**Chicago Open 2015**

Packet by Lee Mack Presents “The Wonderful World Of All The 2012 Capex Of Wolfson Plc”! (Seth Ebner, Charles Hang, William Mason, and Gordon Arsenoff)

**1. In the middle of this painting, a small water wheel pours into a pool which then diverges into two waterfalls. This painting is on a wall whose window looks out onto the Cortile del Belvedere. Ennius sits on the left of this work while resting his quill-holding hand on a tree and copying down the dictated words of a man with an outstretched right arm, who is flanked by Virgil and Dante. A woman in this work's foreground who holds a lyre is identified by a** (\*) scroll in her hand with the name "Sappho" visible. The central character plays an anachronistic lira da braccio, with nine strings instead of seven, possibly symbolizing his nine companions. This painting is located on the North wall of the room that contains *La Disputa*, *The Cardinal Virtues*, and *The School of Athens*. For 10 points, name this Raphael fresco in the Stanza della segnatura that depicts Apollo surrounded by poets on the mountain home of the Muses.

ANSWER: *The* ***Parnassus***

**2. One account of this event was written in 2010 by Paul Hacker, who headed the consulate in a major city in the country in which this event took place. One of the masterminds behind this action split from the PAV party after being replaced as its head by Carnogursky and founded the HZDS party, while the other man behind this action was the leader of the ODS party. The mechanism for dividing property** (\*) following this action was codified in Act 541, and Act 542 specified its date. This action took place without a referendum, and despite the fact that overwhelming majorities in the country in which it occurred opposed it. Engineered by Vladimir Meciar and Vaclav Klaus over the objections of Vaclav Havel, who resigned rather than be a party to it, for 10 points, identify this 1992 action which split a central European nation in twain.

ANSWER: **Velvet Divorce** or **Dissolution of Czechoslovakia** [accept obvious equivalents indicating that **Czechoslovakia** is being split into separate countries]

**3. The Onyx embolic agent contains this substance mixed with ethylene vinyl alcohol copolymer. Mixing a 10 to 20% solution of this substance and Eagle’s minimal essential medium is commonly used to freeze stem cells. After being activated with a carbodiimide, this compound is used to activate primary and secondary alcohols in the Pfitzner-Moffatt oxidation. A derivative of this compound often shows a residual 2.50 ppm quintuplet peak; that very viscous deuterated “d6” derivative is often used instead of deuterated chloroform to dissolve NMR samples. Both oxalyl chloride and this substance are used to transform alcohols into aldehydes in a variety of the Corey-Kim reaction known as the (\*)** Swern oxidation. This compound is added to GC-rich templates to decrease their annealing temperature in PCR. This substance is created by reacting a byproduct of kraft pulping with oxygen or nitrogen dioxide. Upon touching the skin, this compound causes a taste of garlic in a person’s mouth. For 10 points, name this substance made up of two methyl groups bonded to a sulfur double bonded to an oxygen, which is commonly used as a solvent.

ANSWER: **DMSO** [or **Dimethyl sulfoxide**]

**4. As a child, this novel’s protagonist is told by his grandfather about the Swiss radical Babette of Interlauken, after which he has an eroticized dream about her. This novel’s protagonist works with the explosives expert Ninuzzo to sink the ship of Ippolito Nievo on behalf of Cavalier Bianco. That grandfather also introduces this novel’s protagonist to the theories of Abbé Barruel, which later influence his denunciation of the Expedition of the Thousand. Father Bergamaschi** (\*) pays this novel’s subject to work with Leo Taxil to create anti-Masonic literature. Rebaudengo teaches this novel’s protagonist his trade, which he describes as the creation of documents that should have existed. This novel’s protagonist thinks he may also be the Abbé Dalla Piccola, and sets a fictional meeting of thirteen Jewish elders in the title location. For 10 points, name this 2010 novel about the forger Simonini, who creates *The* *Protocols of the Elders of Zion*, written by Umberto Eco.

ANSWER: *The* ***Prague Cemetery***

5. **This nation celebrates days in which there is a full moon with Poya Day. Robert Knox’s 17th century imprisonment in this modern day nation helped inspire the novel *Robinson Crusoe*.The Mudaliyar caste was created in this nation while it was under colonial rule, building upon the earlier Govigama caste which still dominates politics here today. A fortress in this country was built by Kassapa, who usurped his father (\*)** Dhatusena’s crown from his half-brother Mogallana; that fortress is at Sigiriya and its creation was told in the Mahavamsa. This nation’s central region is home to the Temple of the Tooth, which contains a relic of the Buddha, as well as its former capital of Kandy. For 10 points, name this country whose capital is Sri Jayawardenepura Kotte in the city of Colombo.

ANSWER: **Sri Lanka**

**6.** **The first chorus in this play describes the images on the armor and shield of Achilles, and is often called the “Achilles ode.” In a mock-heroic allusion to the scene in the *Odyssey* where Eurycleia recognizes Odysseus, one character in this play is revealed to have a scar on his forehead from chasing a doe. The protagonist of this play parodies an earlier work on the same subject by mocking the idea of recognizing a family member by a footprint, a piece of clothing, or a lock of his hair. This play’s main character tells her** (\*) mother that she has had a son, even though she is married to a peasant from Mycenae who has respected her desire to remain chaste. At the end of this play, the Dioscuri appear and tell two characters to atone for their crime of pushing a sword down a woman’s throat. Its basic plot is similar to *The Libation Bearers*, as both begin with the title character reuniting with a friend of Pylades and vowing revenge. For 10 points, name this Euripides play in which Aegistheus and Clytemnestra are murdered by Orestes and the title woman.

ANSWER: ***Electra***

**7. Description acceptable. A group led by the pseudonymous “Lee Elder” opposes this doctrine. This doctrine was first introduced under the leadership of Nathan Homer Knorr. One document supporting this doctrine cites Americo Valerio to state that the practice it condemns can transfer criminal tendencies and sexual perversion. This doctrine is textually supported by Leviticus 17:15, which states that one must wash ones garments after (\*)** eating dead animals. Paul Blizard suffered disfellowshipping after refusing to adhere to this doctrine. This doctrine covers both allogenic and autologous methods, and is commonly enforced by a card referring to a “durable power of attorney”. For 10 points, name this doctrine by which members of a certain religion refuse a particular medical treatment that requires ABO typing.

ANSWER: **Jehovah’s witnesses’ refusal of blood transfusion** [accept reasonable equivalents]

**8. This company’s vice president for international operations, Sidney Reso, was kidnapped and murdered in 1992. In 2001, this company was sued over human rights violations committed by members of the Indonesian military it hired as security personnel in Aceh. This company undermined the World Bank’s loans to Chad, which were conditional on using revenues to fight poverty, by paying Idriss Deby enough money to back out of them. Those incidents were related in Steve Coll’s book about this company, *Private Empire*, which also noted how its current CEO, (\*)** Rex Tillerson, partially reversed his predecessor Lee Raymond’s policies on climate change.This company was the subject of a 2008 ruling that stated that punitive damages should not exceed compensatory damages in a maritime case; that ruling was in response to an accident involving its employee Joseph Hazelwood. This company was formed by the merger of the former Standard Oil of New Jersey and Standard Oil of New York. For 10 points, name this company whose *Valdez* tanker crashed in Alaska in 1989.

ANSWER: **ExxonMobil** [or **Esso**; prompt on anything involving **Exxon** or **Mobil**]

**9. After one inhabitant of this place was exiled, the servants responsible for exiling her fashioned a heart made out of tree sap to lie about her death. The guards of a garden located here were killed after a group of leafcutter ants managed to sneak past them. A house in this location was burned without damaging the inhabitants by a group of people who had transformed into humans from catfish. A message ordering one group to go to this place was told to a louse inside the belly of a toad inside a snake inside a falcon. The rulers of this place all sit next to mannequins meant to confuse their audience. A group of four roads which all talk appear in this place, and are encountered after a (\***) river of scorpions, a river of pus, and a river of blood. The daughter of an inhabitant of this place is impregnated by a skull spitting into her hand. By hiding inside of a blowgun, a group of adventurers that went to this location’s Bat House were able to survive; they were summoned here after its rulers heard them playing a ballgame too loudly. For 10 points, name this location whose rulers were killed by the Hero Twins, the underworld of Mayan mythology

ANSWER: **Xibalba** [prompt on “underworld” or “Mayan underworld”]

**10. Polymorphisms at codon-322 of this protein distinguish the Yt blood groups. A version of this enzyme found in *Torpedo californica* was used to deduce its crystal structure. This enzyme uses its ColQ tail subunit to tetramerize. Inhibition of this enzyme is used to reverse the effects of the anesthetics rocuronium and vecuronium. This enzyme is reversibly inhibited by edrophonium, and inhibitors of this enzyme in eye drop form are used to treat glaucoma. Organophosphate toxicity inhibits this enzyme, which can be regenerated by pralidoxime and inhibited by (\*)** neostigmine, which is commonly used to treat myasthenia gravis. Autoinjectors containing atropine are used in cases when this enzyme is inhibited by VX, Sarin, or other nerve agents. For 10 points, name this enzyme which breaks down a certain neurotransmitter at the neuromuscular junction.

ANSWER: **acetylcholinesterase** [or **AchE**]

11. **This book argues against the title locations using the metaphor of pulling a drowning person out of a lake, teaching him to use the bicycle, and then putting him back into the lake. This work also notes in a section subtitled “Some Notes on the Vicissitudes of the Tinkering Trades” that the operation of the title locations was reminiscent of how 19th century craftsmen operated. This book describes how people who enter the title locations undergo a process of “reconstruction” in which they reevaluate their past; that process occurs as part of their “moral career.”** (\*) In the essay that makes up this book’s first part, the title locations are compared to prisons, monasteries, and military organizations, which represent a class of location in which a large group of people is cut off from the rest of society and controlled by a small staff. This work’s author posed as the assistant to the athletic director of one of the title locations, which he described as a “total institution.” For 10 points, name this Erving Goffmann work about the title mental institutions.

ANSWER: ***Asylums***

**12. Charles Simic analyzed these artworks in his book *Dime-Store Alchemy*. One of these works depicts a white cockatoo surrounded by a grid of similar watch faces. Another of these works depicts a girl suspended by strings against a blue background as she holds a red bead on a string above a mountain, and is named for Tilly Losch. A group of them inspired by Emily Dickinson’s poetry includes *Toward the Blue Peninsula*, while another one uses plastic ice cubes to evoke the jewelery of Marie Taglioni. A spiral appears below a copy of Anguissola’s *Portrait of Massimiliano Stampa*, which is crisscrossed with black lines, in one of a series of them their artist called (\*)** *Medici Slot Machine*. These assemblages often include clay pipes, images of outer space, and references to ballerinas, and were created from found materials in the basement of their artist’s house in Queens. For 10 points, name these enclosed glass-covered artworks created by Joseph Cornell.

ANSWER: Joseph Cornell’s shadow **boxes** [prompt on Joseph Cornell’s **assemblage**s before mentioned]

**13. This work’s seventh section argues that the only philosophical problem “concerning the relationship of mind and matter” are the “linguistic problems of defining certain symbols which denote logical constructions in terms of symbols which denote sense-contents.” Accordingly, that section of this book claims that the self is “a logical construction out of the sense-experiences which constitute” its “actual and possible sense-history.” The final section of this work uses the difference between the sentences “the author of *Hamlet* wrote *Hamlet*” and** (\*) “Shakespeare wrote *Hamlet*,” to explain the errors of monism. In this work’s sixth chapter, the author puts forth an emotivist view of ethics, arguing that the sentence “Stealing money is wrong,” merely expresses personal disapproval. This work’s first chapter is dedicated to “The Elimination of Metaphysics,” and proposes that the significance of statements should be subject to the verification principle. For 10 points, identify this seminal work of logical positivism written by A.J. Ayer

ANSWER: ***Language, Truth, and Logic***

**14. This scientist’s namesake functions extend throughout the entire bulk sample, so for practical applications, they are often Fourier-transformed into Wannier functions, which are localized.A transition region named for this physicist arises when magnetic spins rotate around the in-plane axis, rather than around the z-axis as with a similar transition region named for Neel. This physicist gives his name to the most general geometric** (\*) representation of a two-state quantum system whose surface represents pure states. A theorem named for this physicist holds that a wavefunction given by the exponent of the dot product of the crystal wave vector and the distance vector times a periodic function of the distance vector is the most general solution for a periodic potential. For 10 points, identify this physicist whose namesake sphere is used to represent qubits and who shared the 1952 Nobel Prize with Edward Purcell for the invention of NMR.

ANSWER: Felix **Bloch**

**15. This ruler had to surrender most of the territory he won during one war by the terms of the Treaty of Oliva, and after reconquering it, he would later lose that same territory again at the Treaty of Saint-Germaine-en-Laye. Many of this ruler’s policies, especially with regard to agriculture, were strongly influenced by the time he spent at the court of Frederick Henry of Orange, whose daughter Louise Henriette he married. This ruler attempted to maintain neutrality during the First Northern War between Sweden and Poland, but after his territories were occupied by Swedish armies under Charles X Gustav**, (\*) he was forced to lead his army at the Battle of Warsaw, where his performance earned him territorial concessions to remain a Swedish ally. This ruler remained allied to Louis XIV until it became clear that Louis would not help him win Pomerania, at which point this man joined the Grand Alliance. It was with a victory over the Swedes in 1675 that this ruler gained his famous sobriquet. For 10 points, identify this father of Frederick I who consolidated the Prussian state during his rule from 1640 to 1688.

ANSWER: **Frederick William, the Great Elector** [accept **Frederick William, Elector of Brandenburg** or **Der Grosse Kurfurst**; prompt on “Frederick William” but do not accept or prompt on “Frederick William” followed by any number]

**16. The title character of one of this author’s novels becomes an abolitionist and moves to Bleeding Kansas with her husband Thomas Newton, whose murder by border ruffians inspires her to disguise herself as a man and track down his killers. In another of this author’s novels, Dr. Lionel Gift conspires with Arlen Martin on a scheme to mine gold in the last virgin cloud forest in Costa Rica, which is opposed by Chairman X. This author of *The All-True Travels and Adventures of Lidie Newton* wrote a novel which follows the life of Margret** (\*) Asgeirsdottir from birth to death, as well as an academic farce which opens by describing an experiment conducted on a 700-pound pig named Earl Butz. After writing *The Greenlanders*, she used Zebulon County, Iowa as the setting for a novel inspired by *King Lear*, in which Larry Cook bequeaths his farm to his three daughters, Rose, Caroline, and Ginny. For 10 points, name this American author of *Moo* and *A Thousand Acres*.

ANSWER: Jane **Smiley**

**17. A 1972 paper by Melvin Page and Patrick Bennett analyzes a note carved into a pair of sandals by this man, which mentions the Englishman "Mr. Ward," to examine the controversy over whether he spoke Arabic. This man fought alongside his father in a tax revolt against Manua Sera. After acquiring financing from Tarya Topan, this man went on a twelve-year expedition around Maniema, then established a new base at Kasongo. After attacking the Tabwa over a dispute with Chief Nsama, he began investing his money in clove plantations. Agents of this man escorted** Henry Stanley's expedition down the Lualaba River, and he made an 1882 deal to act as the local agent of the Sultan of Zanzibar. This man was given an onomatopoetic name after the sound of his guns, and his power waned after his son Sefu was killed fighting Belgian agents in the Congo in 1893. For 10 points, name this Swahili ivory and slave trader who controlled a large portion of East Africa.

ANSWER: **Tippu Tip** [or **Muhammad bin Hamed**]

**18. The BHT algorithm uses this algorithm to make only Big-O of N to the one-third queries to solve the collision problem. A key component of this algorithm is a function that returns 1 if a query is a solution and 0 if it is not, which is implemented by an "oracle". This algorithm contains a namesake process that should be iterated pi-over-4 times the square root of N-over-M times to maximize correctness, where N is the number of entries and M is the number of solutions. This algorithm starts by considering a uniform superposition** (\*) of all possible values. A namesake diffusion operator is then iteratively applied, and then a measurement is made to determine the solution with high probability. If the oracle detects a solution, the oracle qubit is flipped. This algorithm uses logarithmic space, and it sees a quadratic speedup over the optimal classical algorithm as it runs in Big-O of square root of n time. For 10 points, name this quantum searching algorithm.

ANSWER: **Grover**’s algorithm

**19. A piece of this type is the penultimate movement of Thomas Tallis’s *Dorian Service*, occurring just before the *Nunc dimittis*. They give their name to a series of 95 fugues, each written “on” one of the eight tones, by Johann Pachelbel. A piece of this type in G minor by Vivaldi uses two oboes only in the penultimate movement and is numbered RV610. Another piece of this type originally contained extra insertions like the hymns (\*) “Vom** himmel hoch” and “Virga Jesse floruit,” and was written for the composer’s first Christmas as Thomaskantor in Leipzig. Ten years after the premiere of that piece, the composer took out the extra hymns and transposed the piece from E-flat to D. The text of these pieces is often divided into verses such as “Et exultavit” and “Sicut locutus,” and is taken from Luke chapter 1 and often called Mary’s “Song of Thanksgiving.” For 10 points, name these Marian canticles often performed during Vespers or Evensong, whose title comes from the incipit “My soul doth magnify the Lord.”

ANSWER: **Magnificat**s [accept ­**Canticle of the Virgin** or **Canticle of Mary** or **Song of Mary** before Mary’s name is read]

**20. The preface to this book’s second edition responds to James Smith’s critique that it lacks the “judgment of value” by noting that there is an implicit argument for the quality of the poems its author discusses in detail, among them Pope’s “Epistle 2: To a Lady” and Herbert’s “The Sacrifice.” Its last section delves into psychology and repeats Freud's claim that when an ancient Egyptian saw a baby “he at once thought of an old man.” Its author argues that Keats’ “Ode on Melancholy” demonstrates that a “force in the poet’s mind, must have wanted to go to Lethe very much, if it took four negatives in the first line to stop them.” Opening with a discussion of how (\*)** “pure sound and atmosphere” impact understanding, this book posits that features like “double grammar” and “alternative meanings” are valuable tools in analyzing literature. For 10 points, identify this work of criticism whose title refers to a certain number of “verbal nuance[s]” which provoke different reactions to the same piece of language, a book by William Empson.

ANSWER: ***Seven Types of Ambiguity***

1. The Future Combat Systems and Expeditionary Fighting Vehicle programs were cancelled due to this amendment. For 10 points each:

[10] Name this amendment which requires notifying Congress if a weapons project’s cost per unit goes 15% over budget. If that cost overrun is over 25%, the project is cancelled unless the Secretary of Defense asks for a waiver.

ANSWER: **Nunn-McCurdy** Amendment

[10] This fighter jet produced by Lockheed Martin for the Joint Strike Fighter program has repeatedly breached the Nunn-McCurdy amendment. Its per-unit cost has risen from less than $65 million to over $200 million.

ANSWER: **F-35** **Lightning II** [accept either]

[10] In 1981, this head of the Senate Armed Forces Committee compared the Nunn-McCurdy Amendment to “closing the gate after the horse has galloped off into the boondocks.” This Texas Republican chaired the commission which investigated the Iran-Contra scandal.

ANSWER: Senator John Goodwin **Tower**

2. He chose Athena over Poseidon as patron of Athens. For 10 points each:

[10] Name this mythological founder of Athens, who had a serpent’s tail instead of legs. His daughters Herse, Pandrosos, and Aglaurus were given a box containing a baby.

ANSWER: **Cecrops**

[10] Cecrops was said to have been born in this manner when Hephaestus’s semen landed on Gaia. Other people born like this included Evenor and Erechtheus, another Athenian ruler.

ANSWER: **autochthonous** [accept **born from the earth** and equivalents]

[10] Because of Erechtheus’ prowess as a charioteer, Zeus is said to have placed him in the stars as this constellation, which is alternatively associated with Myrtilus.

ANSWER: **Auriga**

3. This newspaper was the subject of the work *The Kingdom and the Power*, which one review described as “the first ‘media book’ portraying the inner-workings of a media establishment.” For 10 points each:

[10] Name this newspaper whose leadership by Arthur Ochs Sulzberger was described in that work. This paper uses the motto “All the News That’s Fit to Print.”

ANSWER: *The* ***New York Times***

[10] *The Kingdom and the Power* was written by this former *New York Times* journalist who wrote about the stresses affecting the title singer in the *Esquire* magazine article “Frank Sinatra Has a Cold.”

ANSWER: Gay **Talese**

[10] Talese also wrote about how fame declines in the article “The Silent Season of the Hero,” a work about this person.

ANSWER: Joseph Paul "Joe" **DiMaggio** [or Giuseppe Paolo **DiMaggio**; accept "**Joltin' Joe**" or "The **Yankee Clipper**"]

4. This disease can be caused by the japonicum, mansoni, or haematobium species of a certain organism, and those causative agents commonly use freshwater snails as hosts. For 10 points each:

[10] Name this parasitic disease that can manifest as an acute fever named for Katayama. Like the liver fluke and the fish tapeworm, its causative agents are often killed using praziquantel.

ANSWER: **schistosomiasis**

[10] The causative agents of schistosomiasis are members of this phylum of unsegmented flatworms.

ANSWER: **platyhelminth**es

[10] The antihelminthic albendazole can cause this unfortunate side effect in which a bone marrow smear shows stem cells almost completely replaced by fat. It can also be caused by parvovirus B19 in sickle cell patients.

ANSWER: **aplastic anemia** [prompt on partial answer]

5. This formulation simplifies the more general Mueller calculus, although it only applies to completely polarized light. For 10 points each:

[10] Name this formulation that treats polarized light as 2-by-1 vectors and optical elements as 2-by-2 matrices. Unlike the Mueller calculus, this formulation considers the electric field and also light waves’ relative phases.

ANSWER: **Jones** calculus

[10] Mueller calculus makes use of this physicist’s namesake four-component vectors that can characterize light of any polarization. This man is perhaps better known for co-developing fluid mechanics equations that reduce to Euler’s equations for inviscid flow.

ANSWER: Sir George Gabriel **Stokes**, 1st Baronet

[10] While the first Stokes parameter represents the intensity of the light, the other three form a Cartesian coordinate system on this object that describes the possible polarization states for light of a given power.

ANSWER: **Poincaré sphere**

6. This work made an enormous amount of money for its producer, John Rich. For 10 points each:

[10] Name this ballad opera by John Gay about Macheath, a highwayman who avoids hanging after the narrator announces that the audience demands a happy ending.   
ANSWER: *The* ***Beggar’s Opera***

[10] *The Beggar’s Opera* begins with this character singing “Through all the employments of life / Each neighbor abuses his brother / Whore and Rogue they call husband and wife.” This professional thief-catcher plots Macheath’s execution after his daughter announces that she’s married Macheath.

ANSWER: Mr. **Peachum**

[10] While in Newgate, Macheath sings “and if rich men like us were to swing / ‘Twould thin the land, such numbers to string” upon this place’s tree, referring to its massive gallows. Until 1783, this village was the main site of public executions in England.

ANSWER: **Tyburn**

7. This religion is split into the Ketu, Jejé, and Bantu branches, or nations. For 10 points each:

[10] Name this syncretic religion that combines Yoruba, Fon, Bantu, and Catholic beliefs and whose name translates to “dance in honor of the gods”. Its ancestral deities are known as orixas.

ANSWER: **Candomblé**

[10] Like Umbanda and Quimbanda, which were once termed “macumba”, Candomblé is practiced mainly in this country. Its city of Recife is home to the oldest Jewish congregation in the New World.

ANSWER: Federative Republic of **Brazil**

[10] These objects are often used by Candomblé priests to select verses to read based on whether their slit is facing up or facing down. In Yoruba religion, spirits respond to questions by influencing how these objects fall. ANSWER: **cowry** shells [accept **cowrie** shells]

8. The narrator of this poem studies “the monstrous ribs” of the title structure, built on the site where “Roman magistrates judged a foreign people.” For 10 points each:

[10] Identify this poem whose narrator concludes that he too will someday create something as beautiful as the title “basilica” from an unyielding heaviness.

ANSWER: **Notre Dame**

[10] “Notre Dame” was written by this Russian Acmeist who wrote of a political leader whose “thick fingers are bulky and fat like live-baits / And his accurate words are as heavy as weights” in his “Stalin Epigram.”

ANSWER: Osip Emilyevich **Mandelstam**

[10] Mandelstam used this adjective to refer to Stalin’s “torso” in the *Stalin Epigram*. This adjective alludes to Stalin’s Georgian ancestry.

ANSWER: **Ossetian**

9. After the battle of Cannae, this man dispatched fifteen hundred men to protect Rome from Hannibal’s victorious forces. For 10 points each:

[10] Name this man, known as the Sword of Rome, who won the *spolia opima* for slaying the Insubrian king Britomartus in single combat.

ANSWER: Marcus Claudius **Marcellus**

[10] During the Second Punic War, Marcellus commanded troops that besieged this city, which had declared for Carthage under the leadership of the magistrates Hippocrates and Epicydes. Archimedes was killed when Roman troops finally captured it in 212 B.C.E.

ANSWER: **Syracuse**

[10] A long era of Sicilian loyalty to Rome ended with the death in 215 B.C.E. of this long-time tyrant of Syracuse, who was succeeded by a son who ruled for less than a year before being assassinated.

ANSWER: **Hiero II**

10. Kaddish Poznan’s son Pato disappears during the Dirty War in this author’s first novel, *The Ministry of Special Cases*. For 10 points each:

[10] Name this contemporary American author, who used Stalin’s “Night of the Murdered Poets” as the basis for “The 27th Man,” a short story published in his collection *For the Relief of Unbearable Urges*.

ANSWER: Nathan **Englander**

[10] Englander wrote a short story titled “What We Talk About When We Talk About [this person].” This friend of Miep Gies wrote a series of letters to her pen pal Juanita Wagner before she died in Bergen-Belsen.

ANSWER: Anne **Frank** [or **Anne** Frank]

[10] This novel by Philip Roth is narrated by a young Nathan Zuckerman, who comes to believe that Anne Frank is alive and going by the name Amy Bellette. It focuses on Zuckerman’s relationship with his mentor, the old writer E. I. Lonoff.

ANSWER: *The* ***Ghost Writer***

11. Answer the following about composers who brought American folksong into classical music, for 10 points each.

[10] Henry Cowell claimed that the third movement of this composer’s modernist string quartet was the greatest ever written for such an ensemble. She collaborated with Carl Sandburg, setting several of his poems to music, and compiled a number of books intended to teach folk songs at the elementary level.

ANSWER: Ruth Crawford **Seeger**

[10] This composer profusely quoted folk, hymn, and patriotic tunes like “Columbia, Gem of the Ocean” in pieces like his *“Holidays” Symphony*. He also called for the player to hit the keys with a piece of wood in his *Concord Sonata*.

ANSWER: Charles **Ives**

[10] Ives quoted the hymn “Bethany” both in his unfinished “Universe Symphony” and in this piece which usually requires two conductors to perform due to its incredibly complex polyrhythms.

ANSWER: **Symphony** No. **4**

12. The number of arguments that these words take is known as their valence. For 10 points each:

[10] Name these words whose intransitive form lacks a direct object.

ANSWER: **verb**

[10] In languages with this property, the subject of a transitive verb differs from the subject of an intransitive verb.

ANSWER: **ergativity** [or **ergative**-absolutive language]

[10] In English, a phenomenon similar to ergativity can be seen in the way this suffix is placed on the end of some verbs in order to turn them into nouns and make them the objects of transitive verbs. The suffix comes from the French past participle form.

ANSWER: -**ee** (as in “retiree” as a form of “retire”)

13. Prince Shotoku was inspired by this system to develop the Handen-Shinju system as part of the Taika Reforms. For 10 points each:

[10] Name this system of land distribution popular in the early and mid-Tang dynasty. Under this system, every able-bodied man received 40 mu of land, and women received less

ANSWER: **Equal-field** system [or **Jūntián Zhìdù***]*

[10] The equal-field system was first implemented by Emperor Xiaowen of this dynasty, which was founded by the Tuoba clan of the Xianbei ethnic group. This dynasty united northern China in the 400s AD.

ANSWER: **Northern Wei** [prompt on “Wei”]

[10] Another ruler of a kingdom called Wei was this emperor and military leader, who participated in the campaign against Dong Zhuo and was defeated at the Battle of Red Cliffs by his rivals Liu Bei and Sun Quan.

ANSWER: **Cao Cao** [or Emperor **Wu** of Wei or **Mengde**]

14. A March 2015 article described how a fracking fluid made from a polymer of this compound could be expanded and shrunk when needed, reducing the volume of fluid necessary. For 10 points each:

[10] Name this compound whose three varieties are formed by treating allyl chloride with ammonia, after which the result is distilled.

ANSWER: **allylamine** [accept poly**allylamine**]

[10] The experimental fracking fluid works by forming one of these substances which behave like solids despite being primarily made of water. They are similar to other substances which behave like solids despite being primarily made of oil or air.

ANSWER: **hydrogel** [prompt on “gel”]

[10] Hydrogels can be used to encapsulate quantum dots. A common type of quantum dots use this element’s selenide, and this poisonous element is also paired with nickel oxide in rechargeable batteries.

ANSWER: **Cadmium** or **Cd**

15. He collected his musings in *Novels in Three Lines* and was a defendant in the Trial of the Thirty, for 10 points each.

[10] Name this French art critic who championed the Neo-Impressionist movement. Paul Signac’s *Opus 217: Against the Enamel of a Background Rhythmic with Beats and Angles, Tones, and Tints* depicts this man’s goatee and shows him carrying a tophat and cane and extending a flower.

ANSWER: Félix **Fénéon**

[10] Another defendant in the Trial of the Thirty was this artist who painted Fénéon “at Manzas”. His other works include *The Quai Saint-Michel and Notre-Dame* and *The Execution of Varlin*.

ANSWER: Maximilien(-Jules-Constant) **Luce**

[10] Fénéon most notably promoted the work of this artist who painted *Bathers at Asnières* and depicted his most famous work hanging on the wall in *The Models*.

ANSWER: Georges(-Pierre) **Seurat**

16. This man may have fictionalized his affair with Victor Hugo’s wife Adele in his only novel, *Volupte*. For 10 points each:

[10] Name this 19th century French literary critic, whose many literary “portraits” analyzed biographical details from an author’s life in order to interpret an author’s works.

ANSWER: Charles Augustin **Sainte-Beuve**

[10] This author attacked Sainte-Beuve’s views about literature in his book *Against Sainte-Beuve*. His only novel ends with a party thrown by the Prince of Guermantes in the section *Time Regained*.

ANSWER: Marcel **Proust**

[10] Proust’s essay “On Reading” discusses his translation of this author’s book *Sesame and Lilies*. Another of this author’s books attacks the Industrial Revolution for dehumanizing workers in its section “The Nature of Gothic.”

ANSWER: John **Ruskin**

17. One process to produce this metal avoids the excess exposure to nitrogen caused by an earlier process by using an open hearth furnace. For 10 points each:

[10] Name this metal whose mild variety replaced wrought iron in applications such as construction.

ANSWER: **steel**

[10] One definition of steel is that it is an iron-carbon alloy that does not undergo this type of reaction. These reactions occur when a mixture melts or solidifies all at once at a given namesake temperature.

ANSWER: **eutectic** reaction

[10] In plain-carbon steel, this allotrope of iron combined with an alloying element occurs about a eutectoid temperature of 1000 degrees. This allotrope is formed when ferrite is heated.

ANSWER: **austenite**

18. Hans Albert coined the term “Munchhausen Trilemma” to refer to an argument made by this thinker that all arguments are ultimately either circular, axiomatic, or infinitely regressive. For 10 points each:

[10] Identify this thinker about whom very little is known save that Diogenes Laertius attributed to him the five modes for suspending judgment.

ANSWER: **Agrippa** the Skeptic

[10] The Modes of Agrippa were incorporated into the *Outline of Pyrrhonism*, the most important text of this skeptical philosopher who also wrote *Against the Mathematicians*.

ANSWER: **Sextus Empiricus**

[10] The work of Sextus Empiricus was a strong influence on this 17th century French philosopher, who relied on the words of Jesus as related in Luke 14:23 to argue for religious toleration in his *Philosophical Commentary*, an argument that he would later develop in a much larger work.

ANSWER: Pierre **Bayle**

19. You can climb a ladder and peek into the asshole of a sculpture by this artist to see two politicians feeding each other to the song “We Are the Champions.” For 10 points each:

[10] Name this artist who sculpted statues of Sigmund Freud hanging from one arm above a building and Saint Wenceslas riding an upside-down horse. He parodied Damien Hirst’s *The Physical Impossibilities of Death in the Mind of Someone Living* in *Shark*, which depicts Saddam Hussein in a tank of formaldehyde.

ANSWER: David **Černý**

[10] Černý sculpted a series of babies crawling up this city’s Zizkov Television Tower. It’s also the site of Frank Gehry’s *Dancing House* and Jaroslav Róna’s sculpture of Franz Kafka.

ANSWER: **Prague** [or **Praha**]

[10] In the early 1990s, Cerny notoriously painted a Soviet tank this color. It’s also the color of a cartoon character held by Jayne Mansfield in a sculpture by Jeff Koons and the fabric that Christo and Jean-Claude used to surround a series of islands in 1983.

ANSWER: **pink**

20. During this battle, Swiss mercenaries under the Duke of Milan defected to the side of the French. For 10 points each:

[10] Name this 1500 battle in which the remaining Milanese forces were slaughtered while trying to cut their way through French siege lines.

ANSWER: First Battle of **Novara** [accept **Treason of Novara**]

[10] This Duke of Milan, also known as “Il Moro,” was betrayed and captured at Novara while trying to sneak out among the Swiss defectors. He had succeeded to the ducal throne after the suspicious death of his nephew Gian Galeazzo.

ANSWER: **L**udovico **Sforza**

[10] 13 years after the First Battle of Novara, another battle at the same location resulted in the complete defeat by Swiss halberdiers of these German mercenaries in the pay of the French. These troops typically used long pikes and maneuvered in squares.

ANSWER: **Landsknecht**s