

Bulldog High School Academic Tournament XXI (2012): Oh God, Not the Spider Cows!

Written by Yale Student Academic Competitions

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Round 9 Tossups

1. In one of this author's novels, the sinking of the ship *Wilhelm Gustloff* is commemorated by the journalist Paul Pokriefke. In one of his novels, a cat scratches the Adam's apple of the protagonist, who steals an Iron Cross medal, "The Great Mahlke". This author of *Crabwalk* controversially revealed that he had served in the S.S. while talking about his memoir, *Peeling the Onion*. The most famous protagonist of this author of *Cat and Mouse* is an "auditory clairvoyant" whose voice can shatter glass named Oskar Matzerath. For 10 points, name this German author whose Danzig trilogy begins with *The Tin Drum*.

ANSWER: Gunter Wilhelm Grass <JL>

2. In one appearance, this character steals a box with a spoon and is later tied to a tree. Another commercial features him dressed as a scientist mixing crystals into yogurt. In a different sequence of events, he robs a train in an attempt to obtain the product he advertises. For a temporary promotion, he appears in a world which has been turned entirely lime green to showcase a new flavor. He also appears in a world without color until his associated cereal arrives. For 10 points, identify this animal who is frequently told that his desired cereal is "for kids".

ANSWER: Trix rabbit [prompt "Silly Rabbit" or "Rabbit"] <MPG>

3. This man's work with L. J. Savage argued that wealth causes a curvature in an individual's expected utility function, and he argued against the American Medical Association for raising fees by restricting the number of doctors. He argued for totally replacing welfare with a negative income tax, and predicted stable consumer behavior in his "permanent income hypothesis". This economist blamed the Federal Reserve for the 1929 "Great Contraction" in *A Monetary History of the United States*. For 10 points, name this Nobel-winning Chicago School economist who founded monetarism and wrote *Capitalism and Freedom* before advising Ronald Reagan.

ANSWER: Milton Friedman <MHH>

4. This author wrote about the sexual awakening of the vicar's daughter Yvette in *The Virgin and the Gypsy*. Gerald Crich and Rupert Birkin become romantically involved with the Brangwen sisters in this author's sequel to his *The Rainbow*. This author of *Women in Love* wrote about an aspiring artist who is beloved of Clara Dawes and Miriam Leivers, Paul Morel. His most famous protagonist has an adulterous affair with her groundskeeper, Oliver Mellors. For 10 points, name this English author of *Sons and Lovers* and *Lady Chatterley's Lover*.

ANSWER: D[avid] H[erbert] Lawrence <JL>

5. This element is the one whose behavior is most similar to muonium. Organic solvents containing the heaviest stable isotope of this element are used in the most common form of NMR, which observes this element's lightest isotope. It was sequestered in a palladium lattice in Fleischmann and Pons's apparatus for cold fusion. Reforming of methane with steam yields carbon monoxide and this element's molecular form. The reduction potential of its cation form on a platinum electrode defines a zero standard electrode potential. It forms relatively strong noncovalent bonds with electronegative atoms. Bronsted acids donate its cation. For 10 points, name this lightest element.

ANSWER: hydrogen [accept H; accept hydrogen ion; accept hydrogen cation; accept H+; accept dihydrogen; accept H2; accept molecular hydrogen; prompt on "deuterium"] <Ashvin>

6. This city's Roman name included *Felicitas Iulia*, and it built the Jerónimos monastery from taxes on East Indies goods after becoming a center of spice trading. Military supporters of a nonviolent revolution in this city blocked their guns' barrels with carnations in the spring of 1974. This city was reconquered from Muslims in 1147 by Afonso I. In 2009, Ireland became the last EU nation to affirm a treaty named for this city, which was the seat of the Aviz and Braganza dynasties and suffered a 1755 earthquake. For 10 points, name this Iberian city from whose ports Vasco da Gama sailed in service of the Portuguese king who lived there.

ANSWER: Lisbon [or Lisboa] <CSM>

7. This man penned the line “the world’s more full of weeping than you can understand” in “The Stolen Child”. In another poem, he asks sages to become the singing-masters of his soul, and declares that unless “the Soul claps his hand sing”, “an aged man is but a paltry thing”. In one poem by this man, the speaker says “a vast image out of Spiritus Mundi / Troubles my sight.” This poet wrote an introduction to Tagore’s *Gitanjali* and wrote the line “That is no country for old men.” In another poem, the title event means that “The falcon cannot hear the falconer; / Things fall apart, the center cannot hold.” For 10 points, name this Irish poet of “Sailing to Byzantium” and “The Second Coming.”

ANSWER: William Butler **Yeats** [pronounced “Yates”] <SJW>

8. One theory of this phenomenon suggests that it occurs when cosmic rays trigger a runaway avalanche of particles, and it may itself trigger terrestrial gamma-ray flashes. A descending stepped leader connects to a return stroke along an ionized channel that subsequently is superheated by this phenomenon, producing a shock wave. This process may produce fulgurites, a form of glass. It proceeds along a path that may be formed by runaway breakdown in the atmosphere, and it usually occurs due to a negative potential in the clouds. For 10 points, give the name for atmospheric electrical discharges, which are often accompanied by thunder.

ANSWER: **lightning** [prompt on “electricity” or word forms; prompt on “sprites”; prompt on “jets”; prompt on “elves”; do not accept “thunder”] <AS>

9. This locale traded copper and beads with Werowocomoco. One of its leaders held a gun to the head of its enemy Opechancanough, who raided this place twice. It was originally built with wooden walls as a triangular fort while Christopher Newport was captain of the *Susan Constant*. Baron de la Warr arrived at this place after its “starving time.” Strict rationing and tobacco growth helped save this settlement at the behest of John Rolfe. For 10 points, name this colony which fought the Powhatans and was settled by English colonists such as John Smith in what’s now Virginia in 1607.

ANSWER: **Jamestown** [prompt “Virginia” until “Virginia” is read] <MJ>

10. This artist depicted the title figure dressed like a vestal virgin, glancing over her shoulder, while reclining on an Empire-style sofa in his *Portrait of Madame Recamier*. In another of his paintings, a woman in orange clutches her crying children as corpses are borne in on the left, behind the title figure, who sits in the shadows. The title figure of another painting by this artist of *The Lictors Bring to Brutus the Bodies of His Sons* holds a letter from Charlotte Corday as he slumps in his bath. Another painting by him shows three brothers reaching towards three swords held by their father. For 10 points, name this French painter of *The Death of Marat* and *Oath of the Horatii*.

ANSWER: Jacques-Louis **David** <JL>

11. At one point in this opera, a character sings of his desire for a wife while a glockenspiel accompaniment represents his bells, after which he pledges his love to an elderly woman and she transforms into a pretty girl. This opera’s antagonist gives her daughter a dagger and orders her to kill another character. That aria is known for its stratospheric high Fs and titled “Der Hölle Rache.” The trials of Sarastro are humorously failed by the bird catcher Papageno, and Pamina’s mother is the malicious Queen of the Night. For 10 points, name this German-language opera by Mozart, in which Tamino passes several trials with the help of the title enchanted instrument.

ANSWER: *The **Magic Flute*** [or *Die **Zauberflöte***] <KK>

12. This figure led the Nonpartisan Bloc for Support of Reforms and bolstered his country’s economy with the Balcerowicz Plan. This man, who declared that he’d sooner resign than sign any bill legalizing abortion, extracted promises from a general in sunglasses during the Roundtable Talks. This man mourned his successor in 2010 after that successor died in a Smolensk airport plane crash. He got his start in the Lenin shipyards by leading a strike of workers in Gdansk against Communism. For 10 points, identify this former electrician who founded the Solidarity movement, the first democratically-elected president of Poland.

ANSWER: Lech **Walesa** [approx. *vah-WEN-suh*; accept more Anglicized pronunciations] <MPG>

13. One political youth group in this country uses a white X on a red background as its logo, and has a name meaning “Ours.” “The party of crooks and thieves” is a common refrain among this country’s dissidents. Yabloko’s failure to obtain a single seat in this country’s legislature helped spawn its “anti-Orange protests,” which erupted among wearers of white ribbons in this country three months before its leader blamed the wind for his tears during an acceptance speech. Anti-government blogger Alexei Navalny was arrested in, for 10 points, what country which blamed Hillary Clinton for protests in Bolotnaya square preceding the re-election of Vladimir Putin?

ANSWER: Russian Federation [or Rossiyskaya Federatsiya] <SL>

14. This book claims that just as monks wrote saints’ biographies on top of classical manuscripts, German philosophers write over French ideas. Its first section notes that after explorers discovered America, the world market could not be sustained by feudalism. Its opening groups “pope and Czar, Metternich and Guizot” in a “holy alliance.” It advocates abolishing inheritance and confiscating rebel property in a ten-point program. This book opens with the image of a “spectre ...haunting Europe” and endorses the proletariat in their class struggle with the bourgeoisie. For 10 points, name this booklet outlining the political ideology of Friedrich Engels and Karl Marx.

ANSWER: The Communist Manifesto [or Manifesto of the Communist Party; or Manifest der Kommunistischen Partei] <MJ>

15. One play by this author concerns a plot to transform 1839 Wylie into the Bedford Hills Redevelopment Project by Roosevelt Hicks and Harmond Wilkes. 1839 Wylie was previously featured in a play about Aunt Ester, *Gem of the Ocean*, also by this playwright of *Radio Golf*. In one of his plays, Boy Willie wants to sell the title object treasured by Berenice in order to buy back land their ancestors had worked on as slaves. His most famous protagonist is a retired baseball player turned garbage man named Troy Maxson. For 10 points, name this African-American playwright who included the plays *The Piano Lesson* and *Fences* in his Pittsburgh Cycle.

ANSWER: August Wilson <JL>

16. Condenser microphones use variable versions of this device to transduce sound. “Super” examples of this device use high-surface-area substances like charcoal in a double-layer to achieve better performance than in electrolytic ones. In parallel, its equivalent characteristic parameter is the sum of the individual characteristic parameters. Fringing fields tend to draw dielectric materials into these devices, in which the dielectric separates two conducting plates. Their namesake property is measured by the amount of charge they store per unit voltage. For 10 points, name this device which stores energy in an electric field, whose namesake property is measured in Farads.

ANSWER: capacitors [accept variable capacitors; accept supercapacitors] <DSteinberg/AS>

17. This man names a prose text describing Nebro and Saklas, two rebel angels who created humanity; that text describes Adamas emerging from a luminous cloud and was written in Coptic. During a foot-washing, this man is described as carrying a purse full of money. In one account, he died when his intestines burst on Hakeldama, the Field of Blood. This namesake of a Gnostic gospel was buried in a potter’s field after hanging himself in despair. He received thirty pieces of silver for entering the Garden of Gethsemane and kissing another man to mark him for arrest. For 10 points, identify this Apostle who betrayed Jesus to the Romans.

ANSWER: Judas Iscariot [or Ioudas; or Yehuda] <SSp>

18. This man ordered a state funeral for a man called “King Freddie.” The State Research Bureau answered to this man, who was deposed after a failed attempt to conquer the Kagera province. After declaring “economic war,” he expelled all ethnic Indians and all other Asians from his country. This successor of Milton Obote harbored an Air France plane hijacked by Palestinians, resulting in the Entebbe raid from Israel. In one of many eccentricities, this general, an ally of Gaddafi, declared himself “King of Scotland.” For 10 points, name this man who ruled from 1971 to 1979 and was accused of cannibalism while dictator of Uganda.

ANSWER: Idi Amin Dada <CSM>

19. This being’s three children with a serf, a peasant, and a wealthy noblewoman are said to be the basis of social classes. In one myth, this deity responds to a theft by slapping another god in the form of a seal and recovering the Brisingamen necklace, which Loki had stolen. This god’s home, renowned for its fine mead, is Himinbjorg. This god with nine mothers has teeth made of gold and ears which can hear grass growing. A sound from this man signals the beginning of Ragnarok. For 10 points, name this god who blows the Gjallarhorn and guards the Bifrost bridge in Norse myth.

ANSWER: Heimdallr [prompt “Rig”] <SSp>

20. The standard treatment for this disease uses a drug which may act by generating high-valent iron in this disease's pathogen from a porphyrin derivative. That drug is artemisinin. Some species of this disease's pathogen, such as *vivax*, can remain dormant in the liver in hypnozoite form, others such as *P. falciparum* cannot. Its pathogen sequesters insoluble hemozoin; the conversion of hemozoin back to heme is the mechanism by means of which cinchona derivatives like quinine act to combat this disease. People with at least one gene for sickle-cell disease are resistant to it. For 10 points, name this disease caused by Plasmodium and transmitted by the Anopheles mosquito.
ANSWER: malaria [prompt on "Plasmodium" before "pathogen" is read] <IP/AS>

[STOP HERE]

[You have reached the end of the round. Do not continue reading unless the game is tied or a tossup was thrown out earlier in the round.]

21. Paul Wittgenstein commissioned several specialized works of this genre, including the fourth of these by Sergei Prokofiev. Another piece in this genre begins with alternating chords and low Fs, imitating the sound of bells. That C-minor work is the second by its composer. Another piece of this type begins with a timpani roll that leads to an A-G-sharp-E figure in the solo part. That A-minor work is the only piece in this genre by Edvard Grieg, and Rachmaninoff wrote four. Beethoven's fifth and final essay in this genre is in E-flat major. For 10 points, name this type of composition for orchestra and keyboard soloist, exemplified by Beethoven's "Emperor."
ANSWER: piano concertos [accept equivalents like concertos for piano and orchestra, prompt on partial answer; accept left-hand concertos or equivalents before "Prokofiev"] <KK>

Round 9 Bonuses

1. Answer these questions about linguistics, for 10 points each.

[10] This MIT professor revolutionized the study of syntax and posited the existence of a “universal grammar” with which children acquire language. He expresses his leftist political views in books such as *Manufacturing Consent*.

ANSWER: Avram Noam **Chomsky**

[10] Chomsky’s work obsoleted the *Course in General Linguistics* by this 19th-century intellectual, who also wrote on the arbitrariness of the linguistic signifier.

ANSWER: Ferdinand de **Saussure**

[10] Saussure also put forth the laryngeal theory of this language family’s “Proto-” ancestor, which in turn underwent changes to become Proto-Germanic and Proto-Italic.

ANSWER: **Indo-European** language family [or **Proto-Indo-European**; prompt “PIE”] <IP>

2. Answer the following about gases, for 10 points each:

[10] In the Van der Waals equation, the correction represented by the term with moles squared divided by volume squared, multiplied by the “a” parameter, corresponds to this physical phenomenon.

ANSWER: **intermolecular forces** [or **intermolecular attraction**; or obvious equivalents like **forces among particles**]

[10] That correction is added to this thermodynamic variable in the Van der Waals equation. Boyle’s law describes its relationship with volume.

ANSWER: **pressure**

[10] The Van der Waals equation is a more accurate version of this gas law, which relates pressure, volume, and temperature to the number of moles via its namesake constant, often denoted R.

ANSWER: **ideal gas** law <DStobierski/AS>

3. On his long journey home after the Trojan War, Odysseus encountered many temptations. For 10 points each, answer these questions about women in *The Odyssey*:

[10] This mortal woman proves faithful to Odysseus by resisting the advances of suitors for all twenty years he’s away. Odysseus fathered Telemachus with this wife of his.

ANSWER: **Penelope**

[10] The witch Circe turned Odysseus’s men into these creatures, turning them back after a year of Odysseus’s love. The Erymanthian and Calydonian ones were slain by Meleager and Heracles, respectively.

ANSWER: **pigs** [or **boars**; or **hogs**; or **swine**]

[10] The immortal nymph Calypso held Odysseus captive on this island for seven years. Zeus sent Hermes to a cave on this island with orders to set Odysseus free.

ANSWER: **Ogygia** [or **Ogygiē**] <RB>

4. This quantity, with reciprocal approximately 137, is the coupling constant that defines the strength of electromagnetic interactions. For 10 points each:

[10] Name this quantity, which takes its name from the first-order relativistic correction to atomic energy levels.

ANSWER: **fine structure** constant

[10] The study of the quantum version of this effect allows accurate determination of the fine structure constant, via the von Klitzing constant. Its classical version describes the voltage on a current-carrying conductor in a B-field.

ANSWER: **Hall** effect [accept **quantum Hall** effect]

[10] The historical occurrence of this process at Oklo could have provided evidence that the fine structure constant is not constant. This process occurs spontaneously in superheavy nuclides, and is used in modern nuclear reactors.

ANSWER: nuclear **fission** [accept **uranium fission** or obvious equivalents; prompt on “nuclear reaction” or obvious equivalents; do not accept answers containing “fusion”] <AS>

5. The novel's action is set into motion when Magua's plan to lead the Munro family into an ambush is foiled. For 10 points each:

[10] Name this novel set at Fort William Henry during the French and Indian War, the second novel to feature Natty Bumppo.

ANSWER: The *Last of the Mohicans*

[10] *The Last of the Mohicans* is one of the *Leatherstocking Tales* by this American author.

ANSWER: James Fenimore Cooper

[10] Natty Bumppo was first introduced in this prequel to *The Last of the Mohicans*, in which he prevents an attack on the Huron by "Hurry Harry".

ANSWER: The *Deerslayer* <JL>

6. The set of these numbers is often denoted Q. For 10 points each:

[10] Name these numbers which have a terminating or repeating decimal representation. The roots of polynomials with these numbers as coefficients are algebraic numbers.

ANSWER: rational numbers [or rationals]

[10] This operation applied to the rationals and the integers yields the rationals. Performing this operation on two sets creates a new set containing all members of both sets.

ANSWER: union

[10] This term describes sets that cannot be put into one-to-one correspondence with the rationals. The real numbers have this property. Aleph numbers larger than aleph-nought describe these sets.

ANSWER: uncountable [or uncountably infinite] <AS>

7. This man was crowned king of the Arverni after seizing the city of Gergovia in the late 50s BC. For 10 points each:

[10] Name this leader whose men were surrounded by two temporary walls at the battle of Alesia, where he then surrendered to the Romans.

ANSWER: Vercingetorix

[10] Vercingetorix was recounted in this man's third-person *Commentaries on the Gallic Wars*, which described his conquests in Transalpine Gaul. He later won at Pharsalus against Pompey.

ANSWER: Gaius Julius Caesar [prompt partial answer]

[10] This Egyptian queen and female pharaoh, allegedly smuggled into Caesar's palace in a carpet, bore Caesar's child before her later love affair with Marc Antony. She committed suicide by snakebite.

ANSWER: Cleopatra VII Philopator <MPG>

8. The protagonist of this novel causes the ruin of her household by borrowing from Monsieur Lheureux. For 10 points each:

[10] Name this novel, whose title character cheats on her doctor husband Charles with Leon and Rodolphe.

ANSWER: Madame Bovary

[10] *Madame Bovary* is by this Frenchman who wrote of Felicité's devotion for the Aubains in "A Simple Heart".

ANSWER: Gustave Flaubert

[10] This character in *Madame Bovary* is the pharmacist in Yonville. He encourages Charles to perform disastrous surgery upon Hippolite and is awarded the Legion of Honor at the end of the novel.

ANSWER: Monsieur Homais <JL>

9. On the week of March 3, 2012, Billboard claimed that this song was the biggest crossover hit in 25 years, having at various points topped the rock, pop, adult contemporary, Latin, dance, and R&B/hip hop charts. For 10 points each:

[10] Name this soulful blues romp in which the singer laments to a former lover, "We could have had it all," and that "you had my heart inside your hand/but you played it/to the beat."

ANSWER: Rolling in the Deep

[10] Name the British singer of "Rolling in the Deep" and the hit songs "Someone Like You" and "Chasing Pavements." She won 6 Grammys at the 2012 Grammy Awards, including Album of the Year and Song of the Year.

ANSWER: Adele Laurie Blue Adkins (accept either or both)

[10] This Adele cover of a Bob Dylan piano ballad reached Number Four on the UK Singles Chart upon its release. The singer urges a lover that "there is nothing that I wouldn't do" to have the lover experience the title phenomenon.

ANSWER: Make You Feel My Love <MHH>

10. The Homestead strikers were workers with this substance, which Andrew Carnegie began mass-producing in America using Bessemer furnaces around Pittsburgh. For 10 points each:

[10] Name this durable metal alloy.

ANSWER: steel

[10] Carnegie consolidated his business into U.S. Steel with the help of this multimillionaire investor in 1901. His still-existent investment corporation also helped merge General Electric.

ANSWER: J. P. Morgan [John Pierpont Morgan]

[10] The case *Youngstown Sheet and Tube v. Sawyer* ruled that this president could not seize steel mills during a strike.

ANSWER: Harry S. Truman <MJ>

11. A broom hangs from a bedpost on the right of this painting. For 10 points each:

[10] Name this painting in which a small brown dog stands between a man in purple with a big hat and a pregnant woman in green who are linking hands.

ANSWER: *The Arnolfini Wedding* [or *Arnolfini Marriage*; or *Arnolfini Double Portrait*; or *Portrait of Giovanni Arnolfini and his Wife*]

[10] *The Arnolfini Wedding* is by this Flemish master of *Portrait of a Man in a Red Turban*.

ANSWER: Jan van Eyck

[10] This figure is being worshipped in the center of the lower register of the center panel of the *Ghent Altarpiece*, which Jan van Eyck collaborated with his brother Hubert in creating.

ANSWER: Lamb of God [or Mystic Lamb] <JL>

12. John Gardner wrote a modern retelling of this work from the perspective of its antagonist, the monster Grendel. For 10 points,

[10] Name this Anglo-Saxon poem, in which the title warrior slays Grendel before contending with the monster's equally fearsome mother.

ANSWER: Beowulf

[10] In old age, Beowulf is killed by one of these creatures which he fights with Wiglaf after a slave steals from it.

ANSWER: Dragon[s]

[10] The most famous English-language adaptation of *Beowulf* is by this Irish poet, who included poems like "Digging" and "Mid-term Break" in his collection *Death of a Naturalist*.

ANSWER: Seamus Heaney <SJW>

13. It began after a Defenestration of Prague, and involved Imperial forces under Count Tilly committing a massacre at Magdeburg. For 10 points each:

[10] Name this conflict, which began with Frederick the Winter King claiming the throne of Bohemia and ended with the Peace of Westphalia. It lasted from 1618 to 1648.

ANSWER: The Thirty Years' War

[10] This Lutheran kingdom led the Protestants during the middle of the Thirty Years' War, coming south to the defense of Stralsund. After its king died at Lützen, this kingdom was led by the regent Axel Oxenstierna.

ANSWER: Kingdom of Sweden [or Konungariket Sverige]

[10] At Lützen, Swedish forces defeated this capable Bohemian general. Emperor Ferdinand II had this man killed when he seemed likely to defect to the Protestant side.

ANSWER: Albrecht Wenzel Eusebius von Wallenstein [or Waldstein] <SJW>

14. Answer the following about Czech composers, for 10 points each.

[10] This Czech composer of sixteen *Slavonic Dances* also wrote a number of works inspired by his sojourn in America, such as the "American" string quartet and his ninth symphony, "From the New World."

ANSWER: Antonin Dvořák

[10] This other Czech composer depicted his homeland in the set of symphonic poems *Má vlast*, which contains the river-depicting "Die Moldau."

ANSWER: Bedřich Smetana

[10] Dvořák wrote an E-minor chamber work in this genre subtitled *Dumky*. Pieces in this genre by Beethoven include the "Archduke" and the "Ghost."

ANSWER: piano trios [or trios for piano, violin, and cello; prompt on "trio"] <KK>

15. One character with this name and the epithet “segundo” parties much harder than his twin. For 10 points each, [10] Give this first name of a different character, referred to as the Colonel, who spends much of his time making little gold fishes. That character, the brother of Jose Arcadio, has seventeen sons, all of whom also share this name.

ANSWER: Aureliano Buendía

[10] Aureliano Buendía appears in this Gabriel García Márquez work, which tells the story of the Buendía family through six generations, often considered an exemplar of magical realism.

ANSWER: One Hundred Years of Solitude [or Cien Años de Soledad]

[10] *One Hundred Years of Solitude* takes place in this fictional town, modeled on García Márquez’s hometown of Aracataca. This location is also the setting of many of García Márquez’s short stories.

ANSWER: Macondo <SJW>

16. Nichiren and Pure Land are two sects of this religion. For 10 points each:

[10] Identify this religion, whose two major sects are Theravada and Mahayana, and which was founded in India by its namesake enlightened sage between the 4th and 6th centuries BC.

ANSWER: Buddhism

[10] The phrase “the Buddha” usually refers to this founder of Buddhism, a prince who renounced his privilege to attain *nirvana* beneath the Bodhi tree and teach the Four Noble Truths. He is *not* the fat Buddha.

ANSWER: Siddhartha Gautama [or Shakyamuni]

[10] The first of the Four Noble truths equates all life with this Pali-language state often translated as “suffering”.

ANSWER: dukkha <MPG>

17. Answer these questions about Canadian geography in Canada, for 10 points each.

[10] This province is a major hub for auto manufacturing in cities such as Alliston and Windsor. This province next to Quebec is Canada’s most populous and contains the capital, Ottawa.

ANSWER: Ontario

[10] Around Hudson Bay, the eastern half of Canada’s terrain includes this surface of exposed, partially-eroded igneous rock from before the Cambrian era.

ANSWER: Canadian Shield [or Laurentian Plateau; or Bouclier Canadien]

[10] New Brunswick and Nova Scotia surround this body of water, which is fed by the St. John River and has a high tide almost six feet higher in sea level than its low tide.

ANSWER: Bay of Fundy <SL>

18. Name these films directed by Alfred Hitchcock, for 10 points each.

[10] Marion Crane is stabbed in the famous shower scene while staying at the Bates Motel in this 1959 film.

ANSWER: Psycho

[10] Cary Grant plays Roger Thornhill who is mistaken for the spy George Kaplan in this Hitchcock film, which includes a chase with a crop-dusting plane and an escape down Mount Rushmore.

ANSWER: North by Northwest

[10] The Leopold and Loeb case inspired this movie starring Farley Granger and John Dall, which is filmed to give the appearance of having no cuts.

ANSWER: Rope <JL>

19. This period began thirteen years after the arrival of Matthew Perry’s black ships with the accession of its namesake emperor. For 10 points each:

[10] Name this period of rapid industrialization starting in 1867, in which laws such as a ban on sword-carrying ended the era of the samurai and modernized Japan.

ANSWER: Meiji restoration [or Meiji Ishin; accept any answer involving the rule of Emperor Meiji or changes made therein]

[10] This multi-barrel wheeled gun was brought to Japan from America during the Meiji era. Its operator turned a crank to make one barrel around a circle fire, eject its cartridge, and load the next one.

ANSWER: Gatling gun

[10] During this 1877 revolt against Meiji rule, the Imperial army turned its new Gatling guns on the so-called “last samurai”, Saigo Takamori, and his army.

ANSWER: Satsuma rebellion <MJ>

20. This organelle can glycosylate and phosphorylate proteins before they are exported. For 10 points each:

[10] Name this organelle whose cis- and trans- networks receive vesicles from the endoplasmic reticulum.

ANSWER: Golgi apparatus [or Golgi complex; or Golgi body]

[10] These organelles break down long-chain fatty acids into CO₂ and water by means of beta-oxidation. They are derived from the ER and eliminate a dangerous compound which contains oxygen in a minus 1 oxidation state.

ANSWER: peroxisomes

[10] Peroxisomes also eliminate these highly-reactive atoms and molecules that contain unpaired electrons. The photodissociation of chlorine gas produces these substances, which are largely responsible for ozone depletion.

ANSWER: free radicals [accept chlorine radicals] <IP>

21. This thinker's namesake Forms are idealized concept-objects in a realm real beings should strive to reach through philosophy. For 10 points each:

[10] Name this philosopher, the most famous author of dialogues about his teacher Socrates.

ANSWER: Plato [or Platon; or Aristocles]

[10] In this Plato dialogue, Aristophanes tells how humans originally had two-heads and four legs before Zeus cut them apart. Later, Socrates explains Diotima's teachings about love to the hung-over men at a banquet.

ANSWER: Symposium [or Sympousion]

[10] The title Athenian citizen of this Plato dialogue is on his way to prosecute his father. In it, Socrates tries to define the nature of piety.

ANSWER: Euthyphro <DSteinberg>