

ACF Fall 2013

Packet by Stanford A (Benji Nguyen, James Bradbury, Roger Cain, Dennis Sun) and Maryland A (Isaac Hirsch, Dan Puma, Adam Hussain, Ophir Lifshitz)

Edited by Stephen Liu, Tanay Kothari, Ankit Aggarwal, Adam Silverman, Stephen Eltinge, Lloyd Sy, John Lawrence, and Andrew Hart

1. This species created oval and pear-shaped handaxes indicative of the fact that it was the first species to be grouped with the Acheulean stone tool industry. One site yielding fossils of this species was excavated by Franz Weidenreich and Pierre Teilhard de Chardin. The *ergaster* species, exemplified by Turkana Boy, is also known as the “African” type of this species. Eugene Dubois made an 1891 find in Indonesia of fossils of this species, which is thought to have arisen about 1.8 million years ago as a descendant of *Homo habilis*. For 10 points, name this species, exemplified by the fossil finds of Java Man and Peking Man, whose Latin name means “upright man.”

ANSWER: *Homo* **erectus** [or **H. erectus**; prompt on **Homo**; accept **Pithecanthropus erectus** or **P. erectus**]

2. At the center of this work, a man wearing a shirt with baggy, black and white-striped sleeves sits with his back to the viewer and his face cast to a scene on the right. On the left of this painting, which hangs in the Contarelli Chapel, a wide-eyed, bearded man points at a young man in red slumping over a wooden table, while a balding man peers through his spectacles at a pile of coins. An open window and a harsh beam of light illuminate the title action of this painting, which occurs as a figure on the right points his outstretched arm toward the center of the canvas. For 10 points, name this painting in which Jesus reaches out to a tax collector, a work by Caravaggio.

ANSWER: *The* **Calling of St. Matthew**

3. In the 1950s, a massive temple dedicated to Mithras at Walbrook was excavated in this city. The Kray Twins were major gangsters during the 1960s in this city, where the Bow Street Runners were formed to fight crime. According to Tacitus, women in this city had their breasts cut off by the Iceni under Boudicca. Edward the Confessor had a Romanesque royal burial complex constructed in this city, which was destroyed in a 1666 fire recorded in a diary by Samuel Pepys. Charles I opened this city’s Hyde Park to the public. For 10 points, name this city served by Heathrow Airport, home to boroughs like Newham and Chelsea and the capital of England.

ANSWER: **London**

4. This quantity is often plotted on the y-axis of a DSC output, and a sudden discontinuity in it usually characterizes the glass transition of a polymer. Calculation of sensible heat requires integrating this quantity, usually to an empirical polynomial fit. For a monoatomic ideal gas, this quantity is $2.5R$ at constant pressure and $1.5R$ at constant volume. At constant pressure, the derivative of enthalpy with respect to temperature equals a form of this quantity. Hydrogen bonding in water gives it a value of 4.18 Joules per Kelvin for this quantity. For 10 points, name this quantity, the amount of energy required to raise a substance’s temperature by one degree.

ANSWER: **specific heat** capacity [prompt on “C” or “C_P” or “C_V”]

5. Hylas, a member of these people, was abducted by naiads when they visited the Cius River. A woman associated with them killed the bronze man Talos, and this group was forced to wait in Phaeacia while two people were married by Alcinous. Earlier, they were purified of the murder of Absyrtus, son of King Aeetes. Apollonius of Rhodes wrote an epic about these people, who came together to assist their leader in completing a quest for his uncle Pelias. This group escaped the Sirens thanks to the music of Orpheus, and other members included Meleager and Heracles. For 10 points, name this group of Greek heroes who helped Jason retrieve the Golden Fleece.

ANSWER: **Argonauts**

6. While holding this political office, Abel Upshur was killed during the explosion of the *USS Princeton*. This office was held by William Marcy under Franklin Pierce, and its longest-serving holder was Cordell Hull. Both John

Sherman and John Hay were appointed by William McKinley to this office. It was the highest executive office held by William Jennings Bryan, though he resigned in protest of Wilson's response to the sinking of the *Lusitania*. The man responsible for the "folly" of purchasing Alaska, William Seward, held this office under Lincoln. For 10 points, name this office responsible for America's foreign affairs, more recently held by Hillary Clinton.

ANSWER: United States **Secretary of State**

7. The idea that this body of water underwent a catastrophic rise in 5600 BCE is the subject of William Ryan and Walter Pitman's "deluge hypothesis." This body of water, the world's largest not to contain intermixing layers, is often called the Euxine Sea in historical texts. The resort town of Varna is located on this body of water, whose northern coast is indented by a peninsula containing the city of Yalta. The Strait of Kerch separates the Sea of Azov from this body, which is separated from the Sea of Marmara by the Bosphorus. For 10 points, name this sea that surrounds the Crimean Peninsula and borders Romania, Bulgaria, Ukraine, Russia, and Turkey.

ANSWER: **Black** Sea

8. In September 2013, one probe to this celestial body became the first deep space mission launched from the Mid-Atlantic Regional Spaceport. A Chinese probe to this body is scheduled for launch in December 2013. The Ranger and Surveyor spacecrafts were the first American ones to explore its surface, and the 1994 Clementine mission imaged this body from orbit. Google sponsors a private competition to land a rover on this body through the X Prize Foundation. A Soviet probe took the first pictures of the "far side" of this body, which is currently being mapped by the LRO. For 10 points, name the only extraterrestrial body that has been visited by human explorers.

ANSWER: the **Moon**

9. A scene from one of this man's works has Helen telling Paris how she noticed the words "I love" spelled out with wine on a table. That collection by this man consists of letters from heroines such as Penelope and Medea to their lovers. One of this writer's characters kills himself after thinking his lover was murdered by a lion. Before this poet of the *Fasti* and the *Heroides* was exiled to the Black Sea, he wrote a poem about the art of seduction. This man described transformations in the story of Pyramus and Thisbe and Apollo and Daphne, among others, in his most famous work. For 10 points, identify this Roman poet of *The Art of Love* and the *Metamorphoses*.

ANSWER: Publius **Ovidius** Naso

10. This thinker argued that the phrase "in the beginning" indicates not a temporal beginning, but the origin to which we return. He discussed different methods of interpreting signs when reading scripture in *On Christian Doctrine*. In one work, he recounts a vision in Ostia that he experienced with his mother, Monica. He used the sack of Rome as an example of the defeat of an earthly construct "of man" that is in conflict with the title divine domain. In one work, the voice of a child telling him to "take up and read" the Bible catalyzes his conversion from Manichaeism to Christianity. For 10 points, name this Church Father who wrote the *City of God* and *Confessions*.

ANSWER: Saint **Augustine** of Hippo [or Saint **Austin**]

11. A common cause of this disease is the malfunction of a diacidic sorting signal due to the deletion of phenylalanine residue 508 in a critical protein. This disease often results in over-expression of the ENaC channel protein, due to a defect in an ABC-class transporter for thiocyanate and other anions. The structure that normally connects the epididymis to the urethra, the *vas deferens*, is often absent in males who suffer from this disease. This autosomal recessive disorder is often diagnosed with a sweat test, measuring the concentration of chloride in the fluid. For 10 points, name this disease which causes the buildup of thick mucus in the lungs.

ANSWER: **cystic fibrosis** [or **CF**]

12. Chris Marker's theory that the second half of this film mostly takes place in the mind of its protagonist partially hinges on the fact that it takes months to get reservations at Ernie's. This film uses an extensive amount of profile

shots of one character whom the main character is tasked to follow by Gavin Elster. That character, a look-alike of Madeline, pretends to have been overtaken by the spirit of Carlotta Valdez so that Madeleine's fall from the top of the bell tower at the Mission San Juan Bautista could be ruled a suicide. For 10 points, name this Alfred Hitchcock film in which Scottie Ferguson pursues a mysterious woman but is hampered by his titular dizziness.

ANSWER: Vertigo

13. This figure hid much of his fortune with secret accounts at the Riggs Bank. This man ordered his secret police, the DINA, to eliminate dissidents in Operation Colombo. He was indicted in 2002 for his connection to a death squad in his country known as the "Caravan of Death," and came to power after the bombing of the La Moneda palace. This man presided over his country's economic "miracle," which was aided by a group of advisers known as the "Chicago Boys." This participant in Operation Condor overthrew his predecessor in a CIA-backed coup in 1973. For 10 points, identify this man who overthrew Salvador Allende and was a former dictator of Chile.

ANSWER: Augusto Pinochet Ugarte

14. According to Luke, immediately after the Resurrection, Jesus consumes fish and this food with the disciples. Samson asks the Philistines a riddle about how one can extract this food from the beast of a wild animal. Saul nearly kills Jonathan after Jonathan consumes this food. While living in the wilderness, John the Baptist subsides on locusts and this substance. Manna is usually described as tasting like wafers baked with this foodstuff. On Rosh Hashanah, Jews traditionally consume apples mixed with this substance. The Promised Land of Canaan is said to flow with milk and this substance. For 10 points, name this sweet food that can be extracted from beehives.

ANSWER: honey [or honeycomb]

15. The title character of one of this author's novels is impregnated by a Senator and tries to keep her daughter, Vesta, a secret from her next lover, Lester Kane. At a performance of *Under the Gaslight*, George Hurstwood cheats on his wife with the title actress of another novel by this author. In that novel, this author of *Jennie Gerhardt* created the character of Minnie, whose sister is given critical financial assistance by George Drouet. Another novel by this man sees the protagonist kill the pregnant Robert Alden to preserve his relationship with Sondra. For 10 points, name this creator Clyde Griffiths, an American novelist who wrote *Sister Carrie* and *An American Tragedy*.

ANSWER: Theodore Herman Albert Dreiser

16. A public holiday called Restoration of Sovereignty Day was held in this country in 2013. In August, this nation's finance minister said that his country could admire Nazi Germany's way of changing the constitution stealthily. This nation has recently entered free-trade talks in the TPP, angering highly subsidized farmers. Quantitative easing, fiscal stimulus, and extensive deregulation are the "three arrows" of this nation's prime minister's namesake economic program. That PM controversially visited a war shrine in 2006, when he also held the office, but resigned due to his poor health. For 10 points, name this Asian country led by Shinzo Abe.

ANSWER: Japan [or Nippon]

17. A failed attempt by William I to suppress a revolution in this country was known as the Ten Days' Campaign. Chancellor Bethmann Hollweg commented that Germany was going to war over a "scrap of paper" after Germany violated a policy concerning this country. One of this country's rulers was criticized in the Casement Report, and that same ruler created an army called the *Force Publique*. Resistance from this country's fortresses was key in

foiling the Schlieffen Plan, and a king of this country created a personal colony for himself in a part of the Congo named for this country. For 10 points, name this country home to the cities of Antwerp and Brussels.

ANSWER: Kingdom of Belgium

18. One statement about this property will be tested with the disturbance-insulated samples of the STEP satellite. Robert H. Dicke confirmed the accuracy of that statement about this property to 1 in 100 billion, improving on an earlier experiment in which Lorand Eotvos used a torsion balance to balance two forces caused by it. That experiment demonstrated the equivalence principle, which states that two types of this property are identical. Its rest type is often measured in electron volts, leaving off the factor of c squared between energy and this property. For 10 points, name this property inherent to matter, and gravitational forces, which can be measured in kilograms.

ANSWER: mass

19. One of this man's poems imagines an object "hung with snow" that "stands about the woodland ride / Wearing white for Eastertide." That poem is found in a collection alongside a poem in which a wise man tells the narrator to "Give crowns and pounds and guineas / But not your heart away," and ends with the lament, "And oh, 'tis true, 'tis true." This poet describes "fields where glory does not stay" in a poem that notes that the laurel "withers quicker than the rose," and recalls "the time you won your town the race." For 10 points, name this English poet of "To An Athlete Dying Young" and "When I Was One and Twenty," which appeared in his collection *A Shropshire Lad*.

ANSWER: Alfred Edward Housman

20. One composer's second work in this genre has a handbell part in the finale that grants that movement its nickname. Another work in this genre features a G minor canzonetta second movement that leads directly into the finale. That D major work by Tchaikovsky was its composer's only foray into this genre. An E minor work of this type by Mendelssohn places the cadenza before the recapitulation. Brahms' only work in this genre was written for Joseph Joachim, and four of these works make up *The Four Seasons*. For 10 points, name this type of work for orchestra and a solo part that Itzhak Perlman or Niccolò Paganini might have played.

ANSWER: violin concerto [prompt on partial answer]

21. In one novel by this author, a woman rejects a suitor in favor of Norberg, who supports her financially and the title character rescues Mignon from abusive acrobats. Count C and Fräulein von B look down upon another of this author's characters, who briefly leaves Wahlheim to lose his obsession with a fellow Ossian enthusiast. An "apprenticeship" ends when a member of the Tower Society marries Natalia in this man's first novel about Wilhelm Meister. This man created a character who shoots himself with Albert's pistols after Lotte spurns his love. For 10 points, name this German member of the Sturm und Drang movement who wrote *The Sorrows of Young Werther*.

ANSWER: Johann Wolfgang von Goethe

X. The city of Shemnitz was known for its production of this resource in medieval times, while the Grecian city of Laurium was a major source of this resource in the ancient world. Its discovery in one nation led to boomtowns like Virginia City. European powers' replacement of this trade medium led to the Opium Wars. The Spanish used the *mita* system to provide labor for the mining of this resource at sites like Potosi. In the US, using this to back currency was promoted by the bimetallism movement. For 10 points, name this resource that was championed in William Jennings Bryan's Cross of Gold Speech and is frequently used in coins and jewelry.

ANSWER: silver [or Ag]

X. Finding an optimal one of these procedures for two normal distributions is known as the Behrens-Fisher problem. Wilks' theorem gives a general way to construct one of these procedures based on the likelihood ratio, which is the optimal one according to the Neyman-Pearson lemma. Their typical goal is to maximize power while controlling Type I error below a threshold called the significance level. Inverting the acceptance region of one of them gives a

confidence interval, and they produce a p -value that describes the probability of obtaining some result under the null hypothesis. For 10 points, name these statistical practices that come in z , t , and chi-square varieties.

ANSWER: hypothesis **test**

X. In one scene from this novel, the protagonist must fight off a plague of locusts. This novel's opening sees the protagonist go to the House of Hwang to purchase a wife, and he later tries to convince a girl to poison his mentally disabled daughter, nicknamed the "poor fool." At the end of this novel, the sons of the protagonist decide to sell their father's land despite his wishes, and this work forms a trilogy with *Sons* and *A House Divided*. This novel features the concubines Pear Blossom and Lotus Flower, as well as the protagonist's patient and loving wife O-Lan. For 10 points, name this novel about the Chinese farmer Wang Lung, written by Pearl S. Buck.

ANSWER: *The **Good Earth***

1. This story is told over the attempts of a monk to tell his own story, and its central characters convince John that the Second Flood is happening. For 10 points each:

[10] Name this tale in which Absolon tries to sleep with Alisoun, who is already cheating on her husband with Nicholas. It features a scene in which Nicholas tries to fart on Absolon, who brands his rear end with a hot poker.

ANSWER: "The **Miller's Tale**"

[10] The "The Miller's Tale" is the second of a group of stories told by pilgrims who are traveling to Thomas a Becket's shrine in this author's *The Canterbury Tales*.

ANSWER: Geoffrey **Chaucer**

[10] In this story from *The Canterbury Tales*, three men who set off to revenge themselves on Death all end up dying after they plot to kill each other so that each can claim a pile of gold for himself.

ANSWER: "The **Pardoner's Tale**"

2. The title character makes fun of high-brow townsfolk and mingles with peasants *Till Eulenspiegel's Merry Pranks*, a work of this composer. For 10 points each:

[10] Name this German composer who is perhaps best known for a piece that opens with a section called "Sunrise" that was used in *2001: A Space Odyssey*.

ANSWER: **Richard Georg Strauss** [prompt on "Strauss"]

[10] The aforementioned Strauss work is this tone poem in nine parts, based on a Nietzsche tract. Its "Of Science and Learning" section utilizes all twelve chromatic pitches.

ANSWER: **Also sprach Zarathustra** [or **Thus Spoke Zarathustra**, or **Thus Spake Zarathustra**]

[10] Strauss's final completed composition was a set of this many "last songs," which ends with a section entitled "At Sunset" and was partially based on Hermann Hesse poems.

ANSWER: **four**

3. Name the following people and things important in the development of the Standard Model of particle physics, for 10 points each:

[10] Independently of George Zweig, this physicist came up with the idea of quarks. He organized baryons and mesons according to their symmetries in the Eightfold Way and won the 1969 Nobel Prize in Physics.

ANSWER: Murray **Gell-Mann**

[10] With François Englert, this physicist recently won the Nobel in Physics for their theory of how subatomic particles get mass. The prize was awarded after the discovery of his namesake boson at the LHC.

ANSWER: Peter **Higgs**

[10] Samuel Ting and Burton Richter independently found this charm quark-charm antiquark meson, the first charmed particle to be discovered. Its discovery was part of the November Revolution of particle physics.

ANSWER: **J/psi** meson

4. During his reign, this man reconquered much of the old Western Roman Empire. For 10 points each:

[10] Name this Byzantine emperor who, among other things, established a namesake law code in 529. His reign also endured a devastating plague named for him, though both he and his wife Theodora survived.

ANSWER: **Justinian the Great** [or **Justinian I**; or **Flavius Petrus Sabbatius Justinianus Augustus**; prompt on “Justinian”]

[10] In 534, chariot racing fanatics united to revolt against Justinian during these riots. Justinian responded by massacring thousands of unarmed civilians in the Hippodrome.

ANSWER: **Nika** riots [or **Nika** revolt]

[10] While this man’s rival Belisarius suppressed the Nika riots, this general bribed the Blue faction to support Justinian. This Armenian defeated the Franks and Alemanni at the Battle of the Volturnus River.

ANSWER: **Narses**

5. Beginning on October 1, 2013, thousands of people experienced frozen screens and unexpected logouts when attempting to access a website. For 10 points each:

[10] The website allowed consumers to purchase this commodity, the subject of a law abbreviated ACA signed by President Obama in 2010 which instituted an “individual mandate” for purchasing this good.

ANSWER: **health insurance** [or **health insurance plans**; or **Obamacare**; or same-knowledge equivalents]

[10] Consumers were supposed to be able to purchase plans from these common markets. States can opt to create one of these marketplaces for themselves, or default to the federal one.

ANSWER: **exchanges**

[10] One of the few remaining popular aspects of Obamacare is that it allows individuals to remain on their parents’ health care plans until they turn this age.

ANSWER: **26** years old

6. The Amesha Spentas, or “divine sparks,” represent a code of right morals and good deeds in this religion. For 10 points each:

[10] Name this dualistic faith, the official religion of the Parthian empire, which uses fire temples as a place of worship. The *Avesta* is a collection of its central texts.

ANSWER: **Zoroastrianism** [or **Zarathustraism**; or **Mazdaism**; or **Magianism**]

[10] The prophet Zoroaster described the conflict between this creator god and the “destructive spirit” Angra Mainyu. This chief god is assisted by the Amesha Spentas and is praised in the *Yasna*.

ANSWER: **Ahura Mazda** [or **Hormuz**; or **Ohrmazd**]

[10] This collection of holy scriptures, which includes the “Best Beloved” and “Bounteous Spirit” hymns, is said to have been written by Zoroaster. These hymns are included in the *Yasna*.

ANSWER: **Gathas**

7. In this novel, the medical attaché of a Saudi prince who eats only Toblerone goes crazy after witnessing the final film of a man who is referred to as “Himself” by his children. For 10 points each:

[10] Name this lengthy novel that partly takes place at the Enfield Tennis Academy, where Hal Incandenza goes to school, as well as at the Ennet House Drug and Alcohol Recovery House, where Don Gately is a counselor.

ANSWER: **Infinite Jest**

[10] This American essayist wrote *Infinite Jest*. His first novel, *The Broom of the System*, focuses on Lenore Bardsman’s search for her great-grandmother, who ran away from a nursing home.

ANSWER: David Foster **Wallace**

[10] *Infinite Jest* involves a Quebec separatist organization named for these objects. The name comes from a game in which children jumped across the tracks of an oncoming train, causing many to lose their legs.

ANSWER: **wheelchair**s [accept **fauteils roulants** or **fauteils rollents**, since Wallace misspells the French word intentionally; accept the **Wheelchair Assassins** or Les **Assassins des Fauteils Rollents**]

8. Otto Jespersen, a Danish linguist and Anglicist, was the first to study an event concerning these sounds. For 10 points each:

[10] Name these sounds pronounced with an open vocal tract. They underwent a “Great Shift” between Middle English and Early Modern English, partly explaining the modern mismatch between spelling and pronunciation.

ANSWER: **vowels**

[10] During the Great Vowel Shift, two long vowels became this sort of sound, in which two adjacent vowel sounds are pronounced as one syllable.

ANSWER: **diphthong** [or **glide**; or **gliding vowel**]

[10] The Great Vowel Shift further exacerbated the differences between English and this group of Dutch-like languages of residents of the North Sea shore. They are still the second-closest relative to English after Scots.

ANSWER: **Frisian** languages

9. This compound has two types of receptors: muscarinic and nicotinic. For 10 points each:

[10] Name this neurotransmitter which stimulates skeletal muscle contractions.

ANSWER: **acetylcholine**

[10] Acetylcholine affects muscle cells by stimulating the release of this substance from the sarcoplasmic reticulum. This secondary messenger is an alkaline earth metal normally stored in bone.

ANSWER: **calcium** (II) ion [or **Ca²⁺**]

[10] Another excitatory neurotransmitter used in the nervous system is this amino acid, which is usually negatively charged and has a three-carbon side chain. The NMDA receptor is for this compound.

ANSWER: **glutamate** [or **glutamic acid**]

10. This war ended when Peru ceded the Tarapacá Region to Chile in the Treaty of Ancón. For 10 points each:

[10] Name this 1879-83 conflict over specific kinds of access to the namesake body of water, in particular the resources of the Atacama Desert.

ANSWER: War of the **Pacific** [or Guerra del **Pacífico**]

[10] The War of the Pacific is also named after this much sought-after substance that is abundant in the Atacama Desert. This chemical is critical to the manufacture of gunpowder.

ANSWER: **sodium nitrate** [or **NaNO₃**; or Peru **saltpeter**; or Chile **saltpeter**; prompt on “nitrate”; accept **potassium nitrate** or **KNO₃** because that’s what actual saltpeter is, even though the Saltpeter War is named for the Peru or Chile variety]

[10] The War of the Pacific left this South American country landlocked when its access to the Pacific Ocean was given over to Chile in an 1884 truce. This country takes its name from a man called “the Liberator.”

ANSWER: Plurinational State of **Bolivia** [or Estado Plurinacional de **Bolivia**]

11. After English and Spanish, the third-most-commonly spoken language in this city is Tagalog. For 10 points each:

[10] Name this commercial center and most populous city of Alaska, located at the end of Cook Inlet.

ANSWER: **Anchorage**

[10] The population of Anchorage expanded greatly with the 1968 discovery of the most productive oil field in the U.S. in this bay on Alaska’s North Slope.

ANSWER: **Prudhoe** Bay

[10] In 1964, Anchorage was rocked by one of these disasters on Good Friday, the second-most-powerful in history behind one that struck Valdivia in Chile in 1960.

ANSWER: **earthquakes** [do not accept “tsunamis” or equivalents]

12. Developed by Tony Hoare in 1960, it runs in average big-O of $n \log n$ time. For 10 points each:

[10] Name this sorting algorithm, which recursively chooses pivots and partitions the list around the pivot. It is named for its relative rapidity.

ANSWER: **quicksort**

[10] Quicksort is an example of this class of algorithms, which recursively break a problem down into subproblems. Other examples include the Cooley-Tukey algorithm and Karatsuba's algorithm.

ANSWER: **divide and conquer** algorithms

[10] Another sorting algorithm, insertion sort, has this big-O runtime, since it must run through a list as many times as there are elements in the list.

ANSWER: $O(n^2)$ (pronounced "big-O of **n squared**," or just "O of **n squared**")

13. This work argues that while "natural rights" might be metaphysically true, they are morally and politically false. For 10 points each:

[10] Name this 1790 work by Edmund Burke, which defends tradition and the divinely ordained monarchy, in response to the radical events happening across the English Channel.

ANSWER: **Reflections on the Revolution in France**

[10] Burke's *Reflections* provoked the publication of *The Rights of Man* by this thinker, who argued that it was absurd for the British island to rule the American continent in the pamphlet *Common Sense*.

ANSWER: Thomas **Paine**

[10] In the *Reflections*, Burke argued that this concept is superior to reason, because it renders virtue a habit.

Gadamer defined this concept as "fore-meaning" and as a fundamental prerequisite to hermeneutics.

ANSWER: **prejudice**

14. One member of this literary movement chronicled the life of a Haitian ruler in *The Tragedy of King Christophe*. For 10 points each:

[10] Identify this anti-colonialist movement that included the writers Aime Césaire and Léopold Senghor, who hailed from Senegal.

ANSWER: **Négritude**

[10] Négritude was opposed by this Nigerian playwright of *Madmen and Specialists* who wrote about Elesin Oba's suicide in another work. Baroka and Lakunle vie for Sidi's love in this author's *The Lion and the Jewel*.

ANSWER: (Akinwande Oluwole) Wole **Soyinka**

[10] Simon Pilkings hopes to intervene and stop Elesin's suicide in this aforementioned Soyinka play.

ANSWER: **Death and the King's Horseman**

15. Name these Americans whom Oliver Stone regarded as unsung heroes in his *Untold History of the United States*, for 10 points each:

[10] This labor-friendly, pacifist VP from 1940-44 might have become president had Democratic party bosses not colluded to nominate Truman in 1944 instead. He later made an unsuccessful presidential bid in 1948.

ANSWER: Henry Agard **Wallace**

[10] This scientist was appointed by Leslie Groves to head the Manhattan Project's secret weapons lab. He became chief advisor to the Atomic Energy Commission after the war and campaigned against nuclear proliferation.

ANSWER: J. Robert **Oppenheimer**

[10] Although not a hero, Stone points out that this Republican president was a moderate whose many good moves include signing SALT I, establishing the EPA, and supporting the Equal Rights Amendment.

ANSWER: Richard **Nixon**

16. With Menelaus, one hero from here carried the body of Patroclus off of the battlefield and won the archery contest at his funeral games. For 10 points each:

[10] Name this island home to Meriones and his half-brother Idomeneus, who led this location's forces at Troy. Sarpedon and Rhadamanthys were the brothers of the most famous ruler of this island.

ANSWER: Crete

[10] The aforementioned ruler of this island failed to sacrifice a bull given to him by Poseidon, resulting in his wife giving birth to this human-bull hybrid monster. Daedalus built a labyrinth to contain this beast.

ANSWER: Minotaur

[10] Theseus, the slayer of the Minotaur, was given a sword and a ball of thread by this daughter of Minos to aid him in his task. He later abandoned her on the island of Naxos, where Dionysus found her.

ANSWER: Ariadne

17. This battle probably didn't take place on the same day as the Battle of Mycale, but it was nonetheless a massive Greek victory. For ten points each:

[10] Name this 479 BCE battle, a victory for Pausanias over the forces of Mardonius, who ended up dead.

ANSWER: Battle of Plataea

[10] The army that lost at Plataea was fighting for this ruler. His forces were also defeated by Leonidas's Spartans at Thermopylae.

ANSWER: Xerxes I [or Xerxes the Great; prompt on "Xerxes"]

[10] Xerxes followed the first Achaemenid ruler of this name, who showed off his conquests on the Behistun Inscription. The third ruler of this name was defeated at Gaugamela and Issus.

ANSWER: Darius

18. A controversial 1998 experiment may have shown that one of these nuclides can be induced to emit massive amounts of gamma radiation through a nuclear analogue of fluorescence. For 10 points each:

[10] Name these metastable nuclides that contain protons or neutrons in excited states. Examples include technetium-99m, widely used in nuclear medicine, and the "football-shaped" plutonium-240f.

ANSWER: nuclear isomer [prompt on "isomer"; do not accept "isotope"]

[10] This term describes variants of elements that share the same number of protons, but have a different number of neutrons.

ANSWER: isotope

[10] Radioactive isotopes often undergo beta minus decay, which essentially causes this quantity for the nucleus to increase by one. Traditionally, this quantity symbolized Z is written below and to the left of the atomic symbol.

ANSWER: atomic number [or proton number; or nuclear charge]

19. A grassy field fills the foreground of this painting, and two gray farmhouses sit at the top right. For 10 points each:

[10] Name this painting, which shows a woman in a pink dress crawling with her back to the viewer.

ANSWER: Christina's World

[10] This artist of *Christina's World* painted many portraits of his neighbor Helga Testorf. His father, Newell, painted the cover for the Scribner's Classics edition of *Treasure Island*.

ANSWER: Andrew Newell Wyeth

[10] Many of Andrew Wyeth's depictions of the Olson family, including *Christina's World*, are set in this American state, which was also home to Winslow Homer.

ANSWER: Maine

20. This work begins with a letter from the protagonist written in exile at Sidi. For 10 points each:

[10] Name this book about Michel, who recovers from tuberculosis contracted in Tunisia and develops a new zeal for life that is seen as unseemly by Parisian society.

ANSWER: *The **Immoralist***

[10] *The Immoralist* is by this author, who wrote about Bernard running away from home in *The Counterfeiters*. The complicated relationship between Jerome and Alissa forms the premise of his novel *Strait Is the Gate*.

ANSWER: Andre **Gide**

[10] Andre Gide influenced this compatriot, who included a character named Garcin who concludes that “Hell is other people” in the play *No Exit*.

ANSWER: Jean-Paul **Sartre**

21. Anish Kapoor and Cecil Balmond recently designed the ArcelorMittal Orbit in this city. For 10 points each:

[10] Name this city that also contains Piccadilly Circus in its West End and Trafalgar Square.

ANSWER: **London**, England

[10] Another square in London is this one laid out in piazza style by Inigo Jones. St. Paul’s Church, also designed by Jones, sits on end of this square, the first modern one in London.

ANSWER: **Covent Gardens** Square

[10] While St. Paul’s Church in London was designed by Inigo Jones, St. Paul’s Cathedral on Ludgate Hill was designed by this man, who redesigned it after the Great Fire.

ANSWER: Sir Christopher **Wren**

X. This animal kills the attempted murderer of Judge Scott. For 10 points each:

[10] Name this part-wolf, part-dog that accompanies Grey Beaver to the Yukon. Weedon Scott rescues this creature from a fight in which he is overmatched.

ANSWER: **White Fang**

[10] This author of the short story “To Build a Fire” wrote the novel *White Fang*. He also described the Oligarchy’s rule over a dystopian society in *The Iron Heel*.

ANSWER: Jack **London** [or John Griffith **Chaney**]

[10] A dog named Buck avenges the death of his owner, John Thornton, in this most famous Jack London novel.

ANSWER: *The **Call of the Wild***

X. This man gained the nickname “uncrowned king of England” after his victory at the Battle of Lewes. For 10 points each:

[10] Name this rebellious baron who perished at the Battle of Evesham while leading the Second Barons’ War against Henry III. His similarly named father was a leader in the Albigensian Crusade.

ANSWER: Simon **de Montfort**, 6th **Earl of Leicester** [accept either underlined part]

[10] Henry III was a king from this dynasty. Other rulers from this dynasty include its first king Henry II, and it split into cadet branches called York and Lancaster in 1399.

ANSWER: **Plantagenet**

[10] Henry III’s father was this other English king, who was forced to sign the Magna Carta in 1215.

ANSWER: **John** Lackland

X. Answer these questions about a colorful mineral, for 10 points each:

[10] This variety of corundum is a pink or red gemstone, as opposed to sapphire, which is blue. A synthetic crystal of this mineral was used in the first laser device.

ANSWER: **ruby**

[10] The color of rubies is caused by impurities of this element. When combined with oxygen, this element’s +6 oxidation state forms anions that look bright yellow or orange in solution. This metal appears in the Jones reagent.

ANSWER: **chromium** [or **Cr**]

[10] The color of ruby is caused by a breaking of degeneracy among chromium's electron orbitals as described by this theory, which also uses the spectrochemical series to describe organometallic complexes.

ANSWER: **crystal field** theory