

Minnesota Undergraduate Tournament 2016: A Vat of Ranch Dressing or a Bullet to the Head
Questions by Sam Bailey, Rob Carson, Mike Cheyne, Akhil Garg, Carsten Gehring, Andrew Hart, Ike
Jose, Shan Kothari, Cody Voight, Najwa Watson, and NOT Cory Haala
Packet 2: Tossups

1. In one of the earliest short stories from this country, a man with sideburns shaved in the shape of a "U" is tortured and killed by supporters of its dictator. In addition to "The Slaughter Yard", another work attacking that leader of this country is a book that contrasts the urbane civilization of the author with the barbarism of men like Juan Facundo Quiroga. The last Spanish viceroyalty established in South America contained land now mostly in this country. The Unitarians in this country opposed the Federalists, who were led by (*) Juan Manuel de Rosas. One of the first independence movements in South America began in what is now this country when residents overthrew the viceroy Cisneros. The May Revolution is the namesake of a plaza in its current capital. For 10 points, name this country whose capital is Buenos Aires.

ANSWER: Argentina <Bailey>

2. Thorpe and Ingold proposed an explanation for why replacing hydrogen with alkyl groups on compounds with this geometry could accelerate cyclization reactions. The high ring strain in the simplest propellanes causes this geometry to be inverted at each bridgehead. Intermediates with this geometry are formed after a nucleophile pushes a pair of electrons from a carbon to an (*) oxygen in the first step of nucleophilic acyl substitution. Hemiacetals ("hemi" ASS-et-alls) and acetals have this geometry. AX₄E₀ describes this shape in VSEPR ("VESPER") theory, in which the central atom is sp³ hybridized and each bond angle is 109.5 degrees. For 10 points, name this molecular geometry of methane in which four substituents are bonded to a central atom.

ANSWER: tetrahedral [or word forms] <Garg>

3. After nearly dying during a dental procedure, this man wrote the text *Excalibur*, which claimed the "one command" in life was "to survive". His son, once known as "Nibs", eventually accused this man of practicing black magic. He used a former cattle ferry called the *Royal Scotman* as the flagship of a group of ships he sailed around the world. The head of the (*) Guardian Office was this man's wife, who was implicated in a scheme to infiltrate U.S. government agencies called Operation Snow White and was named Mary Sue. This "Commodore" of the Sea Organization designed the E-meter and devised a way for followers to "go clear" and become "Operating Thetans". The book *Dianetics* was written by, for 10 points, what science fiction author and founder of the Church of Scientology?

ANSWER: L. Ron Hubbard [or Lafayette Ronald Hubbard] <Cheyne>

4. The twentieth anniversary of this man's death provided the occasion for a 2007 "letter to" him written by Congolese author Alain Mabankou (ma-bahn-KOO). Editor Christopher Jackson suggested that a contemporary writer adopt the "cold" tone of this man, who was free of "sentiment and melodrama", resulting in a work that discusses "a country lost in the Dream". This man wrote that his "gimmick" was, "by an unforeseeable paradox", his entry into the Christian church, in an essay that examines his eventual disillusionment with religion entitled (*) "Down at the Cross". This man collected that essay along with "My Dungeon Shook" in a book that inspired Ta-Nehisi Coates's *Between the World and Me*. *The Fire Next Time* is by, for 10 points, what African-American author who created John Grimes in his novel *Go Tell it on the Mountain*?

ANSWER: James Baldwin [or James Arthur Baldwin] <Hart>

5. This man described interviewing Jesse Jackson as “boxing a glacier” and encouraged listeners to “enjoy that metaphor, because your grandchildren will have no idea what a glacier is”, in a speech in which he told Ray Nagin that Washington D.C. is “the chocolate city with a marshmallow center”. He described the role of the press as “typing decisions down” after encouraging journalists to “write that novel...about the intrepid Washington reporter with the courage to stand up to the administration...you know, fiction!” In a discussion of approval ratings, this man said that he wouldn't drink from a glass that's (*) two-thirds empty because “the last third is usually backwash” in a speech in which he claimed that “reality has a well-known liberal bias”. For 10 points, name this man who lampooned George W. Bush at the 2006 White House Correspondents Dinner in character from his namesake “report” (ruh-PORE).

ANSWER: Stephen Colbert [or Stephen Tyrone Colbert] <Hart>

6. This man wrote of a “fisherman's boy” who “shouts with his sister at play” in a short poem whose repetitive title phrase is followed by “on thy cold gray stones, O sea!” In another short poem by this author, the title animal stands “ring'd with the azure world”, watching “from his mountain walls”, and “like a thunderbolt he falls”. This author wrote that “the woods decay, the woods decay and fall” at the beginning of a poem about a man who only consumes “cruel (*) immortality” that provided the title for Aldous Huxley's novel *After Many a Summer Dies the Swan*. This author of “Break, Break, Break”, “The Eagle”, and “Tithonus” wrote “theirs not to reason why; / theirs but to do and die” in a poem that describes how “the six hundred” rode “half a league onward” into the “valley of Death”. For 10 points, name this British poet of “The Charge of the Light Brigade”.

ANSWER: Alfred, Lord Tennyson [or Alfred Tennyson] <Hart>

7. When asked when lunch is, one character in this opera responds that love will cure his hunger in the aria “Un'aura amorosa”. In a 3/8 (“three”-“eight”) duet in this opera, two characters alternate until joining together at the lines “Perché batte qui?” and “Che mai balza li?” on staccato sixteenth notes. A woman accepts a heart-shaped locket from her suitor in that duet, “Il core vi dono”. The composer allegedly wanted to make Adriana Ferrarese's head “bob like a chicken” with the large leaps in the aria (*) “Come scoglio”. While dressed up as a doctor, the maid Despina uses a magnet to “cure” two men who pretended to poison themselves. Those two men dress up as Albanians to seduce each other's fiancées, Fiordiligi and Dorabella. For 10 points, name this Mozart opera in which Don Alfonso makes a wager with Ferrando and Guglielmo to prove that women are fickle in love.

ANSWER: Così fan tutte, ossia *La scuola degli amanti* [or All Women Are Like That, or *the School for Lovers*; be generous in accepting similar translations] <Kothari>

8. This phenomenon is minimized in transmission lines by using impedance matching, which makes use of a coefficient named for this phenomenon that's equal to $Z_{\text{sub-}L}$ minus $Z_{\text{sub-nought}}$ over $Z_{\text{sub-}L}$ plus $Z_{\text{sub-nought}}$ and represented by gamma. This phenomenon occurs in an isotropic manner for Lambertian surfaces. Graphite and beryllium are used in nuclear reactors because they cause (*) neutrons to undergo this phenomenon. When this phenomenon occurs with respect to a surface with a higher index of refraction, a wave's phase changes by 180 degrees. This phenomenon can be diffuse or specular; in the latter case, the angle of incidence equals the angle corresponding to this phenomenon. For 10 points, name this phenomenon that occurs when light hits a mirror.

ANSWER: reflection [accept word forms such as reflecting; prompt on “emission”] <Garg>

9. This country was opposed by war loans made by Wall Street banker Jacob Schiff. The commander of its Second Army shot himself in a forest after his forces were wiped out by a numerically inferior opponent. The book *Ten Days That Shook the World* by John Reed is about this country. Bread riots broke out in this country's then-capital city on International Women's Day. Its military suffered a devastating defeat at the Battle of (*) Tannenberg against forces led by Paul von Hindenburg. This country stopped fighting in World War I with the Treaty of Brest-Litovsk, despite having been a Triple Entente member with France and England. For 10 points, name this country that experienced a 1917 Bolshevik revolution overthrowing the tsar.

ANSWER: Russia [or Russian Republic; or Soviet Russia; or Soviet Union; or U.S.S.R.; or Union of Soviet Socialist Republics] <Cheyne>

10. In Sanskrit, *dvandvas* agglomerate these words with an implied “and”. In X-bar theory, a type of phrase with this kind of head word that lacks an explicit determiner has a zero determiner. The Case Filter states that any overtly realized word of this type must have abstract Case. The contents of one of four categories of these words in Dyrbal names a George Lakoff book. In English, some of these words are formed through (*) initial-stress derivation. Classes of these words may denote things like animacy distinctions or, in Indo-European languages, gender. A type of phrase whose head word is this part of speech is denoted NP on syntax trees. The “count” type of these words may be pluralized. For 10 points, name this part of speech that functions as the name of a particular thing or set of things, and may be replaced by a pronoun.

ANSWER: nouns [or noun phrases; or nominal phrases; prompt on “N” or “NP”; prompt on “determiner phrases” or “DP”] <Kothari>

11. The Christian song “This Is Your Time” was inspired by this event. In a film primarily about this event, which did not take place in New York, a montage of American aggression abroad is set to the song “What a Wonderful World”. Evangelicals claimed that Cassie Bernall professed to believe in God shortly before being killed in this event. A documentary about it featured interviews with Matt Stone, (*) Charlton Heston, and Marilyn Manson. The perpetrators of this incident were accused of being part of “The Trenchcoat Mafia”, and an urban legend claimed they designed levels in the game *Doom* to plan for it. For 10 points, name this 1999 incident perpetrated by Eric Harris and Dylan Klebold that resulted in fifteen deaths in a Colorado high school.

ANSWER: Columbine High School massacre <Cheyne>

12. One of this composer's early hits was inspired by Christian Schönbein's discovery of nitrocellulose and features recurring “explosion” effects. The Concordia Writers' Association commissioned a piece from this man that was given a title pairing it with a similar work written for the same occasion by Jacques Offenbach. This composer of *Morning Papers* responded to rumors that he was having an affair with a Russian woman with a piece whose title means “chit-chat”. A short flute cadenza introduces a solo passage for (*) zither in one of this man's more popular pieces, while another features a theme beginning with the rising notes of the D major triad D-F sharp-A, followed by two As an octave higher, then two F sharps. This composer of the *Tritsch-Tratsch Polka* is the son of the composer of the *Radetzky March*. For 10 points, name this composer of *Tales from the Vienna Woods* and *The Blue Danube*, known as “the Waltz King”.

ANSWER: Johann (Baptist) Strauss Jr. [accept Johann Strauss II or Johann Strauss the Younger or anything else that differentiates him from his father; prompt on partial answers] <Carson>

13. These animals are the namesake of the only family of mammals to possess heavy-chain antibodies. Their earliest-known ancestor was the North American *Protylopus*. The males of one species of these animals can inflate a large pink organ in their throats called a dulla, which hangs out of the mouth in mating displays. These mammals have oval-shaped red blood cells that can expand to more than twice their normal size. A management program headquartered in Alice Springs is dedicated to reducing the feral population of these animals in central (*) Australia. Recent findings on Ellesmere Island suggest that, counterintuitively, a cold climate may have been the reason they developed their characteristic fat deposits. For 10 points, identify these ungulate animals whose Bactrian and dromedary varieties differ in their number of humps.

ANSWER: camels [accept Camelus or camelidae; accept Bactrian camels or dromedary camels or Arabian camels] <Carson>

14. A poem sometimes titled as a “poem from” this modern-day country is a mantra that the author would recite while brushing his teeth that begins “brush your teeth up and down, brother”. A condemned man from this country avoids a puddle on the way to the gallows, inspiring a reflection on death, in the essay “A Hanging”. The Indian Dr. Veraswami and Elizabeth Lackersteen appear in a novel in which John Flory is a teak merchant in this country. The narrator performs the title action “solely to (*) avoid looking a fool” in an essay set in this country’s city of Moulmein. Before publishing a memoir about poverty in Paris and London, a man named Eric Arthur Blair served as a colonial policeman in this country, which inspired his essay “Shooting an Elephant”. For 10 points, name this country, once a British colony, the setting of a novel titled for its “days” that was written by George Orwell.

ANSWER: Burma [accept Myanmar; accept Burmese Days or “Poem from Burma”] <Hart>

15. The Italian Romantic painter Francesco Hayez depicted two angels among the smoke rising from this building as people are thrown over a wall in an 1867 painting of its destruction. Norfolk retiree Alec Garrard’s painstaking recreation of a 1:100 scale model of this building was fictionalized in W.G. Sebald’s book *The Rings of Saturn*. Giuseppi Ribera and William Holman Hunt both painted a scene in which a child is “found” after delivering a disputation in this building; like an episode in which a “veil” in this building tears, that scene is a common entry in the Life of (*) Christ. A whip-wielding man flips over tables and threatens a crowd of retreating merchants in a scene painted five times by El Greco in which Christ drives the money-changers out of, for 10 points, what building in Jerusalem that contained the Holy of Holies?

ANSWER: The Second Temple in Jerusalem [or Herod’s Temple or Herodian Temple] <Hart>

16. This ruler legendarily saved two soldiers from quicksand prior to fighting in the Battle of Dinant against Conan II, the Duke of Brittany. He was once shipwrecked and taken captive by Guy I at Ponthieu, where he allegedly was forced to swear an oath on sacred relics supporting another man’s claim to the throne. This king’s exiled brother eventually returned and defeated two northern earls at the Battle of Fulford. This ruler decisively defeated the invading (*) Harald Hardrada and this man’s brother Tostig at the Battle of Stamford Bridge, which occurred shortly before this man’s downfall. He was shown receiving an arrow in his eyes in his depiction in the Bayeux Tapestry. For 10 points, name this king killed by the forces of William the Conqueror at the Battle of Hastings.

ANSWER: Harold II [or Harold Godwinson] <Cheyne>

17. This man claimed that the objects of study in physics and the gods of Homer “differ only in degree and not in kind” from an epistemological view. He rejected Leibniz's notion of interchangeability used in explaining the synonymy of “bachelor” and “unmarried man” in his discussion of the difference between statements that are true by virtue of their meaning and those that are true by virtue of fact. One of his essays argues that the belief that any statement can be separated into a linguistic component and factual component has led to unwarranted support for reductionism and the (*) analytic/synthetic distinction. That essay by this man calls science “a field of force whose boundary conditions are experience” and recalls the theories of Pierre Duhem that the truth or falsity of statements cannot be tested separately from all other beliefs. For 10 points, name this author of “Two Dogmas of Empiricism”.

ANSWER: Willard Van Orman Quine [or W.V.O. Quine; do not accept or prompt on “William Van Orman Quince”] <Bailey>

18. In one play by this author, a man inadvertently obtains a miniature portrait of a girl he helps after she faints on the street, which eventually leads each of the four central characters to think that his or her love interest has a secret lover. This man ended another of his plays with the title character dancing with gypsies while chanting jargon in Latin and French. In that play, this author of *Sganarelle* created a title character who pretends to be dead, causing his wife to run away in joy and his daughter, whom he had previously tried to marry off to Thomas (*) Diafoirus, to break down and vow to become a nun. Richard Wilbur used rhyming couplets to translate a play by this man that ends with a police officer arresting the title religious fraudster instead of Orgon. For 10 points, name this comic French playwright who wrote *The Imaginary Invalid* and *Tartuffe*.

ANSWER: Molière [or Jean-Baptiste Poquelin] <Hart>

19. Damage will occur if this process takes place above or below the optimal rate, according to the “two-factor hypothesis” of Peter Mazur. The ability of certain animals to withstand this process was studied by P. F. Scholander and Art DeVries, whose research led to the discovery of a small alpha-helical Type I protein found in sculpins. Proteins that confer resistance to this process may function because their threonine side chains can form hydrogen bonds. Christopher Polge devised a way to utilize this process in cattle breeding. Converting glycogen to blood glucose and foregoing (*) urination for several months to preserve built-up urea in their bodies allows wood frogs to survive this process, which plants withstand after undergoing a process called “hardening”. AFPs are proteins that confer resistance to, for 10 points, what process that *Listeria* bacteria can survive, which enables *Listeria* to contaminate ice cream?

ANSWER: freezing [accept answers mentioning frozen or below-zero or turning to ice] <Hart>

20. A character of this name once rescued the mute Bharata from robbers who attempted to sacrifice him. A popular story about another figure of this name describes how she stuck out her tongue in shame after stepping on her husband's chest with her right foot, thus assuming the “dakshina” pose. In another story, Parikshit encounters a character of this name disguised as a sudra who had just broken three of the four legs of a bull representing Dharma. Periods named Satya, Treta, and Dvapara precede the one with this name, the final stage in the cycle of (*) yugas. A deity of this name was created during a battle against the demon Raktabija, whose blood she then drank. The demon with this name is the foe of the similarly-named tenth avatar of Vishnu, while the goddess with this name represents the force of time and has black skin. For 10 points, give this name held by the sword-wielding aspect of Durga who was worshiped by the Thuggees.

ANSWER: Kali [accept Kalika or Mahakali] <Carson>

Tiebreaker. **Subrahmanyan Chandrasekhar unpacked much of this book's mathematics in a version "for the common reader". A lemma in this work proved there are no algebraically integrable smooth convex ovals in two dimensions. This work's second edition has a forceful rejection of vortex theories, and its third book provides four rules of reasoning, including that like effects have like causes. Later editions of this work are supplemented with a *General Scholium* claiming that "I (*) contrive no hypotheses" in response to the charge that this work introduced "occult agencies". This work's opening "Definitions" section defines quantities like mass and absolute space and time. This work's author dropped its "System of the World" section after Robert Hooke accused him of copying his inverse-square law of gravitation. Three laws of motion were also proposed in, for 10 points, what magnum opus of Isaac Newton?**
ANSWER: *Philosophiae Naturalis Principia Mathematica* [prompt on "*Principia*"; do not accept or prompt on "Whitehead and Russell's *Principia Mathematica*" or "Alfred North Whitehead's *Principia Mathematica*" or "Bertrand Russell's *Principia Mathematica*"] <Kothari>

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Packet 2: Bonuses

1. The heating-oil-hoarding antagonist of the 1997 Val Kilmer vehicle *The Saint* has this surname, as does the man who became the first person born and trained outside of North America to be inducted into the Hockey Hall of Fame. For 10 points each:

[10] Give this surname whose most famous holder is undoubtedly longtime CSKA Moscow goalie Vladislav.

ANSWER: **Tretiak**

[10] Vladislav Tretiak was inexplicably pulled by Soviet head coach Viktor Tikhonov after the first period of this 1980 game, which turned out to be a major factor in the American team's shocking upset victory. It takes its common name from an exclamation made by commentator Al Michaels.

ANSWER: the **Miracle on Ice** [or the 1980 **Winter Olympics** mens' hockey **semifinal** between the USSR and the USA]

[10] In the 2004 film *Miracle*, American coach Herb Brooks was played by this actor, who starred as Snake Plissken in *Escape from New York* and *Escape from L.A.*. He also played Stuntman Mike in *Death Proof*.

ANSWER: Kurt **Russell** [or Kurt Vogel **Russell**] <Carson>

2. This author decried the "gelatin democracy" of Vienna during the "gay apocalypse" of the late 1890s in a book titled *Hugo von Hofmannsthal and His Time*. For 10 points each:

[10] Name this Austrian writer and friend of Robert Musil whose trilogy *The Sleepwalkers* is a modernist masterpiece of German-language literature. He also wrote *The Death of Virgil*.

ANSWER: Hermann **Broch**

[10] Broch was also acquainted with this German-language writer, whose novels include *Buddenbrooks* and *The Magic Mountain*.

ANSWER: Thomas **Mann** [or Paul Thomas **Mann**]

[10] Broch's *The Death of Virgil* makes extensive use of this modernist literary technique. May Sinclair was the first to use this term, which was coined by William James, in the literary context.

ANSWER: **stream of consciousness** [accept **interior monologue**] <Hart>

3. In the 1870s, Henry Chapman Ford created a portfolio of his paintings of these places. For 10 points each:

[10] Name these locations set up by the Spanish. Junipero Serra founded the first nine of them in the 1700's at places like modern-day Ventura.

ANSWER: **missions** [or **misiones**; prompt on **monasteries**]

[10] Serra's Spanish missions were located in this modern-day state at modern cities such as Santa Clara and San Juan Capistrano.

ANSWER: **California**

[10] Twenty one missions in California were connected with this 600-mile pathway administered by the Spanish that stretched from San Diego to Sonoma.

ANSWER: El **Camino Real** [or The **Royal Road**; or The **King's Highway**] <Cheyne>

4. At two points in this symphony's 3/2 ("three"- "two") finale, the low strings play an ostinato consisting of slurred harmonic minor scales, first in F-sharp minor, then in D minor. For 10 points each:

[10] Name this D major symphony begun in Rapallo, Italy and premiered in 1902. Its three-note rising theme is first presented as a series of slurred tenuto quarter-notes in the strings at the outset of its 6/4 ("six"- "four") first movement.

ANSWER: Symphony No. 2 by Jean Sibelius [or Sibelius's Second Symphony]

[10] The second movement of Sibelius's Second Symphony begins with a long pizzicato section for this lowest bowed string instrument in the standard orchestra, whose strings are tuned in fourths.

ANSWER: double bass [or string bass; or upright bass]

[10] Sibelius started his Second Symphony not long after the premiere of this explicitly nationalist tone poem, which protested Russia's control over his native country.

ANSWER: Finlandia <Kothari>

5. A 2010 paper by John Scannella and Jack Horner argued that *Toro•saurus* specimens were actually adult versions of this dinosaur. For 10 points each:

[10] Name this dinosaur whose two primary species are named *prorsus* and *horribilis*. This regular prey of *Tyrannosaurus rex* is named for the three horns on its face.

ANSWER: Triceratops

[10] *Triceratops* was named by this famed 19th-century Yale paleontologist, who engaged in a long-running rivalry with Edward Drinker Cope dubbed "the Bone Wars".

ANSWER: Othniel C. Marsh [or Othniel Charles Marsh]

[10] Among the many other dinosaurs named by Marsh was this long-necked Jurassic sauropod. Its name refers to the "double-headed" chevron bones found on the underside of its tail.

ANSWER: Diplodocus <Carson>

6. A 2009 study by Betsey Stevenson and Justin Wolfers found that the self-reported well-being of these people has been decreasing since the 1970s. For 10 points each:

[10] Name this group of people whose labor supply increased dramatically in the late 1960s. Although their relative wages have been rising, they still only make between 78 and 93 cents for every dollar of their counterparts.

ANSWER: American women [accept equivalents such as females or ladies]

[10] These two economists argued that the availability of oral contraceptives increased the female labor supply. Name either of these people, who claimed that skill-biased technological change explained growing wage inequality in *The Race Between Technology and Education*.

ANSWER: Claudia Goldin and Lawrence Katz [accept either]

[10] Francine Blau and Lawrence Kahn found that little of the wage gap can be explained by differences in this quantity, the stock of knowledge and skills possessed by workers. Gary Becker wrote a 1964 book titled for it.

ANSWER: human capital [prompt on "capital"] <Bailey>

7. This particular policy was meant to cultivate peaceful coexistence but insisted it would not tolerate armed provocation. For 10 points each:

[10] Name this foreign policy implemented in 1998 as an attempt to improve relations with a particular country's northern neighbor. It was created during the presidency of Kim Dae Jung.

ANSWER: sunshine policy

[10] The sunshine policy was directed at this communist nation, which is led by Supreme Leader Kim Jong-un.

ANSWER: North Korea [or Democratic People's Republic of Korea; or DRPK; do not accept "Republic of Korea"]

[10] Well before the sunshine policy attempted to ease relations between north and south, this man led South Korea during the Korean War as the country's first president. Accused of corruption, he was forced out in 1960's April Revolution.

ANSWER: Syngman Rhee <Cheyne>

8. Answer the following about John Milton and blindness, for 10 points each.

[10] Milton's blindness forced him to hire several amanuenses, or literary helpers, including this English poet of "To His Coy Mistress".

ANSWER: Andrew **Marvell**

[10] Milton's sonnet "On His Blindness" is alternately titled for its first line, which reads "when I consider how" followed by these four words.

ANSWER: **my light is spent**

[10] In the play *Samson Agonistes*, Milton described the blinded Samson with this three-word phrase, which Aldous Huxley used to title a 1936 novel about Anthony Beavis.

ANSWER: **eyeless in Gaza** <Hart>

9. Max Beckmann painted a self-portrait "with" one of these objects in which he is dressed as a businessman in a suit and tie, holding a polka-dot sash suggestive of the circus. For 10 points each:

[10] Name this kind of object that inspired the proto-Pop Artist Stuart Davis's 1921 painting *Lucky Strike*.

ANSWER: **cigarettes** [prompt on "**tobacco** products" or equivalents]

[10] Another self-portrait with a cigarette was painted by this artist, whose *Death in the Sick-Room* was collected into a series of paintings called *The Frieze of Life*.

ANSWER: Edvard **Munch**

[10] This 20th-century painter showed a dead body smoking in his *Skull of as Skeleton with a Burning Cigarette*.

ANSWER: Vincent **van Gogh** [or Vincent Willem **van Gogh**] <Hart>

10. The film *Lorenzo's Oil* describes the use of erucic acid to treat ALD, in which very-long-chain fatty acids are trapped because of this division, though that treatment is limited because erucic acid is also partly blocked by this division. For 10 points each:

[10] Name this division maintained by tight junctions that only allows the passage of water, gases, and some lipid-soluble molecules into parts of the nervous system.

ANSWER: **blood-brain** barrier [accept **BBB**]

[10] The endo•thelial cells that make up the blood-brain barrier are connected to the "feet" of these glial cells in the brain, which are named for their star-shaped appearance.

ANSWER: **astrocytes**

[10] This secretory organ of the brain's circum•ventri•cular system is not protected by the blood-brain barrier. Hagfish lack this structure, whose secretions are modulated based on inputs from the super•chias•matic nucleus.

ANSWER: **pineal** gland [or **pineal** body or **conarium** or **epiphysis cerebri**] <Hart>

11. In this country, the pollster Tarki surveys opinions about the non-existent Piresian people to gauge general anti-immigrant sentiment. For 10 points each:

[10] Name this Eastern European country currently ruled by the national conservative Fidesz party.

ANSWER: **Hungary**

[10] In response to an uptick in Middle Eastern refugees, Hungary built a border wall and temporarily suspended the Dublin Agreement, which binds most members of this continent-wide organization established by the Maastricht Treaty.

ANSWER: **European Union** [or **EU**]

[10] The conservative Law and Justice Party, known for its Euroscepticism, made huge gains in 2015 elections in this country, much of whose government was killed in a 2010 plane crash.

ANSWER: **Poland** [or Republic of **Poland** or Rzeczpospolita **Polska**] <Kothari>

12. A possibly apocryphal story describes how, during a heated debate, St. Nicholas of Myra punched this man in the face. For 10 points each:

[10] Name this Egyptian presbyter whose teachings—according to which Jesus Christ was a creation of, and thus subordinate to, God the father—became a major bone of contention at the very first ecumenical council.

ANSWER: Arius [accept Arianism]

[10] That first ecumenical council adopted this standardized profession of the Christian faith, which took its name from the city in which the council was held. It was later modified at the First Council of Constantinople.

ANSWER: Nicene Creed [or the Niceno-Constantinopolitan Creed; prompt on "Constantinopolitan Creed"]

[10] Arius was inspired by the writings of this controversial early Christian theologian, who had argued that the Son, despite being "eternally generated", was subordinate to the Father. This man's rather literal interpretation of Matthew 19:12 apparently led him to castrate himself.

ANSWER: Origen Adamantius <Carson>

13. An emperor from this dynasty tried to install the sun god "Deus Sol Invictus" as the chief deity. For 10 points each:

[10] Name this dynasty whose members included the sexually deviant Elagabalus and bathhouse creator Caracalla. It takes its name from the emperor who seized power at the end of the Year of the Five Emperors.

ANSWER: Severan dynasty [or Severus]

[10] Caracalla was killed by a member of the Praetorian Guard, much like this earlier Roman emperor, the insane successor to Tiberius whose nickname means "little soldier's boot".

ANSWER: Caligula [prompt on Gaius Julius Caesar]

[10] The Severan dynasty finally fell apart during this tumultuous series of events, a fifty-year period in which numerous men claimed the throne and the empire split apart until Aurelian reunited it.

ANSWER: Crisis of the Third Century [prompt on Imperial Crisis; prompt on Military Anarchy] <Cheyne>

14. Kenyon and Hilda flee back to America at the end of this novel, in which one of the protagonists, an artist named Miriam, is hounded by a man who is eventually thrown off of the Tarpeian rock by her suitor. For 10 points each:

[10] Name this novel about a group of artists living in Rome, the final member of which, Donatello, may or may not be descended from the subject of a Praxiteles sculpture.

ANSWER: *The Marble Faun*

[10] In this novel by the same author, the daguerreotypist Holgrave falls in love with the visiting Phoebe Pyncheon, whose relatives Hepzibah and Clifford are suffering under the curse laid on their ancestor by Matthew Maule.

ANSWER: *The House of the Seven Gables*

[10] *The Marble Faun* and *The House of the Seven Gables* were written by this early American novelist most famous for *The Scarlet Letter*.

ANSWER: Nathaniel Hawthorne <Carson>

15. Substituted examples of these compounds are produced from alpha-halogen ketones and beta di•carbonyls in the Feist-Benary synthesis. For 10 points each:

[10] Name this volatile compound whose five-membered aromatic ring structure consists of four carbons and an oxygen. A common polar solvent called THF is a cyclic ether that has eight hydrogens instead of this compound's four.

ANSWER: furans

[10] Dangerous pollutants called PCDFs are unwanted byproducts of the creation of di•benzo•furans, which are formed when one or more hydrogens are replaced by this second-lightest halogen. This element is often used to sanitize swimming pools.

ANSWER: chlorine [or Cl; accept poly•chlorinated di•benzo•furans]

[10] In the Paal-Knorr synthesis, furan compounds can be created from the one-four-di•ketones using this element's pentoxide. This element forms the tetrahedral center of sarin gas, where it is bonded to a fluorine atom.

ANSWER: phosphorus [or P] <Hart>

16. Answer the following about a literary and political meeting that occurred on Martha's Vineyard in 1995, for 10 points each.

[10] The meeting, which concerned the ongoing Cuban embargo, brought together Bill Clinton and his favorite author, this Colombian who wrote *One Hundred Years of Solitude*.

ANSWER: Gabriel **García Márquez** [or Gabriel José de la Concordia **García Márquez**; prompt on partial last name]

[10] Clinton's unprompted recitation, while pacing around the table, of Benjy's entire monologue from Faulkner's *The Sound and the Fury* inspired the end of this other attendee's novel *The Eagle's Throne*. This author also wrote *The Old Gringo* and *Aura*.

ANSWER: Carlos **Fuentes** [or Carlos **Fuentes** Macías]

[10] The meeting took place at the home of this American author, whose 1990 memoir *Darkness Visible* recounted his battle with depression. His first novel was the 1956 work *Lie Down in Darkness*.

ANSWER: William **Styron** [or William Clark **Styron** Jr.] <Hart>

17. Brian De Palma's film *Obsession* was heavily based on this earlier movie. For 10 points each:

[10] Name this 1958 film in which detective Scottie Ferguson becomes obsessed with Madeleine Elster, who apparently jumped to her death from a mission's bell tower. In the climax of this movie, Scottie finally overcomes the title fear.

ANSWER: **Vertigo**

[10] *Vertigo* was directed by this "Master of Suspense", who also directed films like *Rear Window* and *Psycho*.

ANSWER: Sir Alfred Joseph **Hitchcock**

[10] Hitchcock often claimed his favorite of his movies was this 1943 film, in which the protagonist, teenager Charlie Newton, discovers that her favorite uncle, also named Charlie, is actually a serial killer.

ANSWER: **Shadow of a Doubt** <Cheyne>

18. George Cruikshank drew a cartoon of this man that called him "Old Bumblehead". For 10 points each:

[10] Name this monarch whose relatively brief reign was interrupted by the Hundred Days after a man returned from Elba. This king was succeeded by his brother, who was himself overthrown in the July Revolution.

ANSWER: **Louis XVIII** [prompt on "**Louis**"]

[10] Louis XVIII was the brother of this king, who was executed during the French Revolution.

ANSWER: **Louis XVI** [prompt on "**Louis**"]

[10] In 1816, Louis XVIII relaxed tariffs in order to fight massive famines in France; those food shortages partially occurred due to climate change prompted by the eruption of Mount Tambora, which is why 1816 is frequently known by this nickname.

ANSWER: **Year without a Summer** [accept names that suggest there is no summer; or **Eighteen Hundred and Froze to Death**; prompt on **Little Ice Age**; prompt on **Poverty** Year] <Cheyne>

19. Answer the following about the life and times of Cephalus, for 10 points each.

[10] Cephalus's wife Procris gave him two gifts, a javelin that never missed its target and this dog that never failed to catch its quarry. Cephalus set this dog on the trail of the uncatchable Teumessian fox, but Zeus got irritated at the paradox and turned them to stone.

ANSWER: **Laelaps**

[10] Those gifts were a part of the reconciliation between Procris and Cephalus after the latter returned from an eight-year stay with this rosy-fingered goddess, who had kidnapped him during a hunting trip. This Greek goddess of the dawn similarly abducted Orion and Tithonus.

ANSWER: **Eos**

[10] After Cephalus returned from Eos in disguise and seduced Procris, she angrily fled to the forest to hang out with this virgin goddess of the hunt, the sister of Apollo.

ANSWER: **Artemis** <Carson>

20. Answer the following about testing general relativity before the discovery of gravitational waves, for 10 points each.

[10] The perihelion of this planet shifts toward the sun to a greater degree than what Newton's laws forecast, but its movement matches the predictions of GR exactly. Since this planet is the closest to the sun, it would show the most noticeable effects of the sun bending space-time.

ANSWER: **Mercury**

[10] This GR phenomenon comes in strong, weak, and micro variants, the last of which has been helpful in finding extrasolar planets. This phenomenon is also responsible for creating Einstein crosses and rings.

ANSWER: **gravitational lensing** [prompt on "**lensing**"]

[10] This form of frame-dragging causes nearby gyroscopes to slightly change their precession. This effect was first measured in 1997.

ANSWER: **Lense-Thirring** precession or effect <Garg>

Extra. Answer the following about weird deaths, for 10 points each.

[10] This Athenian lawgiver died when a crowd tried to show its approval by throwing hats and shirts on him, which led to him being smothered. He is better known for extremely harsh laws that were mostly repealed by Solon.

ANSWER: **Draco**

[10] This Danish scientist and author of *Introduction to the New Astronomy* died after contracting a kidney ailment that was brought on by a banquet in which he refused to leave the table to relieve himself so as to avoid committing a social faux pas.

ANSWER: **Tycho Brahe** [accept either part]

[10] Saint Lawrence died when he was roasted to death on a gridiron, which is why he is the patron saint of cooks; the execution was ordered by this emperor, who was himself skinned alive after becoming the first Roman emperor captured in battle during a fight against the Sassanids at Edessa.

ANSWER: **Valerian** the Elder <Cheyne>