For 10 points, name this Scottish Enlightenment author who used the term "invisible hand" exactly once in *The Wealth of Nations*.

ANSWER: Adam Smith

<Jackson>

12. In *Njal's Saga*, the occurrence of this event to Hoskuldr results in the payment of an extra-large wergild. The ancestors of the Israelites did action this to a relative of Akhenaten, according to Sigmund Freud's *Moses and Monotheism*. Thomas de Quincey wrote an essay on this thing "Considered As One of the Fine Arts." An inquiring person at one's doorstep who seeks to do this act appears in (\*) Kant's argument against a "right to lie" in rough situations. This act gives the name for a group of crows. After "Honor thy mother and father," a ban on this action starts off a set of prohibitions in the Ten Commandments. For 10 points, name this crime which is split in many states' laws among several "degrees" and distinguished from manslaughter.

ANSWER: murder [or homicide; or killing another person; or being murdered; or being killed; prompt on death]

<Jackson>

13. This composer counted an arrangement of the quartet from Verdi's *Rigoletto* among his "concert paraphrases". He included musical depictions of Michelangelo's *The Thinker* and sonnets by Petrarch in a suite subtitled "Italy", following one subtitled "Switzerland". Stacked fifths, E - B - F-sharp - C-sharp, imitate the devil tuning his violin in the first of four pieces by this composer based on Nikolaus Lenau's version of (\*) *Faust*. This composer of the *Years of Pilgrimage* and the *Mephisto Waltzes* portrayed the title character being dragged by a horse in "Mazeppa", the fourth of his *Transcendental Études*. For 10 points, name this 19th-century piano virtuoso who composed the *Hungarian Rhapsodies*.

ANSWER: Franz Liszt [or Franz Ritter von Liszt; or Liszt Ferenc in either order]

<Lawrence>

14. This author created a character who is entrapped by the monstrously fat Brunelda after meeting the two drifters Robinson and Delamarche, but frees himself by applying for a job with the Nature Theater. One of his protagonists is engaged to the barmaid Frieda and struggles to set up a meeting with Klamm. Another of his novels opens with the chapter "The (\*) Stoker", in which the protagonist sees a sword-wielding Statue of Liberty. He died without finishing any of his novels, including one about the immigrant Karl Rossman and one in which the land surveyor K. is unable to gain access to the title fortification. For 10 points, name this Czech-German author of *Amerika* and *The Castle* who wrote about Gregor Samsa in *The Metamorphosis*.

ANSWER: Franz Kafka

<Carson>

15. Members of this group from Modena stole a Bolognese bucket, prompting the short-lived "War of the Bucket." A traitor who converted to this group, Bocca degli Abati, cut off the hand of a standard-bearer to help it to a decisive victory at the Battle of Montaperti. After this group raised an army from Arezzo which decisively lost the battle of Campaldino, its main opponents split into (\*) "White" and "Black" factions in Florence. Dante Alighieri opposed this faction, whose name originated with supporters of Hohenstaufens such as Frederick Barbarossa. For 10 points, name this faction of Italians that supported the Holy Roman Empire, and thus opposed supporters of the pope called Guelphs.

ANSWER: Ghibellines

<Hart>

16. During this conflict, a massacre at Parents' Creek led that river to be known as Bloody Run after a charge led partly by Robert Rogers failed. This war began after a council on the Ecorse river and its turning points included a Pyrrhic victory for Henry Bouquet at Bushy Run. The Fort Niagara treaty responded to this war, which inspired a drunken rampage in western Pennsylvania by the (\*) Paxton Boys. This war, which broke out shortly after the issuance of a Royal Proclamation forbidding settlements west of the Appalachians, included Jeffrey Amherst's strategy of infesting blankets with smallpox and consisted largely of a siege of Fort Detroit. For 10 points, name this 1763 uprising of Great Lakes Native American tribes, named for an Ottawa chieftain.

ANSWER: Pontiac's War [or Pontiac's Rebellion; or Pontiac's Conspiracy; accept any answer indicating that Pontiac or Obwandiyag led a military uprising]

<Hart>

17. The last of these people to appear contradicts his elders because "Great men are not always wise; neither do the aged understand judgment." The first of these people to speak is a Temanite who relates that "fear and trembling" came upon him after a spirit spoke. Their arguments earn the angry rejoinder, "I know that my Redeemer lives." A divine voice from a (\*) whirlwind interrupts the last of these people to speak, Elihu. The other three of these people, Eliphaz, Bildad, and Zophar, sit in mourning for seven days with a man who has just lost his wife, children, and livestock. For 10 points, identify this group of people who reproach a much-suffering companion in his namesake Old Testament book.

ANSWER: Job's friends [or Job's false comforters; or Job's interlocutors or Eliphaz, Bildad, Zophar, and Elihu until "Zophar" is read; prompt on Hebrews; prompt on Jews; prompt on theists]

<Bollinger>

18. Small-cell carcinomas cause this substance to have a granular, "salt-and-pepper" appearance. Smc complexes bind to this substance, forming loops separated by scaffold-associated regions. Proteins with a bromodomain motif will bind this substance. It is remodeled by the SWI/SNF complex. Immunoprecipitation of this substance is followed by a microarray in ChIP-on-chip. The 30-nanometer fiber is composed of this substance. It (\*) condenses when HATs methylate lysine. The -hetero- form of this substance stains more darkly than its open -eu- state, which looks like beads on a string. Nucleosomes are repeating regions of this substance. During prophase, it condenses into chromosomes. For 10 points, name this substance composed of DNA and histones.

ANSWER: chromatin

<Silverman>

19. In a fluid at rest, this principle requires that the components on the diagonal of the stress tensor be equal. This principle is often proven geometrically for a static fluid at rest by considering a triangular prism, or wedge. Due to this principle, the ratio of two forces must equal the ratio of the area over which they are applied in a hydraulic pump. It was apocryphally demonstrated by pouring water into a ten meter high tube attached to a barrel already filled with water, causing the barrel to promptly (\*) explode. This principle is often stated mathematically as fluid density times acceleration due to gravity times difference in height equals difference in pressure. For 10 points, name this law which states that the pressure exerted anywhere in a fluid is evenly distributed throughout and is named for Frenchman.

ANSWER: Pascal's law [or Pascal's principle; or the isotropy of pressure]

<Voight>

20. This man's son Owen narrates Russell Banks' novel *Cloudsplitter*. A poem about this man notes that "sometimes there comes a crack in time itself" and begins with an invocation of an "American muse" with a "strong and diverse heart." Another poem about this man claims his "knapsack is strapped upon his back" and that "his pet lambs will meet him on the way." In a poem by John Greenleaf Whittier, this man kisses a (\*) baby shortly before his death. This subject of a poem whose refrain is "glory, glory, Hallelujah" lends his name to an epic by Stephen Vincent Benet. For 10 points, name this abolitionist whose "soul's marching on" and whose body "lies a-mouldering in the grave" in a folk song Julia Ward Howe adapted into "The Battle Hymn of the Republic."

ANSWER: John Brown

<Mehigan>

21. Following this speech, the question "Will you be patient? will you stay awhile?" is asked after the listeners request to hear "a parchment with a seal" read. The orator of this speech dismisses a man's weeping with the line "ambition should be made of sterner stuff". It is delivered after an exchange among four numbered Citizens. This speech laments that "my heart is in the coffin" with its subject, and it notes that "the (\*) evil that men do lives after them, the good is oft interred with their bones" before repeatedly referring, sarcastically, to "honorable men." For 10 points, identify this speech delivered in the scene immediately after the stabbing of Julius Caesar, in which Antony asks the namesake three groups of people to "lend me your ears."

ANSWER: Antony's "friends, Roman, countrymen" speech [or Antony's funeral oration for Caesar or eulogy for Caesar or similar until "Caesar" is read]

<Weiner>

22. Hillel Furstenberg used a topological proof to show that a certain group of numbers have this property. A proof technique named after this property can be used to show that the square root of 2 is irrational and is known as this kind of "descent". In set theory, aleph numbers are used to describe the cardinality of sets with this property, which may be countable or uncountable. The continuum hypothesis states that there are no sets with a cardinality between that of two different sets that with this property: the (\*) integers and reals. L'Hopital's rule is applied to indeterminate forms, which can contain zero or this quantity. For 10 points, name this mathematical property of having no limit that is represented with a lemniscate symbol.

ANSWER: infinite

<Jose>

23. This monarch's court was influenced by the theologian and bishop Jacques-Benigne Bossuet. This monarch spent huge sums to repurchase Dunkirk and declare it a free port. He had the Canal du Midi completed to link the Atlantic with the Mediterranean in Languedoc. The trial of the Marquise de Brinvilliers was part of the Affair of the Poisons during his reign. After a huge feast at the Chateau of Vaux-le-Vicomte, this king's minister Nicolas (\*) Fouquet was arrested, allowing the rise of finance minister Jean-Baptiste Colbert. This king's enemies formed the League of Augsburg and lost the War of the Devolution. His Edict of Fontainebleau revoked the Edict of Nantes. For 10 points, name this French monarch who had Versailles constructed, the so-called Sun King.

ANSWER: Louis XIV [accept Louis the Sun King or Louis le Roi-Soleil before mentioned; prompt on "Louis the Great" or "Louis le Grand"]

<Bentley>

24. This company is negotiating with Panasonic and San Antonio to open a new Gigafactory. Its co-founder also helped start SpaceX and PayPal. Instead of selling products, its outlets are showrooms that direct potential buyers to its website. This company worked out a 2014 deal to keep its five New York outlets, shortly after its outlets were (\*) banned in New Jersey. It has pioneered the use of large numbers of lithium-ion cells in its products, and it recently added aluminum-titanium underbody shields to its Model S to reduce fire risks. Its initial product, the Roadster, is a sports car. For 10 points, name this Elon Musk company that sells electric cars and is named for a Croatian-American scientist.

ANSWER: Tesla Motors

<Reinstein>

1. In this novel, Pointsman trains an octopus named Grigori to respond to Katje. For 10 points each:  
[10] Identify this novel that follows Tyrone Slothrop's quest to uncover the secret of the V-2 rocket bearing serial number 00000, which is thought to contain the mysterious *Schwarzgerat*, or "black device."

ANSWER: **Gravity's Rainbow**

[10] This reclusive American postmodern novelist of *The Crying of Lot 49* wrote *Gravity's Rainbow*.

ANSWER: Thomas Ruggles **Pynchon** Jr.

[10] In this Pynchon novel, Reverend Wicks Cherrycoke relates the embellished tale of an adventure across part of America to Pitt and Pliny.

ANSWER: **Mason & Dixon**

<Mehigan>

2. This piece includes a nocturne whose melody for horn and bassoons depicts sleeping lovers, and an overture imitating the braying of another character. For 10 points each:

[10] Name this collection of music that concludes with its composer's famous Wedding March.

ANSWER: incidental music to *A **Midsummer Night's Dream*** [accept, but DO NOT OTHERWISE REVEAL, Felix **Mendelssohn**'s **Op. 61**]

[10] The incidental music to *A Midsummer Night's Dream* is by this German composer of symphonies nicknamed "Scottish" and "Italian".

ANSWER: Felix **Mendelssohn** [or Jacob Ludwig Felix **Mendelssohn**-Bartholdy]

[10] Mendelssohn's works *Elijah* and *St. Paul* are in this genre. Other works in this vocal genre include Giacomo Carissimi's *Jephthe* and Arthur Honegger's *King David*.

ANSWER: **oratorio**

<Lawrence>

3. This area is located two miles from the town of Bushmills. For 10 points each:

[10] Name this region of basalt columns, located in County Antrim, which was legendarily built by Fionn mac Cumhaill to reach the island of Staffa.

ANSWER: **Giant's Causeway** [or **Clochán an Aifir**; or **Clochán na bhFomhórach**]

[10] Giant's Causeway is located within this constituent country of the United Kingdom.

ANSWER: **Northern Ireland**

[10] Giant's Causeway is found twenty-five miles from this city on the River Foyle, where the 1972 "Bloody Sunday" massacre took place.

ANSWER: Londond**erry** [or **Doire**]

<Karas>

4. China is home to buildings called *nusi*, where women may serve in this leadership position. For 10 points each:

[10] Give this term for people who lead Islamic worship services at mosques.

ANSWER: **imams**

[10] Different sects of this second-largest Islamic denomination disagree over whether there are seven or twelve god-chosen imams. They believe that Ali is the successor to Muhammad.

ANSWER: **Shias** [or **Shiites**]

[10] Imams are not to be confused with these people, who can be of any gender, that have been recognized for their excellent knowledge of Islamic law, theology, and scripture.

ANSWER: **mullahs**

<Gupta>

5. Heptad repeats can occur when these structures interact. For 10 points each:

[10] Name these critical elements of protein secondary structure, which form from hydrogen bonds between every four amino acids. They are more common than beta sheets.

ANSWER: **alpha helix** [or **alpha helices**; prompt on partial answer]

[10] On a Ramachandran plot, alpha helices occur where this quantity is around -60 degrees. This quantity is the dihedral angle between amino groups if you look down the C-alpha C-prime bonding axis.

ANSWER: **psi** [do not accept "phi"]

[10] Alpha helices were discovered by this chemist, who won a Nobel Prize for his book *The Nature of the Chemical Bond* and also won a Nobel Peace Prize for opposing nuclear warfare.

ANSWER: Linus **Pauling**

<Silverman>

6. The U.S. Embassy in this country posts popular air pollution readings on its website. For 10 points each:

[10] Identify this Asian country whose capital has been plagued by an "airpocalypse" of heavy smog. Other environmental scandals in this country include 15,000 dead pigs dumped into the Huangpu River.

ANSWER: People's Republic of **China** [or **PRC**]

[10] One of the sources of Beijing's smog is due to production of this material in the nearby city of Shijiazhuang. George W. Bush signed a 2002 tariff on this good that was lifted in 2003.

ANSWER: **steel**

[10] In November 2013, over a hundred people were killed due to an accident involving one of these structures in China's city of Qingdao. TransCanada CEO Russ Girling advocates building one of these structures in the United States.

ANSWER: oil **pipeline**

<Bentley>

7. Many officers from this country were killed by Soviet troops in the Katyn Massacre. For 10 points each:

[10] Name this country which was ruled largely by the General Government during World War II. Jurgen Stroop liquidated a rebellious Jewish ghetto in this country, where Auschwitz was built.

ANSWER: Republic of **Poland** [or **Polska**]

[10] This Soviet organization led by Lavrenty Beria orchestrated massive killings of Poles, especially in the Ukraine.

ANSWER: **NKVD** [or **People's Commissariat for Internal Affairs**; or **Narodnyy Komissariat Vnutrennikh Del**]

[10] Nikita Khrushchev related many of the NKVD's abuses in this address, which denounced the way in which Stalin twisted the system for his own "glorification."

ANSWER: the **Secret** Speech [or "On the **Cult of Personality** and its Consequences"; or Khrushchev's Address to the **Twentieth** Party **Congress** of the Soviet Union]

<Bentley>



8. This man built on the progress of Bartolomeu Dias by sailing far past the Cape of Good Hope, though his failure to predict monsoon seasons stymied his progress. For 10 points each:

[10] Name this Portuguese explorer who stayed in Calicut during his voyages to India.

ANSWER: Vasco **da Gama**

[10] da Gama paved the way for Portugal to obtain this small state in western India, which remained under Portuguese control until the 1960s.

ANSWER: **Goa** [or Old **Goa**; or Velha **Goa**]

[10] da Gama acquired these goods from the Malabar coast in an attempt to break Venetian monopolies on their trade. Holdings in Kerala produced these goods, and a search for them inspired Afonso de Albuquerque to find the Maluku Islands near Indonesia.

ANSWER: **spices** [or **peppers**; or black **pepper** grains; or **cloves**; or **nutmeg**; or **mace**]

<Jackson>

9. Tristan fakes a noble title for Teodoro to allow Diana, the Countess of Belflor, to marry him in an Aesop-inspired comedy of manners by this man entitled *The Dog in the Manger*. For 10 points each:

[10] Name this author of *La Arcadia*, *The Knight of Olmedo*, and hundreds of other plays, the foremost playwright of the Spanish Golden Age.

ANSWER: **Lope** de Vega [or Félix Arturo **Lope** de Vega y Carpio]

[10] In this Lope de Vega play, after the dastardly Commander breaks up the wedding of Laurencia and Frondoso and tries to have them executed, he is killed by a mob who then attributes his murder to the title town.

ANSWER: **Fuenteovejuna** [or *The Sheep Well*]

[10] The gullible Auté and the Ongol-worshipper Dulcán are among the Indians who appear in a Lope de Vega play about the discovery of the New World by this Genoese explorer.

ANSWER: Christopher **Columbus** [or Cristóbal **Colón**; or Cristoforo Colombo; accept *The New World Discovered by Christopher **Columbus*** or *El Nuevo Mundo descubierto por Cristóbal **Colón***]

<Carson>

10. Multiplication of these objects is non-commutative. For 10 points each:

[10] Name these arrays of numbers that feature rows and columns.

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

[10] This term is the sum of the elements on the main diagonal of a square matrix.

ANSWER: **trace**

[10] A formula named for this German mathematician relates the time derivative of the determinate of a matrix with the trace of its adjoint. This man also names a matrix consisting of the first order partial derivatives of a function.

ANSWER: Carl Gustav Jacob **Jacobi**

<Karas>

11. In the second of three columns attacking a certain genre of literature, Edmund Wilson asked "Who cares" who was responsible for the title event of this novel. For 10 points each:

[10] Identify the novel featuring the popular character Caroline Sheppard, whose brother James serves as the narrator and, at the end, is revealed to have been the culprit.

ANSWER: *The Murder of Roger Ackroyd*

[10] This Belgian detective solves the case in *The Murder of Roger Ackroyd*. He first appeared in *The Mysterious Affair at Styles* and also solved the *Murder on the Orient Express*.

ANSWER: Hercule Poirot [accept either underlined name]

[10] Hercule Poirot was created by this English mystery novelist, who also wrote *And Then There Were None* and many stories starring Miss Marple.

ANSWER: Agatha Mary Clarissa Christie

<Schindler>

12. This son of Labdacus was told not to have a child by his wife, whom Homer calls Epicaste. For 10 points each:

[10] Name this king of Thebes who was the first husband of Jocasta. He was murdered by his son while he was travelling on the way back from the Delphic oracle.

ANSWER: Laius

[10] This unfortunate hero was the one who murdered his father Laius and married his own mother Jocasta. His other exploits include ridding Thebes of the sphinx.

ANSWER: Oedipus

[10] This son of Oedipus became one of the Seven against Thebes after he and his brother could not share the throne peacefully. Creon ordered that this man be refused burial.

ANSWER: Polynices

<Jose>

13. Nino Bixio commanded a ship hijacked from a shipping company to provide transportation for volunteers in this campaign. For 10 points each:

[10] Name this campaign against the Kingdom of the Two Sicilies. The 1860 Battle of Volturnus was part of this campaign.

ANSWER: Expedition of the Thousand [or Spedizione dei Mille; prompt on "Risorgimento" or "Italian unification"]

[10] This bearded Italian patriot, who once fought for the breakaway Rio Grande do Sul region in South America, led his Red Shirts on the Expedition of the Thousand.

ANSWER: Giuseppe Garibaldi

[10] The Expedition of the Thousand aimed to depose a Sicilian king of this name. The second French king of this name married Mary, Queen of Scots, while the first attracted Leonardo da Vinci to his court.

ANSWER: Francis [or Francois]

<Bentley>

14. Linda Tripp recorded her conversations with this woman and turned them over to Ken Starr. For 10 points each:

[10] Name this White House staffer, whose relationship with Bill Clinton was the subject of Clinton's 1998 impeachment.

ANSWER: Monica Samille **Lewinsky**

[10] In this other Clinton-era scandal, David Hale accused the president and first lady of forcing him to loan money for a failed Little Rock real estate venture while Clinton was Arkansas's governor.

ANSWER: **Whitewater** scandal [or **Whitewater** affair; or **Whitewatergate**; or **Whitewater** Development Corporation]

[10] The 1993 death of this Deputy White House Counsel for Clinton was determined to be a suicide. Richard Scaife's Arkansas Project fueled unproven speculation of foul play from the Clintons in this man's death.

ANSWER: Vincent Walker "Vince" **Foster**, Junior

<Wasserman>

15. In 2014, Obokata et al. were found to have fabricated results indicating that cells subjected to stress would behave like these cells. For 10 points each:

[10] Name these cells which can be formed by reprogramming adult cells, or can be extracted from the inner cell mass of the embryo. They can differentiate into many other different cell types.

ANSWER: **stem** cells [or **induced pluripotent stem** cells; or **embryonic stem** cells; or other types of stem cells]

[10] Specifically, embryonic stem cells are extracted from this structure's inner cell mass. It develops from the morula and has around 100 to 200 cells.

ANSWER: **blastula** [or **blastocyst**]

[10] Another way to make stem cells is by injecting the nucleus of one of these cells into an ovum which has its own nucleus removed. This term refers to pretty much any body cell that's not a germ cell.

ANSWER: **somatic** cell

<Silverman>

16. The energy of a particle in this system scales with the energy level squared. For 10 points each:

[10] Name this model from quantum mechanics in which a particle is constrained to move along a free space that is bounded by impenetrable barriers.

ANSWER: **particle in a box** [or **infinite square well**]

[10] The particle cannot leave the box since that would mean the particle would have an infinite value for this quantity. In classical mechanics, the gravitational form of this quantity is given by mass times height times little g.

ANSWER: **potential** energy

[10] For a particle in a box, this quantity is h-bar squared times pi-squared divided by quantity eight times mass times the length of the box squared. This quantity is the lowest possible energy state a quantum system may have.

ANSWER: **zero point** energy [or **ground state** energy; or **E-sub-1**; do not accept "E-sub-0"]

<Jose>

17. The CUDOS principles developed from this sociologist's theories of proper scientific research. For 10 points each:

[10] Name this American sociologist who claimed that sociology should focus on blending abstract concepts and empirical data into "middle-range" theories in his book *Social Theory and Social Structure*.

ANSWER: Robert King Merton [do NOT accept "Robert Cox Merton"]

[10] Merton's theory of criminal deviance focuses on the relationship between culture, social structure, and this term he borrowed from Emile Durkheim. This term indicates a disintegration of social norms and a disconnect between goals and means to obtain them.

ANSWER: anomie

[10] Merton divided the function of social habits into "manifest" and "latent", terms he pilfered from this subconscious-obsessed German psychologist who wrote *The Interpretation of Dreams*.

ANSWER: Sigmund Freud

<Spencer>

18. This man is the father of Mabel, who he offers in marriage to Frederick before the reprise of "Poor wand'ring ones" in the Act II finale of the work he appears in. For 10 points each:

[10] Name this man who patters that he is "very good at integral and differential calculus" and claims to have "information vegetable, animal, and mineral".

ANSWER: Major-General Stanley [accept either underlined portion]

[10] Major-General Stanley claims to be the "very model of a modern major-general" in this Gilbert and Sullivan operetta, in which Frederick is apprenticed to the title buccaneers.

ANSWER: *The Pirates of Penzance: Or, the Slave of Duty*

[10] In *The Pirates of Penzance*, this four-syllable chant is sung by the chorus of police throughout Act II, undergirding such songs as "When the foeman bears his steel" and "With cat-like tread".

ANSWER: "Taran-tara, taran-tara!"

<Jackson>

19. Questions over the attribution of this play to its usual author were raised by Mark Griffith's 1977 study of its "Eigenwörter" and by other critics' analysis of its so-called "Zeus problem". For 10 points each:

[10] Identify this play whose title character is visited by Hermes, Io, and the Oceanids on a mountain in the Caucasus, where he was placed by Kratos, Bia, and Hephaestus on Zeus's orders.

ANSWER: Prometheus Bound [or Prometheus Desmotes]

[10] *Prometheus Bound* may or may not have been written by this earliest of the three major Greek tragedians. His other plays include *Seven Against Thebes* and the *Oresteia* trilogy.

ANSWER: Aeschylus [or Aiskhulos]

[10] Originally produced as part of a trilogy with the now-lost *Phineus* and *Glaucus*, this Aeschylus play unusually depicts then-recent historical events. It includes a scene in which Queen Atossa summons the ghost of Darius to confirm their son's hubris.

ANSWER: *The Persians* [or Persai]

<Carson>

20. This artist earned his common surname as part of a beatification campaign that was finally completed in 1982. For 10 points each:

[10] Identify this artist of *Madonna of the Star*. A blue Jesus sits above an angel holding a cross in the central panel of his *Last Judgment* altarpiece, and he created several works for the Priory of San Marco under the patronage of Cosimo de' Medici.

ANSWER: Fra Angelico [or Guido di Pietro; or Fra Giovanni da Fiesole; or Fra Giovanni Angelico; or Il Beato Angelico]

[10] Latin words shoot out of the pink-glad, golden-winged angel Gabriel's mouth towards this woman in Fra Angelico's *Cortona Annunciation*. This woman is the central subject of most depictions of the Annunciation.

ANSWER: the Blessed Virgin Mary [prompt on "the Virgin" or "Madonna"]

[10] Another friar patronized by Cosimo de' Medici was Fra Lippo Lippi, who painted an altarpiece depicting the funeral of this saint. In a Dürer engraving, this man sits at his desk writing, while a dog and a lion lie around in the foreground.

ANSWER: Saint Jerome [or Hieronymous; or *The Funeral of St. Jerome*; or *St. Jerome in his Study*]

<Bentley>

21. This Welsh émigré to America worked for the *New York Herald*. For 10 points each:

[10] Name this reporter-turned explorer, who greeted a long-missing British missionary in central Africa with the understatement "Dr. Livingstone, I presume?"

ANSWER: Henry Morton **Stanley**

[10] Description acceptable. Livingstone's goal was finding this geographic feature uncharted by Europeans, which Arab traders led him to at Lake Victoria.

ANSWER: finding the **origin** of the White **Nile** River [accept descriptive answers substituting **source**, **headwaters**, etc. for "origin"; prompt on "finding Lake Victoria"; do not accept any answer indicating "Blue Nile"]

[10] This earlier Scottish explorer traveled along the Niger river a few decades before the Scramble for Africa and drowned in it in 1806.

ANSWER: Mungo **Park**

<Jackson>

22. This novel describes a hypothetical implementation of the Slaterry Report. For 10 points each:

[10] Name this novel in which the half-Tlingit ("klin-kit"), half-Jewish Berko Shemets helps Meyer Landsman investigate a murder in Sitka.

ANSWER: *The **Yiddish Policemen's Union***

[10] *The Yiddish Policemen's Union* is by this Jewish-American author of *Wonder Boys* and *The Amazing Adventures of Kavalier and Clay*.

ANSWER: Michael **Chabon**

[10] *The Yiddish Policemen's Union* is set in this US state. Jon Krakauer's book *Into Thin Air* is an account of Chris McCandless' foolhardy hundred-day survival in the bush of this state.

ANSWER: **Alaska**

<Mehigan>

23. This class of macromolecules includes waxes, sterols, and fats. For 10 points each:

[10] Name this class of macromolecules which are nonpolar, in contrast with carbohydrates, proteins, and nucleic acids.

ANSWER: **lipids**

[10] Triglycerides have this compound as their backbone. This three-carbon triol is very soluble in water and is used as a cryoprotectant as well.

ANSWER: **glycerol**

[10] Another class of lipids has this 18-carbon compound as a backbone. Lipids containing this compound, called ceramides, form amide linkages to fatty acids, and are especially prevalent in myelin.

ANSWER: **sphingosine** [prompt on **sphingolipids**]

<Silverman>