PACE NSC 2011

Edited by Mike Bentley, Matt Bollinger, Rob Carson, Kyle Haddad-Fonda, Hannah Kirsch, Trygve Meade, Bernadette Spencer, Guy Tabachnick, and Andy Watkins

Packet 13

Tossups

1. This state's Fish Canyon Tuff was created 26 million years ago by an eruption in the La Garita Caldera, while its Castle Rock was the result of earlier activity in the Thirtyninemile Volcanic Field. Mining sites in this state include the Rangely Oil Field, the Summitville Mine in the San Juan Mountains, and Cripple Creek. In 2004, part of this state's San Luis Valley was designated (*) Great Sand Dunes National Park. This state is also home to the deep Black Canyon of the Gunnison as well as the Spruce Tree House and Cliff Palace at Mesa Verde National Park. For 10 points, identify this state that contains the Front Range and Pike's Peak. ANSWER: Colorado

<Chiego>

2. A skeleton from the torso up is seen looking at this sculpture in a roundel in the ground beneath it. Sculpted members of the namesake family of the chapel in which this sculpture is set are seated in theater boxes flanking it. This sculpture sits in an alcove with two polychrome marble columns on each side, and four candles and a crucifix sit below it. A hidden window was added to the Cornaro Chapel in Santa Maria della Vittoria to shed more light on this sculpture. A winged figure in this work points a (*) golden spear at the title figure, whose left arm and foot hang limply, as golden rays reach down behind them. For 10 points, name this sculpture depicting an angel with a Carmelite reformer from Ávila, a work of Gian Lorenzo Bernini.

ANSWER: The Ecstasy of Saint Teresa [or L'Estasi di Santa Teresa; or Saint Teresa in Ecstasy; or Santa Teresa in estasi; or The Transverberation of Saint Teresa] <Tabachnick>

3. Ten days before one of these events began, students clashed with soldiers at the Plaza de las Tres Culturas and were harshly repressed on the orders of future president Luis Echeverria. Besides the Tlatelolco Massacre that occurred before one of these events in Mexico, deaths during another of these prompted retaliation in the form of Operations Spring of Youth and Wrath of God launched by (*) Golda Meir. Richard Jewell was falsely arrested for carrying out a series of bombings during one of them, a crime actually committed by Eric Robert Rudolph. Earlier, members of Black September killed numerous Israeli hostages in a helicopter during one of these events. For 10 points, name these events, the 1972 incarnation of whichwitnessed the Munich Massacre, a global sporting competition.

ANSWER: the **Olympics** [or Summer **Olympics** Games; or Games of the Summer **Olympiad**] <Bentley>

- 4. One character in this play has his skill with the rapier praised by Lamond, a great Norman horseman; that character incites the protagonist to predict "The cat will mew, and dog will have his day." John Updike reinterpreted the implied adultery in this work as sympathetic true love in a work drawing from the original (*) Saxo Grammaticus source. T.S. Eliot called this work an "artistic failure" in an essay about its title character's "Problems." The title character of this play muses about shuffling "off this mortal coil" and "to sleep, perchance to dream" in a famous soliloquy. For 10 points, name this inspiration for *Rosencrantz and Guildenstern Are Dead*, a Shakespeare play also featuring Gertrude and Claudius. ANSWER: The Tragedy of <u>Hamlet</u>, Prince of Denmark <Ray>
- 5. Secondary detectors used with these devices usually consist of a scintillator in a Faraday cage and were pioneered by Everhart and Thornly. Negative stains for using these devices include uranyl acetate or phosphotungstic acid. Their remarkable properties arise because they are not subject to the same (*) diffraction limit as their more mundane counterparts. Only extremely thin sections could be used in their original "transmission" form; more recent types include the "scanning" form. For 10 points, name these devices, which use the namesake particles to visualize smaller features than their optical counterparts can.

 ANSWER: electron microscopes [prompt on microscopes; do not accept "optical microscopes"]
- 6. This composer included a poem apostrophizing a "contented river" in the score of one work. One of his works features seven exchanges between increasingly atonal flutes and a solo trumpet. Another has a first movement based on a theme found in "Old Black Joe" and "Jesus Loves Me." He ended his second symphony with a dissonant (*) "Bronx cheer." This composer had the woodwinds seek "The Invisible Answer" in the aforementioned *The Unanswered Question*. His second piano sonata has sections named for The Alcotts and Emerson and is called the *Concord Sonata*. *Putnam's Camp* and *The Housatonic at Stockbridge* are movements of another of his works. For 10 points, name this American composer of *Three Places in New England*.

ANSWER: Charles Edward <u>Ives</u>

<Gupta>

<Watkins>

7. One holder of this position arranged Marion Anderson's famous concert on the steps of the Lincoln Memorial. A deputy to this position named J. Stevens Griles was implicated in the Jack Abramoff scandal. Louis Glavis accused James R. Garfield's replacement in this position of negligence due to that man's improper handling of the Guggenheims' attempts to secure interests in (*) Alaska. In addition to Harold Ickes and Richard Ballinger, a third holder of this position convinced Edward Denby to transfer two naval oil reserves to his department, then sold those reserves in the Teapot Dome Scandal. For 10 points, name this Cabinet position formerly held by Albert Fall and currently held by Ken Salazar, the head of a department that oversees the U.S. Geological Survey and the National Park Service.

ANSWER: **Secretary** of the **Interior**

<Wynne>

8. In this novel, the protagonist's mother, Polly, stepped on a nail as a child, leading to a deformed foot and a limp, and now works as a domestic for the Fishers. Henry Washington is scared off with a gun after molesting Frieda in this work. In the spring, one character seeks help from the pedophile (*) Soaphead Church, but he uses her to poison his landlady's dog and then pretends to grant her wish. The novel climaxes when Cholly rapes his daughter, who goes mad and discusses the title object with an imaginary friend. For 10 points, name this novel narrated by Claudia MacTeer in which Pecola wishes for the title trait in order to appear more white, written by Toni Morrison.

ANSWER: The Bluest Eye

<Guth>

9. Two different receptors for this vitamin can dimerize or homodimerize to bind DNA and regulate gene transcription, and one symptom of its deficiency is xerophthalmia. Bitot's spots are another symptom of deficiency of this vitamin, which is sometimes administered alongside vaccines because of its role in bolstering lymphocyte activity. This vitamin is key in the synthesis of (*) rhodopsin. Several carotenoids can be converted into this fat-soluble vitamin, whose metabolite retinal is necessary for scotopic vision. For 10 points, name this vitamin found in foods like liver and carrots whose deficiency causes night blindness.

ANSWER: vitamin A

<Kirsch>

10. One hypothetical situation presented in this book discusses the possibility of filling bottles of money and leasing the right to private employers to dig them up. Milton Friedman developed the permanent income hypothesis as a refutation of the absolute income hypothesis found in this book, which also introduced the MPC curve and the idea that people prefer cash to securities, or liquidity (*) preference. Most famously, this book established principles of macroeconomics that encourage government spending in order to stimulate the economy during times of depression. For 10 points, name the magnum opus of John Maynard Keynes.

ANSWER: The <u>General Theory</u> of Employment, Interest, and Money <Meade>

11. In this painting, a paunchy man has one snake coiled around him and another biting his genitalia. A figure with claws, buggy eyes, and pointed ears holds an oar astride his wooden boat in this work as a man cowers and grasps his head in horror beside him. Along the top of this work, one group of angels brings a column toward the center, while another group carries a cross. St. Bartholomew holds in his left hand his own (*) flayed skin, which supposedly contains a self-portrait of this painting's artist. Daniele da Volterra carried out the Fig-Leaf Campaign to cover up the genitalia in this painting. For 10 points, name this massive fresco in the Sistine Chapel by Michelangelo which depicts Jesus consigning humans to their ultimate fates.

ANSWER: The <u>Last Judgement</u> [or Il <u>Giudizio Universale</u>]

<Tabachnick>

12. The first military ruler of this country introduced "Basic Democracy," an indirect electoral structure that ensured his victory in the 1965 elections over the sister of this country's founder. This country launched Operation Searchlight after its 1970 election resulted in a plurality for a regional party. Ordinance XX ("20") forbade Ahmadis in this country from calling themselves Muslims and was promulgated by (*) Muhammad Zia ul-Haq, who Islamized this country's government. A man ousted in a 1999 coup in this country later formed a coalition between the PPP and his eponymous Muslim League-N. Besides Nawz Sharif, this country has also been led by Mohammad Ali Jinnah. For 10 points, name this Asian country in which Asif Zardari became president after the assassination of his wife, Benazir Bhutto.

ANSWER: Islamic Republic of Pakistan

<Haddad-Fonda>

- 13. Joshua Bloch famously admitted that his implementation of an algorithm to do *this* for the Java Development Kit could lead to an integer overflow error because of a line that added low and high values and dived by two. This operation can be performed with a high probability of success in Big O of N to the one half time using a quantum computing algorithm called Grover's Algorithm. One form of this operation can be performed on strings using the (*) Rabin-Karp algorithm. One of the simplest ways to perform this operation runs in Big O of log N time and works by continually calculating a midpoint and determining if the midpoint is lower or higher than the desired value; that is the binary form of this operation. For 10 points, name this type of algorithm at the heart of websites like Bing and Google. ANSWER: search ing algorithms [accept binary search ing algorithms before "probability" is read] Bentley
- 14. One of this man's works outlines thirty-eight strategies for winning arguments; he included the introduction to that essay, *The Art of Being Right*, in his essay collection whose title means "additions and omissions" in Greek. He described becoming, knowing, and being as three classes of relations in his dissertation on the principle of (*) sufficient reason's "Fourfold Root." His major work, written after his misogynistic essay "On Women," claimed that the undifferentiated *noumenon* drives nature, took inspiration from the Upanishads, and claimed that art is the only reprieve from the suffering caused by experience. For 10 points, name this nineteenth century German philosopher who wrote *The World as Will and Idea*.

ANSWER: Arthur Schopenhauer

<Jackson>

15. In one section of this work, the speaker "sent [his] soul through the Invisible," which returned and told him "I myself am Heav'n and Hell." One notable stanza of this poem describes how the "Moving finger writes; and, having writ, moves on." The speaker of this work recalls how his (*) "computations...reduced the year to better reckoning," referring to his career as a mathematician. Another stanza of this work describes the "Eternal Saki" pouring bubbles from a bowl. In the famous Edward Fitzgerald translation, one part of this work describes the speaker with "A jug of wine, a loaf of bread—and thou." For 10 points, name this collection of quatrains by Omar Khayyam.

ANSWER: The <u>Rubaiyat</u> of Omar Khayyam

<Bollinger>

16. The paltry number of survivors on the losing side in this battle fled to the fort at Aliso, which was besieged in its aftermath. In 1997, archaeologists concluded that this battle took place at present-day Kalkriese. Prior to this battle, the victorious commander married Thusnelda against the wishes of her father, a chieftan of Cherusca named Segestes. Five years after this engagement, the Battle of Idistaviso was part of a punitive expedition led by (*) Drusus Germanicus to avenge losses in this battle. The victorious troops at this battle were commanded by Arminius, while those under Qunctilius Varas were defeated. After receiving news of this battle, Emperor Augustus reportedly cried, "Give me back my legions!" For 10 points, name this 9 CE disaster for Rome in the German wilderness.

ANSWER: Battle of <u>Teutoburg Forest</u> [or <u>Teutoburger Wald</u>] <Bentley>

17. Proteins that are named for clusters incorporating this element and iron include Rieske proteins and aconitase. Reaction with a molecule with two atoms of this element, followed by a base, is one common method of umpolung with carbonyls. This element's most common allotrope is an (*) eight-atom ring. The fuming form of one oxoacid of this element is an equilibrium between its trioxide and its diprotonated tetraoxide. A lead salt of this element is galena, and an iron salt of this element is the mineral pyrite. An atom of this element, found in the amino acid cysteine, replaces oxygen in a thiol. For 10 points, name this element with atomic number sixteen.

ANSWER: sulfur

<Watkins>

18. This man's wife was denied her inheritance of the land of Fadak, while this man's own claim to inheritance was based on words spoken at the pond of Khumm. Thuss supporters of this man did not take an oath at Saqifah. Although he fought an inconclusive battle at Siffin, his forces were victorious at the Battle of the (*) Camel. He was eventually murdered by a Kharijite and succeeded by his rival, Mu'awiyya. This man's older son, Hasan, did not fight at Karbala, where his younger son, Husayn, was martyred. Earlier, this man had benefited from the murder of 'Uthman to become the fourth Rightly Guided Caliph. For 10 points, identify this son-in-law of the Prophet Muhammad who is revered as the first imam by the Shi'a.

ANSWER: 'Ali ibn Abi Talib

<Haddad-Fonda>

19. Nacho Zamora ends up in a knife duel like his father in the town of Oquedal in this work's chapter "Around an Empty Grave". The protagonist of this work tears innumerable suits off of his love interest's sister in the country of Ataguitania, where he goes to pursue the counterfeiter (*) Ermes Marana. Settings in this novel include the town of Malbork and the country of Cimmeria, about which Professor Uzzi-Tuzi is an expert. The narrator of this novel is vexed by Lotaria, whose machine displays a book's most common words. The protagonist of this work meets his lover, Ludmilla, in a bookstore, and that protagonist is said to be "you, the reader." For 10 points, name this novel by Italo Calvino.

ANSWER: *If on a Winter's Night a Traveler* [or *Se una notte d'inverno un viaggiatore*] <Bollinger>

20. One of this man's works contains a fable in which a hawk flies with a nightingale in his claws and berates it for resisting a stronger creature. That work was written after his spendthrift brother sued him for his inherited sheep. This man wrote a work in which every section begins with the phrase "e hoie" [ay HOY-ay], his (*) Catalogue of Women. In a work addressed to his brother Perses, this author gave the first extant account of the Five Ages and described advantageous farming practices. An epic by this poet describes the creation of Gaia out of Chaos and the genealogies of the gods. For 10 points, identify this ancient Greek poet of the *Theogony* and *Works and Days*.

ANSWER: Hesiod

<Angelo>

21. In this novel, one character's mother has an abortion after her first husband leaves her, though she waits for that husband's death before agreeing to marry Clifford. The drowning of Bing during a trip to the beach is recounted in this book's second section, "The Twenty-six Malignant Gates." Another character receives a pack of Lifesavers and a chess set missing two pieces as Christmas gifts, sparking her career as a (*) chess prodigy. The third and fourth sections of this novel describe the marriages of the characters Lena St. Clair and Waverley Jong, who are introduced in its opening, during which Jing-mei takes her mother's place at the mahjong table. For 10 points, identify this novel whose sixteen stories describe successive generations of a Chinese family, as told by Amy Tan.

ANSWER: The Joy Luck Club

<Gupta>

22. This American Labor candidate for a New York State Senate seat in 1950 declared his sense of "two-ness" in an Atlantic Monthly article. While at Penn he published a sociological study on African Americans in a work titled The Philadelphia Negro. He served as the founding editor of a magazine that takes its title from a James Russell Lowell poem. This editor of The Crisis would later receive the Lenin Peace Prize and travel to (*) Ghana, where he began work on his Enclyopedia Africana. In his best known work, he criticized another man's over-reliance on trade schools. This man advocated the idea of the "talented tenth" and attacked accomodationism in The Souls of Black Folk. For 10 points, name this African American leader, a rival of Booker T. Washington.

ANSWER: W.E.B. <u>**Du Bois**</u> ("do-boys") [or William Edward Burghardt <u>**Du Bois**</u>] <Bentley>

23. This physicist developed a regularization method of introducing a spectrum of auxiliary particles and taking the limit as their masses go to infinity with Felix Villars. That method is preferred to dimensional regularization when considering chiral phenomena. He proved the result that symmetry or antisymmetry under exchange corresponded to (*) integer or half-integer spin, the spin-statistics theorem. His best-known result creates the "degeneracy pressure" that keeps sufficiently low mass white dwarfs from collapsing. For 10 points, name this physicist who discovered that no two fermions can occupy the same quantum state, his namesake exclusion principle.

ANSWER: Wolfgang Ernst <u>Pauli</u> [accept Felix <u>Villars</u> before mention] <Watkins>

PACE NSC 2011

Edited by Mike Bentley, Matt Bollinger, Rob Carson, Kyle Haddad-Fonda, Hannah Kirsch, Trygve Meade, Bernadette Spencer, Guy Tabachnick, and Andy Watkins

Packet 13

Bonuses

- 1. This chemical process's namesake "stress" occurs when reactive intermediates build up faster than the body can metabolize them. For 10 points each:
- [10] Name this process, the loss of electrons, contrasted with reduction.

ANSWER: oxidation

[10] These organelles use oxidative enzymes to carry out fatty acid catabolism. They also break down a namesake toxic compound into water and oxygen.

ANSWER: **peroxisome**s

[10] This peroxisomal enzyme promotes the decomposition of hydrogen peroxide into water and oxygen. An asparagine and a histidine residue are key to its action.

ANSWER: catalase

<Kirsch>

- 2. His dramatic works include two installments of *Acts Without Words*, while a novel of his features the inner monologues of the title bicycle-riding bandit and the extremely similar detective Jacques Moran, who has been sent to stop him. For 10 points each:
- [10] Name this author whose *Molloy* is part of a trilogy of novels with *Malone Dies* and *The Unnamable*.

ANSWER: Samuel Beckett

[10] Despite being Irish, Samuel Beckett wrote this absurdist play in French. In it, Estragon and Vladimir sit wearing bowler hats on a set that is bare except for a tree, hoping that either the moon or the title unseen figure, will appear.

ANSWER: Waiting for Godot [or En attendant Godot]

[10] In *Waiting for Godot*, Pozzo (PAHT-tso) holds this slave on a leash. He is believed to be mute, but the removal of his bowler hat and the command to "Speak" result in an outpouring of incoherent words from him.

ANSWER: Lucky

<Jackson>

- 3. His G major viola concerto is the first known to have been written for that instrument. For 10 points each:
- [10] Name this German Baroque composer who composed a bunch of *Tafelmusik*, 6 Canonical Sonatas, and two sets of *Twelve Fantasias* for instruments without bass.

ANSWER: Georg Philipp Telemann

[10] Another German Baroque composer is this one, who repeated the notes D, A, B, F#, G, D, G, and A in the bass line of a ubiquitous canon.

ANSWER: Johann Pachelbel

[10] Pachelbel produced several of these compositions in which a subject or main theme is introduced by multiple voices and then developed in alternating episodes and entries. A J.S. Bach work pairs a collection of these with a collection of preludes.

ANSWER: fugue

<Gupta>

- 4. During this man's tenure as party chief, his country agreed to SALT II. For 10 points each:
- [10] Identify this Soviet leader whose rule marked the start of the so-called Era of Stagnation and who signed the Anti-Ballistic Missile Treaty with Richard Nixon.

ANSWER: Leonid Ilyich Brezhnev

[10] Brezhnev's predecessor was this man, who gave a Secret Speech attacking the personality cult around Joseph Stalin and who once pounded his shoe at a UN assembly.

ANSWER: Nikita Sergeyevich Khrushchev

[10] Before coming to power, Brezhnev helped implement Kruschchev's Virgin and Idle Lands Campaign in this modern day country. Oil money has allowed its current leader to erect buildings like the Pyramid of Peace and Reconciliation in its capital.

ANSWER: Kazahkstan

<Bentley>

- 5. These filamentous cells have structures at their tips called spitzenkorper that organize their growth. For 10 points each:
- [10] Name these branching cells that are divided by selectively permeable septa.

ANSWER: hyphae

[10] The entirety of a fungus's vegetative mass of hyphae is given this name.

ANSWER: mycelium [or mycelia]

[10] Fungi contain this protein, a polymer of N-acetylglucosamine subunits, in their cell walls. It is also found in the exoskeleton of arthropods.

ANSWER: chitin

<Kirsch>

- 6. The title character of this novel threatens to murder one person per day, starting with the physician Dr. Kemp. For 10 points each:
- [10] Identify this novel about Griffin, a former lodger at the Coach and Horses Inn.

ANSWER: <u>The Invisible Man</u> [do not accept "Invisible Man"]

[10] In this novel by the author of *The Invisible Man*, Prendick stays at the title location and befriends the Beast Men after Montgomery and his boss, the title experimenter, die.

ANSWER: The Island of Doctor Moreau

[10] This British author wrote about a man who wakes up rich in *The Sleeper Awakes*, in addition to *The Invisible Man*, *The Island of Doctor Moreau*, and *The War of the Worlds*.

ANSWER: Herbert George Wells

<Gupta>

7. This artist painted clouds above the town where he lived in *View of Toledo*. For 10 points each: [10] Name this Spanish painter who showed a heavenly scene above mourners in *The Burial of Count Orgaz*.

ANSWER: **El Greco** [or Domenikos **Theotokopoulos**]

[10] This El Greco painting shows a scene from the Book of Revelation. A man in blue on the left raises his arms to the heavens, and nude figures behind him hold up sheets of yellow and green silk.

ANSWER: *The Opening of the Fifth Seal* of the Apocalypse [or *The Vision of Saint John*] [10] El Greco also painted this Trojan priest, who is depicted with his sons being attacked by sea serpents in a famous sculpture.

ANSWER: Laocoön

<Nediger>

- 8. After years of decline in this city-state, thanks to Francesco Morosini it gained the Greek territory of Morea for it from the Turks in 1688. For 10 points each:
- [10] Name this city-state whose republican government included a Council of Ten. Its unitary executives were called *doges*.

ANSWER: Most Serene Republic of <u>Venice</u> [or Serenissima Republica di <u>Venezia</u>; do not accept "Venetia"]

[10] From 1508 to 1516, Venice was opposed by this entity led by Pope Julius II and supported by Ferdinand I of Spain. The battles of Agnadello and Padua were fought in the war named for this organization.

ANSWER: the **League of Cambrai** [prompt on **Holy League**]

[10] This Genoese admiral and "perpetual censor" made his fame in a later Italian War by liberating Marseilles for the French. His nephew of the same last name led a fleet at Lepanto, and a ship named for him collided with the MS *Stockholm* in 1956.

ANSWER: Andrea **Doria** [or Giovanni Andrea **Doria**]

<Jackson>

- 9. This quantity is equal to the sum from k equals 0 to infinity of 1 over k factorial. For 10 points each:
- [10] Name this base of the natural logarithm.

ANSWER: **e**

[10] This quantity is defined as *e* to the *x* plus *e* to the negative *x*, all over 2. It is named because it behaves somewhat like a trigonometric function.

ANSWER: **hyperbolic cos**ine [or **cosh**]

[10] This is the shape that results from graphing y equals the hyperbolic cosine of x.

ANSWER: catenary

<Tabachnick>

- 10. The first of these figures attained moksha at Ashtapad mountain, stood at about 1500 meters tall, and was named Rishabha, while the last of them, born with the name Vardhaman, became known as Mahavira. For 10 points each:
- [10] Name these twenty-four figures whose name approximately means "ford-builders," since they help men across the river of human misery.

ANSWER: tirthankara [or tirthankars; or Kevali-Jinas]

[10] This monastic Indian religion inspired by Mahavira venerates the tirthankara. Primary among its five vows is *ahimsa*, or nonviolence towards other living beings.

ANSWER: **Jain**ism [or **Jain** Dharma; or **Samanam**]

[10] Jains believe that this usually abstract concept actually consists of particles that gather around the *jiva*, or soul, and defile it. In Hinduism, it refers to actions with a cause-and-effect relationship on the cycle of *samsara*.

ANSWER: karma

<Jackson>

- 11. In this short story, the washing of a "blond rug" with soap convinces its owner, Major de Spain, that the rug is ruined. For 10 points each:
- [10] Name this short story in which Sarty Snopes tries to prevent his cruel father from having to pay damages in town court. Sarty later hears three shots ring out after snitching on his dad and running away.

ANSWER: "Barn Burning"

[10] This author of "Barn Burning" continued the Snopes story in *The Hamlet*, which this man set, like his *The Sound and the Fury*, in the fictional Yoknapatawpha County, Mississippi.

ANSWER: William Faulkner

[10] This Faulkner collection includes seven short stories such as "Pantaloon in Black," linked by the McCaslin family. Boon Hogganbeck stabs Old Ben, a creature that Uncle Ike hunts, in its short story "The Bear."

ANSWER: Go Down, Moses

<Jackson>

- 12. Identify these Latin American countries that have been the focus of controversial legal cases during 2011 for 10 points each.
- [10] American government contractor Alan Gross was tried in March 2011 for "acts against the integrity and independence" of this communist country, in which he was setting up internet access to promote democracy.

ANSWER: Republic of Cuba

[10] Jorge Videla dominated this country from 1976 to 1981 after he deposed the third wife of its former president. In 2011, he went on trial for stealing babies from political prisoners, although he is already in prison because his role in leading the Dirty War.

ANSWER: <u>Argentina</u> [or <u>Argentine</u> Republic]

[10] The president of this country is implementing a new constitution that will make judgeships elected positions. Its former president, Gonzalo Sánchez de Lozada, is living in the United States because he claims he cannot get a fair trial in this country.

ANSWER: Plurinational State of Bolivia

<Haddad-Fonda>

- 13. One elected official in this city was killed by a man who tried to use the what became known as the "Twinkie defense" to escape conviction. For 10 points each:
- [10] Identify this city where in 1977 Harvey Milk became the United States' first openly gay elected official.

ANSWER: San Francisco, California

[10] A few years before Harvey Milk's election, the Stonewall Riots took place at a gay nightclub in this other American city. Its mayors have included John Lindsay and Ed Koch.

ANSWER: **New York** City, New York

[10] The case of *Lawrence v. Texas* overturned this earlier ruling, which Justice Kennedy called "not correct when it was decided, and it is not correct today." One of its namesakes was an Atlanta-based man arrested under sodomy laws.

ANSWER: <u>Bowers</u> v. <u>Hardwick</u> [or <u>Bowers</u>, Attorney General of Georgia v. <u>Hardwick</u> et al.; accept any underlined answer and accept them in either order] <Bentley>

- 14. This operation gives a pseudovector whose orientation is conventionally given by the right hand rule. For 10 points each:
- [10] Name this operation, employed in giving the angular momentum from the lever arm and the linear momentum.

ANSWER: cross product [or Gibbs vector product]

[10] The cross product of the electric and magnetic field divided by the magnetic constant is this vector.

ANSWER: **Poynting** vector

[10] The time-averaged Poynting vector over the speed of light is this quantity, which would provide the motive force for solar sails..

ANSWER: radiation pressure

<Watkins>

- 15. One on-stage character in this play is the pen pal of Ethel Lange and washes his feet in saltwater every night after his job; the other, his brother, often role-plays with him. For 10 points each:
- [10] Name this play set in a one-room shack, in which Zachariah spends his money on a suit so that his lighter-skinned brother Morris can visit Ethel in his stead.

ANSWER: The Blood Knot

[10] This author of *The Train Driver*, *Boesman and Lena*, and *The Blood Knot* created the characters of Willie and Sam, two victims of his native South Africa's apartheid, in *Master Harold...and the Boys*.

ANSWER: Athol Fugard

[10] Fugard's acting company, the Serpent Players, premiered a play set in a prison on this kind of geographical feature. Other examples from drama include the setting of *The Tempest*.

ANSWER: an **island** [or *The Island*]

<Jackson>

- 16. The central myth of this work describes a rebirth ritual for a dead king of the Nemi, a pre-Roman Italian peninsula civilization. For 10 points each:
- [10] Name this work that takes its name from a scene from *The Aeneid* and discusses common themes in many mythological systesm.

ANSWER: The Golden Bough

[10] Name the author of *The Golden Bough*, who used the same tactic of cross-comparison in his work *Folk-lore in the Old Testament*.

ANSWER: Sir James George Frazer

[10] Another work that describes the role that archetypes play in mythography is this one by Joseph Campbell, which describes the "monomyth."

ANSWER: Hero with a Thousand Faces

<Meade>

- 17. China expanded dramatically thanks to the military victories of Wu Ti, an emperor from this dynasty. For 10 points each:
- [10] Identify this dynasty lasting from about 200 BCE to 200 CE, which also names China's largest ethnic group.

ANSWER: Han Dynasty [or Han Ch'ao]

[10] This dynasty came to power following its victory over Chouhsin at the Battle of Mu-ye.

ANSWER: <u>Zhou</u> Dynasty [or <u>Chou</u> Dynasty; orWestern <u>Zhou</u> Dynasty; or Xi <u>Zhou</u> Dynasty; or Zhou Ch'ao]

[10] Like the Zhou Dynasty, this later dynasty is divided into periods named for cardinal directions. In the case of this dynasty, its Southern period refers to the time when the Jin seized control of the northern part of the country after 1127 CE.

ANSWER: **Song** Dynasty [or **Sung** Dynasty; or **Sung** Ch'ao]

<Bentley>

- 18. This nation's "eight model plays" included the operas *The Harbor* and *Sweeping the White Tiger Regiment*. For 10 points each:
- [10] Name this nation whose leader's wife interrupts a performance of *The Red Detachment of Women* attended by Pat and Richard Nixon in another opera.

ANSWER: People's Republic of China [or Zhonghuá Rénmín Gònghéguó; accept PRC

[10] This composer made the antagonist of *The Red Detachment of Women* look like Henry Kissinger in his opera *Nixon in China*.

ANSWER: John Coolidge Adams

[10] In this recent Adams opera, J. Robert Oppenheimer sings the sonnet "Batter my heart, three person'd God." It chronicles Oppenheimer's quest to create the nuclear bomb.

ANSWER: Doctor Atomic

<Tabachnick>

- 19. According to legend, this system was first derived by a deity who pierced himself with a spear and hung upside down on a tree. For 10 points each:
- [10] Name this class of writing systems alleged to have magical powers. Their symbols are carved on namesake stones throughout Scandinavia.

ANSWER: **runes** [or **runic** system; or **futhark**]

[10] This Norse god was symbolized by an up-arrow rune. He had his hand bitten off during the chaining of Fenrir and will fight the hound Garm at Ragnarok.

ANSWER: <u>Tyr</u> [accept <u>Tiu</u> or <u>Tiwaz</u>]

[10] This wordsmith and husband of Ithunn may have used runes in his role as god of poetry.

ANSWER: Bragi

<Jackson>

- 20. This thinker asserted that "existence precedes essence" in his lecture "Existentialism Is a Humanism." For 10 points each:
- [10] Name this French thinker who argued in favor of authentically adopting an identity and taking responsibility for one's actions in *Being and Nothingness*.

ANSWER: Jean-Paul Sartre

[10] The opposite of that authenticity, for Sartre, is given this term, wherein one does not accept one's freedom to choose one's identity.

ANSWER: **bad faith** [or **mauvaise foi**]

[10] While Sartre explicitly adopted the existentialist label, this German psychiatrist and philosopher of *Reason and Existenz* ("existence") denied such associations. He proposed the "Axial Age" during which the major world religions and philosophical systems were developed.

ANSWER: Karl Theodor Jaspers

<Watkins>

- 21. This monarch was captured at the Battle of Lincoln in 1141 and ruled during the Anarchy. For 10 points each:
- [10] Identify this early king of England who faced a revolt from Robert, Earl of Gloucester. Gloucester was a supporter of a female rival claimant to this man's throne.

ANSWER: **Stephen** I of Blois

[10] The Anarchy involved a dispute over the English throne between Stephen and Matilda following the death of the first English king of this name. The fifth of this name fought the French at Agincourt.

ANSWER: Henry

[10] Matilda's husband Geoffrey was a count of this region of France with center at Angers. The title of count of *this* place was retained by Geoffrey's descendants, Henry II and Richard the Lionheart.

ANSWER: Anjou

<Bentley>

- 22. It opens in McKechnie's bookshop, in which Gordon Comstock works for a measly salary. For 10 points each:
- [10] Name this novel about Gordon's failed attempts to write poetry and his eventual resigned acceptance of his marriage to Rosemary and job in an advertising agency.

ANSWER: Keep the Aspidistra Flying

[10] *Keep the Aspidistra Flying* is by this British author who documented the Spanish civil war in *Homage to Catalonia*. His other works include *Coming up for Air* and *Animal Farm*.

ANSWER: George Orwell [or Eric Arthur Blair]

[10] The narrator of this short story by Orwell set in Burma asserts that "imperialism was an evil thing." He later uses a 44 Winchester rifle to perform the title action by the end of the story.

ANSWER: "Shooting an Elephant"

<Gaurav Kandlikar>

- 23. These organisms have water vascular systems in addition to their namesake spiny skin. For 10 points each:
- [10] Name this phylum that includes sea stars, sea urchins, and starfish.

ANSWER: **Echinoderm**ata

[10] The water vascular system creates the hydraulic pressure to manipulate these processes that consist of an ampulla and a podia and are used for feeding and locomotion.

ANSWER: tube feet

[10] After water enters the water vascular system through the madreporite, it passes into this duct. This calcified duct then delivers water to the rest of the system.

ANSWER: stone canal

<Kirsch>