

VCU Closed

February 2, 2013

Packet by Dartmouth A (Nick Jensen, Cameron Orth) and WUSTL (Richard Yu)

1. Early in his reign, this ruler attempted to suppress the influence of Irish culture on English settlers in the Statutes of Kilkenny. This king supported the victor of the Battle of Dupplin Moor by using heavy arrow fire to break the *schiltron* formations of Archibald Douglas, who attempted to march up Halidon Hill. That victory allowed Edward Balliol to usurp the throne of David II. One of this man's sons invaded Galicia in an ill-fated attempt to become king of (*) Castile, and later served as Duke of Aquitaine. William Montagu helped this victor at the Battle of Sluys to lead a coup against the lover of his mother Isabella, Roger Mortimer. Another of this man's sons by Philippa of Hainault won the Battle of Poitiers and helped him win the Battle of Crecy. For 10 points, name this English king during the Hundred Years' War who fathered Edward the Black Prince.

ANSWER: Edward III [prompt on Edward]

2. A fossil with fermented grapes in its stomach of an early genus of these animals was found in the Messel Oil Shales. Darwin was astonished to discover a tooth from this extant animal group along with fossils of *Toxodon*, noting that Pliocene conditions must have been very different to cause their local extinction. George Gaylord Simpson drew them in a branching evolutionary tree, in contrast to their erroneous (*) anagenetic portrayal. Gould argued that passive diffusion could explain their trend toward increased body size; he also described their inaccurate textbook portrayal in "The Case of the Creeping Fox Terrier Clone," which deals with the genus *Eohippus*. For 10 points, name these perissodactyls, whose extant species are all members of the genus *Equus*.

ANSWER: horses [accept equids or equines or word forms; accept hippomorphs or word forms; antiprompt on zebras, donkeys, asses, onagers or other specific equines; prompt on less specific taxonomic answers such as perissodactyls; prompt on ungulates or hoofed mammals]

3. In one of this work's high points, the orchestra plays triple forte and cowbells punctuate a change of key from B minor to B major. This work's *Andante* second movement begins with a "rocking motive" in the celli whose cadence references another work of the composer, titled "Now the sun wants to rise as brightly." The latter half of the first movement quotes in the brass section a theme from Liszt's first piano concerto. It is often said that the image of children walking in the sand motivated the "old-fashioned" trio in the third movement *Scherzo*. An F major theme that appears in its (*) *Allegro energico* first movement is allegedly a portrait of the composer's wife, and overcomes a somber A-major to A-minor motif. This symphony depicts a hero who is felled "like a tree," and its last movement is punctuated by "three hammer blows of fate." For 10 points, name this symphony in A-minor by Gustav Mahler, nicknamed "Tragic."

ANSWER: Mahler's Symphony No. 6 in A minor [or Mahler's Sixth Symphony; accept Tragic Symphony or Symphonie Tragische before it is read; accept "his Sixth Symphony" after Mahler is read]

4. This state is the home of a garden that in the fall of 1941 fails to grow marigolds, and the dog Bob, who is indirectly poisoned by the pedophile Soaphead Church. A community in this state was founded after a slave was tricked into thinking hilly land was fertile and celebrates National Suicide Day. That home of the three deweys, The (*) Bottom, is located in this state, which is also the setting for a story where prayers for a son named David are answered by a grandson who slings a stone during the attempted sacrifice of a lamb. Other characters from this state include Reverend Curtis Hartman, who spies on a cigarette-smoking schoolteacher from the broken window of a church, and Wing Biddlebaum, who moves his hands nervously remembering his accusation of molesting students. For 10 points, name this home state of Winesburg.

ANSWER: Ohio

5. Bernard Bilski and Rand Warsaw of Equitable Gas are credited with introducing the “fixed bill” program that uses this strategy in the energy industry. The prefix “super” is added to this term to describe the smallest price for a replacement portfolio that will return at least as much as a given portfolio at a specified future time. Southwest Airlines uses this strategy for fuel management more than competitors. International Accounting Standards allow three types of the (*) “forex” kind of this practice under IAS 39, using fair value, cash flow or net investment to deal foreign currencies. The most common strategy in this position is to make a certain first-order Greek sum to zero, the delta neutral method. For 10 points, name this financial position notably done by Renaissance Technologies and Bridgewater Associates, which are its namesake “funds.”

ANSWER: hedging [or word forms]

6. A scalar-valued vector function named for this physicist is best expressed as a Fourier transform involving integration of the Green’s function of the Klein-Gordon equation. That term also gives the Feynman amplitude in the case where two fermions exchange a particle first theorized by this physicist. Quarks and leptons couple to the Higgs field in a phenomenon named for this man, which is much greater for the top quark than any other particle. That phenomenon can be described by a potential containing an e to the negative k times m times r term, which is also called the (*) screened Coulomb potential. The first experimental evidence for his theorized class of particles was found by Carl David Anderson but turned out to be a lepton, the muon. For 10 points, name this physicist who predicted the existence of mesons, a Japanese Nobel Laureate.

ANSWER: Hideki Yukawa

7. Ludwig Roselius developed a process of treating this substance with benzene, although it is more commonly treated either through one process that uses supercritical carbon dioxide or another process that produces the “GCE fluid,” known as the Swiss Water Process. Luigi Bezzera developed a device for processing this substance that was later improved on by Achille Gaggia. An apocryphal story tells of this substance’s discovery by a (*) goatherd named Kaldi, and one type of it is prepared in a cezve pot. The so-called “Third Wave” of this product focuses on factors like single-origin and direct trade, and “cupping” is a method of discerning characteristics of this substance like body and acidity. This substance is mostly produced from the *robusta* and *arabica* species and was traded in the port of Mocha. For 10 points, name this caffeinated beverage.

ANSWER: coffee [accept coffee beans; prompt on variations like “espresso” or “decaf”]

8. This action is completed using reeds by the Mongolian god Erlik after he falls to earth in the form of a black goose and bribes Ulgan's guard dog with a furry coat so it will look away. An Aboriginal myth describes the knife-wielding Ungambiluka performing this action, which involves sweat droplets in a Slavic tale. In Chinese mythology, this action is either performed by Nü Wa swinging a vine through the mud or fleas jumping off of (*) Pangu. The Popul Vuh describes failed attempts at this action involving wet clay and wood before success using maize dough, while Villi, Ve and Odin perform this action by carving an ash log along with its elm counterpart. For 10 points, name this action performed by God in His image to create a master for the animals, resulting in the genesis of Adam.

ANSWER: creating the first man [accept any answers that are clearly about the creation of humanity; prompt on creating animals or equivalents]

9. In one of this author's novels, the words "that Higher Being Whom we Revere" are edited into tapes in place of the word "God" by the title radio editor, Murke. A novel by him concerns a man who performs an "almost too long" routine called "Arrival and Departure" and complains of how Marie left him in order to marry a Catholic man named (*) Zupfner. In another of his books, a character is called "God's little lamb" by classmates who beat him, and several characters reject the "Host of the Beast." In that novel, a bellhop named Hugo is adopted by Robert, who demolished the St. Anthony Abbey during World War II. That novel is titled for an activity that Robert performs daily in the Prince Heinrich Hotel. For 10 points, name this German author of *The Clown*, *The Lost Honour of Katharina Blum* and *Billiards at Half-Past Nine*.

ANSWER: Heinrich Theodor Böll

10. This man left a teaching position at Yale to work at the SEC under William O. Douglas. His wife was the first female partner at a major law firm. Almost two decades after convincing Hugo Black to restore a politician's name to the ballot after allegations from Coke Stevenson, this lawyer was that President's choice to fill the "Jewish seat" left by Arthur (*) Goldberg. Forced to start a firm with Koven after a scandal involving the Wolfson Family Foundation, this lawyer had earlier made his name in a pro bono case that helped overturn the precedent set by *Betts v Brady*, thus allowing for court-appointed attorneys. For 10 points, name this advocate for Clarence Gideon who later joined the Supreme Court and was nominated for Chief Justice by LBJ, before he was forced to resign entirely in a scandal over conflict of interest.

ANSWER: Abe Fortas

11. This person is said to have died in the wilderness of Zin at Kadesh. At Hazeroth, God uses the analogy of a father spitting in someone's face to explain why this figure is sent into the wilderness as unclean for seven days, after being punished for speaking out about a Cushite woman by becoming "like one stillborn" and "white as snow" with (*) leprosy. This figure plays a tambourine and leads a group of women in singing a follow-up to a poem that praises God's "right hand" for defeating "horse and rider," the Song of the Sea. In her first appearance, this prophetess and daughter of Amram fetches her mother Jochebed as a nurse for Pharaoh's daughter after she finds the papyrus basket holding her baby brother in the Nile. For 10 points, name this sister of Aaron and Moses.

ANSWER: Miriam

12. In one scene, this play's antagonists speak of their ancestors Mulmutius and Cassibelan. In the last scene, a doctor reports the death of one character, who had prepared a "mortal mineral" that would "by inches waste" her husband. One character in this work claims that a beheaded corpse was named "Richard du Champ" and, while traveling in the countryside, takes on the name "Fidele." That character accidentally takes a sleeping potion that was given by (*) Pisanio. In this play, the brothers Arviragus and Guiderius, along with Belarius, help defeat the forces of Caius Lucius. At the end of this play, Iachimo is forgiven for deceiving Posthumus Leonatus, who was exiled to Italy and returned as part of the Roman army. He is eventually reunited with Imogen, the daughter of the title character. For 10 points, name this Shakespeare play about the title "King of Britain."

ANSWER: Cymbeline

13. Booth encoding was originally developed to speed up this operation, and that method can improve this operation when employing Wallace trees to make this problem decidable in polylog time on a parallel computer. One popular algorithm for performing this action has a runtime of big O of $n \log n \log \log n$ and is improved upon by Fuhrer's algorithm. That algorithm performs Fast Fourier Transforms in a ring, and is the (*) Schonhage-Strassen algorithm. The divide-and-conquer method for this operation is named for Karatsuba, and common methods of doing it involve converting to binary or using the "grade school" method. For 10 points, name this process which calculates the product of two numbers.

ANSWER: integer multiplication [accept word forms; do not accept or prompt on polynomial multiplication or word forms]

14. The artist of this work referred to it as his "first exorcism painting" and an attempt to "give spirits a form." The leftmost figure of this painting appears in profile facing right and raises a hand behind her to hold up a curtain of deep red, which appears to cast reddish light on her body. Studies for this painting depict a sailor and a skull-holding medical student interacting with its figures in a reception room, which was later simplified to a background of (*) blue drapery. In the foreground of this painting, an apple, a pear, a bunch of grapes and a watermelon rind rest on a bundle of grey curtain. The three figures on the left of this painting were influenced by Iberian sculptures, while the two on the right wear African masks and display greater abstraction. For 10 points, name this major Cubist painting depicting five nude prostitutes, a work by Pablo Picasso.

ANSWER: Les Demoiselles d'Avignon [or The Young Ladies of Avignon or The Demoiselles of Avignon]

15. In one conflict in this city, one side set up a stronghold in a Holiday Inn in the Minet El-Hosn district, which was eventually taken in the Battle of the Hotels by the militants of al-Murabitoun. In this city, Habib Shartouni planted a bomb above the headquarters of a political party in the Achrafieh district. Operation Blue Bat landed troops here in support of the Baghdad Pact. This city was largely destroyed in a conflict involving the forces of Michel Aoun, and and was rebuilt with monetary aid from (*) Rafik Hariri, whose assassination here set off a 2005 independence movement. Much conflict in this city was centered on the Green Line, which separated Muslim and Christian factions, and a Multinational Force was sent here by Ronald Reagan in 1982. For 10 points, name this city that was the site of much protesting during the Cedar Revolution, and which was ravaged by the Lebanese Civil War.

ANSWER: Beirut [or Beyreuth]

16. The independent candidate in this country's 2012 election faced scrutiny for his wife's tax filings but is better known as a philanthropist who has donated many shares of his company, which has received buyout offers from McAfee. The winner in this country ran with the slogan "No Worries." One factor in this country's presidential election was the division of the Democratic United Party, creating the (*) "Honam wing." The second-place candidate in this country couldn't become a judge because of his history of protests and had earlier served in the special forces during the Axe Murder incident. Moon Jae-in finished second to the candidate of the New Frontier, or Saenuri Party in this country. For 10 points, identify this country that elected its first female president, Park Geun-hye, in 2012.

ANSWER: South Korea

17. One character with this profession goes to the house of a literary critic named Farewell, where he sees Neruda reciting poems by moonlight. That man, Urrutia, is the dying protagonist of *By Night in Chile*. In another work, one of these people named Baltazar Montoya kills a boy by throwing a cup at him. Other people in that novel with this occupation include (*) Gallegos and Martinez, as well a man who eventually moves to Colorado. In another novel, one of these characters is betrayed by "the mestizo" to the lieutenant when he goes to see a dying man called "the gringo." That protagonist is a "whisky" one of these people. For 10 points, name this occupation shared by the protagonist of *The Power and the Glory* and *The Count of Monte Cristo's* Abbe Faria.

ANSWER: a Catholic priest

18. One sanctuary of this deity includes a stoa with an Ionic colonnade above a Doric one, a sacred pool and several cisterns. Besides that one at Perachora, a sanctuary that housed a chryselephantine statue of this deity by Polykleitos in its New Temple was excavated by Thomas Gordon at Argos. One temple of this deity that was mistakenly attributed to (*) Neptune is associated with two *bothroi* and stands near another one, nicknamed the "Basilica," with flattened Doric capitals, a divided *naos* and pronounced entasis at Paestum. The Olympic torch is lit at the temple of this non-Zeus deity in Olympia, where *Hermes and the Infant Dionysus* was discovered. Another temple of this goddess, located near the Pythagoreion, celebrated her birth under the lygos tree, housed the Geneleos group and depicted her with the horns of a cow. For 10 points, name this goddess whose temple at Samos kept a flock of peacocks.

ANSWER: Hera [accept Juno; accept Heraion]

19. Blood levels of this molecule and its 11-keto derivative are elevated in stoplight parrotfish during the initial- to terminal-phase transition. Injecting passerines with this molecule triggers a catecholamine-driven signaling cascade that induces singing out of season and increases vulnerability to cuckoldry by shifting effort from parental investment to extrapair copulations. This molecule induces the transformation of the mesonephric duct and undergoes 5 alpha reduction to its dihydro form, which shrinks (*) hair follicles. With its precursor DHEA, this molecule is produced in Leydig cells exposed to LH. This molecule binds to AR in Sertoli cells, where it allows post-meiotic germ cells to detach when mature, completing spermatogenesis. For 10 points, name this foremost androgen, a hormone that regulates male sexual characteristics and is mimicked by anabolic steroids.

ANSWER: testosterone [or (8R,9S,10R,13S,14S,17S)- 17-hydroxy-10,13-dimethyl-1,2,6,7,8,9,11,12,14,15,16,17- dodecahydrocyclopenta[a]phenanthren-3-one; accept T]

20. A notable book about this man's career contains the chapter "Winged Genghis Khan," which describes his machinery like his namesake "Pipe Organs" before a chapter "About 'Obsolete' Airplanes." Another book on this man by the same author was criticized for neglecting the reassessment of this figure's life by Dmitri (*) Volkogonov. Cynthia Ann Ruder's *Making History* for this man tells the *The Story of the Belomor Canal*, whereas *Laughter and the Twenty Million* subtitles Martin Amis' treatment of this man, *Koba the Dread*. As well as a man who was outmaneuvered by this historical personage, Isaac Deutscher is the major biographer of this figure. For 10 points, name this primary subject of Viktor Suvorov's books *Icebreaker* and *The Chief Culprit*, a Georgian- born alterer of photographs who led the USSR in World War II.

ANSWER: Joseph Vissarionovich Stalin [or Ioseb Besarionis dze Dzhugashvili; prompt on pseudonyms/nicknames like Koba, Vasiliev, Chizhikov, Besoshvili and Ivanovich]

TIEBREAKER/EXTRA

21. One "Forest Tradition" of this sect included such luminaries as Mun Bhuridatta and his student Ajahn Chah. Some adherents of this school observe a holiday in which they accept instruction from any of their peers; that Pavarana ceremony is followed by the Kathina festival, in which laypeople offer gifts, and it comes at the end of the three-month Vassa season, also called the Rains Retreat. This denomination includes four stages of (*) enlightenment, the highest of which is the *Arahant*. Its monastic orders, known as *nikaya*, are made up of *bhikkhu* and *bhikkuni* who follow the rules of the *Vinaya* to enter into the larger monastic community, called the Sangha. The *Vinaya* and *Sutta* sections make up two of the three "baskets" of this sect's main text, the Pali Canon, and its name means "teaching of the elders." For 10 points, name this religion prevalent in Southeast Asia that is distinct from Mahayana Buddhism.

ANSWER: Theravada Buddhism [prompt on Buddhism]

22. One film set in this country ends with a scene in which silent black veiled figures build a structure from which the protagonist hangs himself, after spending one last night with his lover in a graveyard. Another film set here makes heavy use of train imagery in its "pillow shots" and includes a scene in which a widower gives his wife's pocket watch to a widow, imploring her to remarry. In an iconic scene from another film in this country, the protagonist sings the "Gondola song" while sitting on a (*) swing in the playground he helped build. One film that takes place in this setting of *Double Suicide* ends with a scene in which the woodcutter walks home carrying an abandoned baby, and the rain finally stops. In that film, three men discuss various perspectives on a murder while waiting under the title structure. For 10 points, name this country, the setting of films like *Ikiru*, *Rashomon*, and *Tokyo Story*.

ANSWER: Japan

VCU Closed

February 2, 2013

Packet by Dartmouth A (Nick Jensen, Cameron Orth) and WUSTL (Richard Yu)

1. Before his sentence was commuted, this man was sentenced to labor in a *presidio* in Oran for attempting to aid the Guaraní Indians at Asunción. For 10 points each:

[10] Name this man, known as "cow's head," who traded "beads of the sea" for bison skin and red ochre after traveling inland from the island of Malhado. This man traversed the "River of Nuts" and became a healer after removing an arrowhead from an Indian near Monclova.

ANSWER: Álvaro Núñez **Cabeza de Vaca**

[10] Along with the Moor Estevanico, Cabeza de Vaca was one of the few survivors of this hurricane-wracked 1527 expedition that crashed on Galveston Island. This expedition besieged the Tocobaga and Apalachee tribes of Florida.

ANSWER: **Narváez** Expedition

[10] Narváez earlier led an expedition to attack this other conquistador, a lover of La Malinche who conquered Tenochtitlan. This man's army killed thousands of Aztecs on La Noche Triste after holding Moctezuma II hostage.

ANSWER: Hernán **Cortés** de Montoy y Pizarro, First Marques de Valle de Oaxaca

2. Moderately strong examples of these groups often have an electronegative atom next to a pi bond adjacent to the ring they are attached to. For 10 points each:

[10] Name these benzene substituents that withdraw electrons through induction or resonance. The classic example of these typically meta-directing substituents is the nitro group.

ANSWER: **deactivators** [accept word forms]

[10] Unlike stronger ones, these weak deactivators are ortho/para directors. These elements appear in group 17 of the periodic table.

ANSWER: **halides** [accept **halogen**]

[10] Halides and other deactivators decrease the rate of the "electrophilic aromatic" reaction of this type. "Nucleophilic" reactions of this type can be bimolecular and invert stereochemistry.

ANSWER: **substitution** reactions

3. Answer the following about the marriage of jazz and blues, for 10 points each.

[10] Probably the most notable intersection occurred with this composer's opera *Porgy and Bess*. Musicals by this composer of "Rhapsody in Blue" include *Show Girl* and *Girl Crazy*.

ANSWER: **George Gershwin** [prompt on **Gershwin**]

[10] This jazz opera, Gershwin's only other work in the genre, was first performed by white actors in blackface and was later performed under the title *135th Street* for its Harlem setting.

ANSWER: **Blue Monday**

[10] Wynton Kelly appears on this track from Miles Davis's *Kind of Blue*, as Kelly was more proficient at its blues structure than Bill Evans. Named in reference to a Red Skelton character, this song is the second on the album, following "So What."

ANSWER: "**Freddie Freeloader**"

4. It is dedicated "For Warren Winslow, Dead at Sea." For 10 points each:

[10] Name this poem that describes sailors who cry "If God himself had not been on our side" while hunting for "the whited monster," a sperm whale. Its last section describes "the old mouth of the Atlantic" as the speaker looks at a cenotaph in the title location.

ANSWER: "The Quaker Graveyard in Nantucket"

[10] "The Quaker Graveyard in Nantucket" is part of this author's collection *Lord Weary's Castle*. His teacher Allen Tate wrote the introduction to his first book, *Land of Unlikeness*, and he may be better known for his poem "For the Union Dead."

ANSWER: Robert Traill Spence Lowell [prompt on Lowell]

[10] This other Lowell poem describes how the title creatures "[swill] the garbage pail" and "search in the moonlight / for a bite to eat" while the speaker "watched for love-cars" and says "I myself am Hell."

ANSWER: "Skunk Hour"

5. This state contains an enormous uranium deposit at Olympic Dam near the Roxby Downs. For 10 points each:

[10] The confluence of the Murray and Darling Rivers empties into the Indian Ocean at Lake Alexandrina in what state, near its largest city of Adelaide?

ANSWER: South Australia

[10] The Murray River rises in the Australian Alps, which contains the Snowy Mountains, the range in which this tallest mountain in Australia is located.

ANSWER: Mount Kosciuszko

[10] This river forms Lake Burrendong and drains via the Barwon River into the Darling. Its floodplain houses a large wetlands reserve in northern New South Wales, and it covers much of the Central Tablelands.

ANSWER: Macquarie River

6. The Palermo Stone recounts this ruler's military excursions into Libya and Nubia, and he completed a pyramid at Meidum that was begun by his predecessor Huni. For 10 points each:

[10] Name this first pharaoh of the Fourth Dynasty, best known for building the Bent Pyramid and the Red Pyramid at the necropolis of Dahshur.

ANSWER: Sneferu [or Soris]

[10] The Westcar Papyrus recounts fantastical events that happened at the court of this son of Sneferu, and Herodotus described him as a tyrant who closed all of the temples of Egypt. He is better known as the builder of the Great Pyramid of Giza.

ANSWER: Khufu [or Cheops]

[10] Herodotus also described this ruler as an impious tyrant, whose son Menkaure restored peace to Egypt. Some believe he built the Great Sphinx, and he built the second tallest pyramid at Giza after that of his grandfather Khufu.

ANSWER: Khafra [or Khafre; or Chefren]

7. A kneeling figure in this painting is wearing only one shoe. For 10 points each:

[10] Name this atypical Baroque painting. According to Gardner's *Art Through the Ages*, this painting uses light to give primary focus to a "beautiful, spiritual face" that contrasts with a stern witness.

ANSWER: *The Return of the Prodigal Son*

[10] *The Return of the Prodigal Son* was painted by this Dutch artist, who also painted a self-portrait as the prodigal son with his wife Saskia. This artist of *Dead Peacocks and a Girl*, *The Jewish Bride* and *Belshazzar's Feast* depicted a shadowy dog and a shooting company in *The Night Watch*.

ANSWER: Rembrandt Harmenszoon van Rijn

[10] Rembrandt also painted this seascape, which depicts Jesus calming the waves around a rocking boat. This painting was stolen from the Isabella Stewart Gardner Museum in 1990 and remains missing.

ANSWER: *Storm on the Sea of Galilee*

8. Answer some questions about bicoid, a morphogen responsible for anterior-posterior axis formation. For 10 points each:

[10] Bicoid codes for an mRNA that attaches to microtubules at the anterior end of the embryos of these organisms, whose developmental mutants include antennapedia, kruppel, and wingless.

ANSWER: *Drosophila melanogaster* [or *D. melanogaster*]

[10] The *bicoid* gene displays this unusual inheritance pattern, in which mutations in the parent are not manifested until F1. This phenomenon arises when an organism's mother augments the oocyte with protein or RNA.

ANSWER: maternal effect genes

[10] Maternal effects are a confounding factor when examining contributions to this sum of an organism's observed properties. It is often described as the expression of the genotype.

ANSWER: phenotype

9. This poem opens with the image of "My life was a feast where all hearts opened and all wines flowed." For 10 points each:

[10] Name this poem in which the speaker describes how "all th world" cried "all is vanity" in the section "Lightning" before concluding "slaves, let us not curse life" in "Morning."

ANSWER: "A Season in Hell" [or "Une Saison en Enfer"]

[10] *A Season in Hell* was written by this symbolist poet, who described images of "birdless ether," "singing phosphorus" and a rotting leviathan in "The Drunken Boat." He was shot in the wrist by his lover Paul Verlaine.

ANSWER: Jean Nicolas Arthur Rimbaud

[10] A Rimbaud sonnet describes assigning colors to these things to tell of their "mysterious origins" or "naissances latentes." Rimbaud brags about inventing colors for them in the "Alchemy of the World" section of *A Season in Hell*.

ANSWER: vowels [or voyelles]

10. It popularized the work of the Vienna Circle, and distinguishes between “strong” and “weak” verification. For 10 points each:

[10] Name this book defense of logical positivism, which characterizes ethical statements as subjective, and argues that philosophy should follow the verification principle.

ANSWER: **Language, Truth and Logic**

[10] This man criticized Ayer’s use of argument from illusion in his book *Sense and Sensibilia*, whose title is a humorous reference to his name. He is also known for a set of collected lectures titled *How to Do Things with Words*.

ANSWER: John Langshaw **Austin**

[10] Ayer wrote a book about this man and G.E. Moore, subtitled *The Analytical Heritage*. He is known for such works as the essay “On Denoting” and collaborating with Alfred Whitehead on *Principia Mathematica*.

ANSWER: Bertrand Arthur William **Russell**

11. The system named for it was criticized by Robert Triffin, and the Nixon shock targeted that system’s use of the gold standard. For 10 points each:

[10] Name this meeting in New Hampshire that established the International Monetary Fund and sometimes gives its name to the postwar international monetary system.

ANSWER: **Bretton Woods** conference [or **United Nations Monetary and Financial Conference**]

[10] Another participant at Bretton Woods was this Secretary of the Treasury. He led the investigation of Kansas City political boss Thomas Pendergast, and also put forward a plan to destroy Germany’s industrial capacity that was opposed by an elderly Herbert Hoover.

ANSWER: Henry **Morgenthau**, Jr.

[10] Henry Morgenthau’s same-named father once held this diplomatic post, as did James Longstreet and Lew Wallace. This awesome but no-longer-extant diplomatic position addressed the kidnapping of a US citizen in the Miss Stone affair and involved representing American interests at the Sublime Porte.

ANSWER: United States **ambassador to the Ottoman Empire** [we still have an ambassador to Turkey, so that’s not correct]

12. One speaker in this poem says “Foreheads of men have bled where no wounds were” and speaks “the truth untold, / The pity of war, the pity war distilled.” For 10 points each:

[10] Name this poem in which a soldier goes down a “profound dull tunnel” into Hell and meets a man who says “I am the enemy you killed, my friend.”

ANSWER: **“Strange Meeting”**

[10] “Strange Meeting” is by Wilfred Owen, who also wrote this poem that describes a gas attack and ends with a quotation of the title “old lie” taken from Horace’s *Odes*.

ANSWER: **“Dulce Et Decorum Est”**

[10] “Strange Meeting” may have been based on a poem by this friend of Owen, who edited and wrote the introduction to Owen’s posthumous 1920 collection. Unlike the other World War I poets, he unfortunately survived the war and went on to write the awful *Poems of Pinchbeck Lyre* and *Lenten Illuminations*.

ANSWER: Siegfried Loraine **Sassoon**

13. The coolest bird species may be the kakapo, but unfortunately they picked some other ones to be king. For 10 points each:

[10] The Feng Huang, a composite of male and female birds that symbolizes imperial power, is the Chinese equivalent of this western bird. This bird sets itself ablaze in a nest of myrrh and cinnamon every thousand years to renew its immortality.

ANSWER: **Phoenix**

[10] This Persian ruler of the birds inhabits the Tree of Knowledge and has seen the world destroyed three times. In one story, thirty birds go on a quest to find it, only to see their reflections and realize that together they are this bird.

ANSWER: **Simurgh**

[10] The Jakata tales describe this previous incarnation of the Buddha, who loses his unique plumage after a greedy family plucks it out. This bird king's daughter wants to marry the peacock, but he gives her to his nephew instead after the peacock puts on a mating display like a jerk.

ANSWER: **Golden Mallard** [prompt on answers about **ducks** in general such as **mallards** and **Anatidae**]

14. This character drives his friend's Prius from Los Angeles to New York. For 10 points each:

[10] Name this hurricane victim, portrayed by J.B. Smoove, who remains behind at Larry David's house after the rest of the Black family returns home.

ANSWER: **Leon** Black

[10] Leon is a character on this HBO comedy, in which Larry David plays Larry David. Its seventh season revolved around a plot to win back Larry's wife Cheryl by staging a reunion episode of *Seinfeld*.

ANSWER: **Curb Your Enthusiasm**

[10] In the most recent season finale of *Curb Your Enthusiasm*, Larry is banned from New York City after Michael Bloomberg mistakenly believes that Larry is mocking Michael J. Fox's Parkinson's disease by pretending to do this action. The songs "Sunrise, Sunset" and "If I Were A Rich Man" appear in a musical titled for doing this action in an unusual location.

ANSWER: **playing the violin** [or **fiddling** etc.]

15. Laser Unequal Path ones modify ones named for Twyman and Green that use collimators and monochromatic light. For 10 points each:

[10] Morley worked with the one of these instruments and their namesake to split a beam of light and recombine it in order to show an example of luminiferous aether, in which quest they failed.

ANSWER: Michelson **interferometers**

[10] In a follow-up to the Michelson-Morley experiment, this scientist and namesake of a rule concerning the entropy of vaporization used a capacitor to get the same null result.

ANSWER: Frederick Thomas **Trouton** [accept **Trouton-Noble** experiment, but do NOT accept **Noble**]

[10] The Trouton-Noble experiment showed that special relativity has this property, in which experimental results are independent of boosts or orientation of the laboratory in space

ANSWER: **Lorentz invariance** [or **Lorentz symmetric** or **Lorentz covariance**; prompt on partial answer, word forms are acceptable]

16. An extraction of phytoliths from the teeth of this species revealed a strong preference for C3 plants and determined that it ate bark. For 10 points each:

[10] Name this candidate ancestor of the genus *Homo* discovered in 2008. Despite a humanlike ankle joint, gracile features of this hominin's foot suggest that it may have been partially arboreal.

ANSWER: *Australopithecus* **sediba**

[10] *Australopithecus sediba* was discovered in the Cradle of Humankind in this country, where the Mrs. Ples skull of *A. africanus* was also located. The eagle-slain Taung Child was also discovered in this country, where leading economists include the ex-president's brother, Moletsisi Mbeki.

ANSWER: Republic of **South Africa**

[10] Another person who did social science in Africa was this disciple of Louis Leakey, who combined anthropological and biological observation of gorillas in Rwanda until her 1985 murder.

ANSWER: Dian **Fossey**

17. Characters in this novel include the gossip columnist White Carnation and Lemon the canary, the namesake of the film company the protagonist founds to finance *Blue Rain*. For 10 points each:

[10] Name this novel about a man who breaks off his engagement after an affair with Füsün, whom he later visits about four nights a week for eight years and steals objects from. She later dies in a car crash on a drive through Europe after a fight about an earring.

ANSWER: *The* **Museum of Innocence** [or **Masumiyet Müzesi**]

[10] This character from *The Museum of Innocence* dances with Füsün at a party and later writes the novel. This color-loving Turkish author wrote about a group of Ottoman miniaturists in *My Name is Red* and about an Italian enslaved by Hoja in *The White Castle*.

ANSWER: Orhan **Pamuk**

[10] Pamuk is currently dating this Indian author, who described the villagers of Shahkot battling the Cinema Monkey's band of alcoholic langurs and trying to lure Sampath out of a tree in *Hullabaloo in the Guava Orchard*. She also wrote *The Inheritance of Loss*.

ANSWER: Kiran **Desai** [prompt on **Desai**]

18. In the last years of his life he wrote numerous "Number Pieces," including a film-based one scored for "solo cameraman." For 10 points each:

[10] Name this minimalist composer of several pieces titled *Imaginary Landscape*, who also composed *4'33"*.

ANSWER: John Milton **Cage**, Jr.

[10] Influenced by the eight emotions in Indian art, called *rasas*, Cage wrote the twenty *Sonatas and Interludes* for this instrument, which often appears in Cage compositions. It takes a keyboard instrument and puts unexpected items on the strings.

ANSWER: **prepared piano**

[10] Cage also composed many dance-related works, including *Sonatas and Interludes*, influenced by this choreographer. This man formed his namesake dance troupe at Black Mountain College in 1953.

ANSWER: Merce "Merce" Philip **Cunningham**

19. Answer some questions about black holes, for 10 points each:

[10] Black holes are created when a bunch of matter is compressed down to this length scale, which is equal to $2 G M$ over c squared.

ANSWER: **Schwarzschild** radius

[10] The A-star radio source in this constellation is believed to be the supermassive black hole at the center of the Milky Way galaxy.

ANSWER: **Sagittarius**

[10] This measure for a black hole is proportional to one fourth times its area. The fact that this quantity scales with area rather than volume led to the derivation of the holographic principle.

ANSWER: **entropy**

20. This city named a set of laws that defined municipal autonomy in the Holy Roman Empire for centuries prior to the 1495 Diet of Worms. For 10 points each:

[10] Name this city whose Archbishopric was established by Otto I, who held court in this city and is buried at its cathedral. It served as a springboard for proselytization to the Eastern Slavs by its first archbishop, Adalbert.

ANSWER: **Magdeburg** [or **Meideborg**]

[10] Along with Pappenheim, this man led Catholic forces in the infamous sack of Magdeburg during the Thirty Years War. He died of tetanus from a cannon shot at the Battle of Rain, and was earlier defeated at the Battle of Breitenfeld.

ANSWER: the Count of **Tilly** [or Johann **Tserclaes**]

[10] This man commanded forces opposing Tilly both at the Battle of Rain and the Battle of Breitenfeld. This Protestant king of Sweden was called the “Lion of the North.”

ANSWER: **Gustavus Adolphus** [or **Gustav II** Adolf; prompt on **Gustavus**]

21. Answer some questions about the Milky Way, for 10 points each.

[10] Both the Jade Emperor and the Queen Mother of the West are said to have created the Milky Way to separate two lovers, who represent the stars Altair and Vega. They are reunited by a bridge of magpies on the “night of sevens.” Identify either of them.

ANSWER: the **cowherd** and the **weaver** girl [or **Niulang** and **Zhinu** (Chih'nü); or **Hikoboshi** and **Orihime**; or **Jiknyeo** and **Gyeonwu**]

[10] In this mythology, the Milky Way is represented by the great fish Te Ikaroa, which was carried to the heavens by Kewa, a son of Papa and Rangi. This tradition also tells the story of Maui fishing up a certain island with a jawbone hook.

ANSWER: **Maori** mythology [prompt on “Polynesian mythology” or “mythology of New Zealand”]

[10] In Greek myth, this son of Alcmena suckled on the breasts of Hera, but his enormous strength caused Hera to recoil from him, and her spilled breast milk formed the Milky Way. This figure later performed twelve labors.

ANSWER: **Heracles**