

Round	16	Room	
Bracket			
Reader			

Team									Team								
Player Names																	
Q#					Bonus	Steals	Ques. Total	Run. Score						Bonus	Steals	Ques. Total	Run. score
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
TB1																	
TB2																	
TB3																	
SD																	
Player 20s																	
Player 10s																	
Point totals																	
Final score																	
	Substitutions before Tossup 11								Substitutions before Tossup 11								
	Out:				In:				Out:				In:				
	Out:				In:				Out:				In:				

Circle winning team above. Clearly mark if game goes to OT/SD. Fill out "Point totals" row completely. If there are substitutions, please note tossups by each player in "20s" and "10s" rows. Below is for Tab Room use only:

RH	RS	BH	BS	Left	Right	BH	BS	RH	RS
----	----	----	----	------	-------	----	----	----	----



## PACE NSC 2015 - Round 16 - Tossups

1. In the form of an eagle, this hero calls upon the god of rain for a torrent of water to escape from an angry fire goddess, from whom this hero earlier receives ten fingernails and toenails filled with fire. This hero uses a stone axe to kill Long Eel, or Tuna, for spitting slime at his wife. This hero meets his end when some nearby birds break out in laughter, causing the queen of the underworld to wake up while this hero is trying to crawl into her body and gain (\*) immortality. This husband of Hina uses his grandmother's jawbone and a lasso made of his sister's hair to beat the sun into submission and lengthen the day. In another story, he uses a magic hook to fish out some islands in the Pacific Ocean. For 10 points, name this Polynesian folk hero.

ANSWER: Maui [accept longer answers that include the name Maui] <Kim>

2. A city in this state was the site of the 1909 Greek Town Riot. It's not Tennessee, but it secured large government-owned hydroelectric power plants thanks to its senator George W. Norris. A politician from this state resigned a Secretary of State to protest America's entry into World War I. Ignatius Donnelly wrote a political platform named after the largest city in this state for the (\*) Populist Party. Settlers in this state argued over whether its capital should be north or south of the Platte. A famous politician from this state was the prosecutor in the Scopes "monkey" trial and gave the Cross of Gold speech. For 10 points, name this home state of William Jennings Bryan, whose most populous city inspired the codename of Omaha Beach.

ANSWER: Nebraska <Bentley>

3. Residents of this place remember the order of streets with the mnemonic "Jesus Christ Made [this city] Under Protest". Kris Kime was murdered during this city's 2001 Mardi Gras Riots in Pioneer Square. The multi-site Mars Hill megachurch in this city disbanded after controversies involving its pastor Mark Driscoll. This city's alternative newspaper *The Stranger* was the first to run an advice column by (\*) Dan Savage. Near Elliott Bay, one can find this city's Pike Place Market. A famous landmark of this city houses SkyCity, a rotating restaurant 500 feet above ground. Frank Gehry designed this King County city's Experience Music Project, which houses musical paraphernalia from Jimi Hendrix and Nirvana. For 10 points, name this West Coast city home to the Space Needle.

ANSWER: Seattle, Washington <Smart>

4. G. Evelyn Hutchinson formally defined these entities as n-dimensional hypervolumes. These entities are often plotted on bell-shaped utilization curves along a resource spectrum above variables like prey size. Joseph Connell's studies of barnacles on rocks documented the concept of the "realized width" of these entities. Natural selection assigns these entities to competing species in a process alternatively called (\*) "partitioning" or "differentiation." An example of animals "constructing" this kind of entity by altering the environment is beavers building dams. When different species eat the same prey, these entities overlap. For 10 points, name this ecological concept that describes the roles that organisms play in their habitats.

ANSWER: ecological niches <Gupta>

5. Jan Tinbergen developed a model for this phenomenon which uses an equation similar to the law of universal gravitation to predict its amount. Another model of this phenomenon assumes that labor is the only variable factor. Paul Samuelson outlined a modification to a model of this phenomenon that uses a 2x2x2 (2 by 2 by 2) model that allows for variances in both capital and labor. Paul Krugman was awarded the Nobel Prize for his work in this area, which is described by the (\*) Heckscher-Ohlin Model. The most basic model that claims every country should produce what it is best at was developed by David Ricardo and is called comparative advantage. For 10 points, name this phenomenon, which can be controlled by the application of tariffs, where two countries exchange goods and services.

ANSWER: international trade <Nutter>

6. Due to material defects, this phenomenon gives the overall lower bound on losses in propagation in optical fibers. The original derivation of this effect failed to predict the Arago point and two other neutral points of zero polarization. The intensity of this phenomenon is proportional to wavenumber to the fourth power and varies inversely with the (\*) sixth power of radius. Its cross-section is proportional to the sine-squared of the angle, which creates a polarization pattern that varies with azimuth. This effect, which occurs only if the wavelength is much larger than the particle diameter, does not impact the energy of the incident photon, unlike Raman scattering. For 10 points, name this form of elastic scattering which explains why the sky is blue.

ANSWER: Rayleigh scattering [prompt on Mie scattering] <Silverman>

7. This author described an affable soldier with "very flat and very fat" feet marching through Normandy in "Walter Schnaffs' Adventure." A woman created by this author is noted for her "embonpoint" and has fingers "choked at the phalanges." A weak-willed man in a story by this man sleeps in a coat room while his wife dances at the Ministry of Education's ball. Morissot and Sauvage refuse to reveal a password and are shot by the (\*) Prussians in his story "Deux Amis". The title prostitute of one of his stories, Elisabeth Rousset, helps her company by sleeping with a Prussian officer. In another of his stories, Madame Loisel borrows a piece of jewelry that turns out to be fake in another of his stories. For 10 points, name this author of "Ball of Fat" and "The Necklace."

ANSWER: Guy de Maupassant [or Henri Rene Albert Guy de Maupassant] <Sy>

8. This operatic character is teased in a cavatina during which another character jokes that he'll play his guitar if this character wants to dance. He plays piano 'accompaniment' during the duet "Contro un cor accende amore," while passing himself off as a substitute music tutor. Played by a tenor, this character sings "Ecco, ridente in cielo" while disguised as the student (\*) Lindoro at the beginning of one opera. In another opera, played by a baritone or bass, this character plans to revive the *droit du seigneur* to sleep with his valet's wife Susanna, but is exposed by his own wife Rosina. For 10 points, name this character from Rossini's *The Barber of Seville*, a nobleman who also appears as Figaro's antagonistic boss in Mozart's *The Marriage of Figaro*.

ANSWER: Count Almaviva [or Il Conte di Almaviva or just "The Count"] <Rosenberg>

9. Members of this profession were often buried in hollowed-out trees rather than the ground. A device called the *ngoni* was first used by these people. While kidnapped, a man in this profession found that a rival king was invulnerable unless shot with an arrow tipped by a white rooster's nail. These people were seen in green feathered costumes by traveler (\*) ibn Battuta. One of these people named Balla Fasseke was at Kirina as his king defeated the Soso kingdom of Sumanguru. The Mandinka term for these people is used less often than a French term of unknown origin which may mean "servant" or "one who shouts." For 10 points, name these people who preserved the *Epic of Sundiata* into the present day, the traditional oral historians and ritual musicians of West Africa.

ANSWER: griots [or jeli; or jali; or gewel; prompt on poets; prompt on musicians; prompt on praise-singers; prompt on advisors] <Jackson>

10. When Willard Phillips first read this poem out loud, Richard Henry Dana responded that "no one on this side of the Atlantic is capable of writing such verses". This poem describes how "the rude swain turns with his share and treads upon" the "sluggish clod". "Patriarchs of the infant world" "and hoary seers of ages past" will be joined by the addressee of this poem, who is told to "lose thyself in the continuous woods where rolls the (\*) Oregon" and to "pierce the Barcan wilderness". This poem advises its addressee to "go not like the quarry slave at night" when joining "the innumerable caravan", but to go "like one who . . . lies down to pleasant dreams." For 10 points, name this meditation on death written by William Cullen Bryant.

ANSWER: "**Thanatopsis**" <Gehring>

11. An artist from this country painted politicians of his time in spiritual form, leading the biblical beasts Behemoth and Leviathan into war. That artist also depicted a crouching, bearded figure holding out a gigantic compass from his sun-like perch in the sky in a watercolor. The first president of this nation's art academy advocated the Grand Style in his lectures and depicted an (\*) actress seated between a figure holding a sword and another holding a cup. *The Ancient of Days* and *Sarah Siddons as the Tragic Muse* are paintings from this country. A monarch of this country stands beside his horse while "at the hunt" in a portrait by Anthony van Dyck. For 10 points, name this country home to William Blake and Joshua Reynolds.

ANSWER: **United Kingdom** [or **Great Britain**; or **England**] <Bentley>

12. A common cause of male infertility is the enlargement of a network of these structures, resulting in a "bag of worms" appearance. The longest of these structures, the great saphenous one, has an especially thick tunica adventitia. Surgical immobilization and long periods of sitting may predispose a patient to a problem in "deep" types of this structure. Enlarged and twisted examples of these structures are termed (\*) "varicose." The largest of these valved, vascular structures is the inferior vena cava, and the pulmonary one is one of the very few that are rich in oxygen. For 10 points, name these vessels that primarily carry deoxygenated blood to the heart, as opposed to arteries.

ANSWER: **veins** [prompt on **blood vessels**] <Smart>

13. A character who physically resembles, and is named for, a type of these creatures is pursued by the thieves Souris and Tigre and eventually kills an apparition at the urging of Corporal Lestrade. The fact that anything he puts in the water floats allows one of these creatures named Nala to construct a bridge. Another of these creatures is sent to retrieve an herb but comes back carrying an entire (\*) mountain. A Derek Walcott play is titled for a "dream" on the "mountain" of these creatures, examples of which in another literary work include the commander Nila, the usurper Vali, and the king Sugriva, all of whom assist Rama. For 10 points, name these creatures, the most famous example of which in the *Ramayana* is Hanuman.

ANSWER: **monkeys** [or **monos**; or **vanaras**; accept **Makak** or **macaque**; accept ***Dream on Monkey Mountain***] <Carson>

14. Fourteen letters which appear twenty-nine times in seemingly meaningless arrangements in this text are called the "initials" or "isolated letters." Its repeated challenge to readers to produce merely ten chapters of a text like it is taken to be evidence for this book's inimitability. This text, which declares that there is "no compulsion in religion," can be read in a month by dividing it into thirty equally-apportioned (\*) *juʿz*. An expunged, supposedly anti-monotheistic portion of this book that references three pagan goddess is known as the Satanic Verses. Over a period of twenty-three years in a mountain cave, this text was revealed through the angel Gabriel. For 10 points, name this holy book divided into chapters called surahs, the key religious text of Islam.

ANSWER: the **Qur'an** [or **Koran**] <Gupta>

15. During this campaign, several soldiers committed suicide out of hunger, despite having plenty of watermelons and grain cakes to eat. At a battle in this campaign, a commander told his men that "forty centuries look down upon you." Felicia Hemans's poem "Casabianca" dramatizes the explosion of the *Orient* during a battle in this campaign, which departed from Toulon after being reluctantly approved by the (\*) Directory. Malta was captured on the way to its primary objective. Lord Nelson ambushed an anchored navy during this campaign at the Battle of Aboukir Bay. During this campaign, the soldier Pierre-Francois Bouchard discovered the Rosetta stone. For 10 points, name this 1798-1801 expedition, during which Napoleon's army lost the Battle of the Nile.

ANSWER: French invasion of Egypt and Syria [or Napoleon's Egyptian invasion; or French invasion of Syria and Egypt; or Napoleon's Syrian invasion; accept any answer that indicates that Napoleon or France is attacking Egypt; accept any answer that indicates that Napoleon or France is attacking Syria] <Gupta>

16. This process can be performed everywhere on entire functions. The arc length of a function  $f$  from  $a$  to  $b$  is the integral of square root quantity one plus this operation of  $f$  squared. When this operation can be repeated infinitely, the input function is called smooth. The Jacobian is the determinant of a matrix whose entries come from performing this operation. It cannot be performed at the origin for the (\*) absolute value function and cannot be performed anywhere on the Weierstrass function. This operation applied to a composition of two functions is this operation applied to the first times this operation applied to the second according to the chain rule. For 10 points, name this operation which finds the slope of the line tangent to a curve.

ANSWER: differentiation [or taking a derivative, accept any more descriptive answers like complex/partial differentiation] <Bailey>

17. An old man in this novel says that the hardest things in life to deal with are "muddles." This novel's protagonist earns the ire of the Alan sisters after failing to get them Cissie House, a summer home near Windy Corner. In this novel, the pseudonym "Joseph Emery Prank" is used by Eleanor Lavish, who takes away the protagonist's Baedeker before she enters the Santa Croce. This novel's protagonist breaks off an engagement to the snobbish (\*) Cecil Vyse. At the beginning of this novel, the protagonist arrives in the Pension Bertolini in Florence with her cousin Charlotte Bartlett, and meets George Emerson while complaining about not being given the title accommodation. For 10 points, name this novel about Lucy Honeychurch by E.M. Forster.

ANSWER: *A Room with a View* <Sy>

18. The fourth movement of this piece begins with low strings playing two bars of pianissimo tremolos on D, after which second violins introduce a B-flat minor staccato melody depicting raindrops. The second movement of this piece is an *Andante molto moto* written in 12/8 time using the subdominant key of B-flat major. This piece's last two movements, played without a pause, are a (\*) "Storm" and a "Shepherd's Song." Woodwind instruments imitate birdcall near the end of its second-movement "Scene by the brook." This F major symphony begins with an "Awakening of cheerful feelings upon arrival in the countryside." For 10 points, name this programmatic symphony by Ludwig van Beethoven named for its depiction of nature.

ANSWER: Pastoral Symphony [or Beethoven's Sixth; or Pastoral Symphony after "Beethoven" is read; or Symphony No. 6 after "Beethoven" is read; or obvious equivalents] <Kim>

19. A winning commander in this war was boarded up to the point of near starvation in a temple to a deity of the Brazen House after being accused of collaborating with the losing side. The losing side of this war had planned to dig a canal across the isthmus of Mount Athos. A king in this war ordered the construction of two pontoon bridges to cross a body of water that he had (\*) lashed for being uncooperative. Its first phase ended with the defeat of Datis and Artaphernes by Miltiades, and began soon after the Ionian Revolt was quashed. The winning side of this war formed the Delian League after winning the Battle of Plataea. For 10 points, name this series of wars in which the losing king Xerxes beat 300 Spartans at the Battle of Thermopylae.

ANSWER: Greco-Persian Wars <Gupta>

20. This theory inspired Rudolf Steiner's method of classifying children in the Waldorf educational system. A 1946 George Balanchine ballet with music by Paul Hindemith was inspired by this theory. Dyscrasia should be avoided according to this theory, whose basic concepts inform Robert Burton's encyclopedic treatise *Anatomy of Melancholy*. This theory inspired a play in which the servant Brainworm defies the orders of Old Kno'well, an early comedy by Ben (\*) Jonson. A believer in this theory might assume that an excessively cheery, or "sanguine," temperament results from vapors in the brain. For 10 points, name this now-discredited theory which attributed personality traits to a bodily imbalance between blood, phlegm, yellow bile, and black bile.

ANSWER: theory of the four humors [or humorism; accept four classical temperaments before "temperament" and prompt afterwards; prompt on "four classical elements" or "ancient Greek medicine"] <Jackson>

21. Venetians under Enrico Contarini stole the body of Saint Nicholas late in this campaign. Despite sending reports about this campaign back to his wife Adela, Stephen, the Count of Blois deserted it. Count Emicho carried out a series of massacres of Jews in the Rhineland during this campaign. The Battle of Ascalon was the last engagement of this campaign, which was chronicled by (\*) Anna Comnena in the *Alexiad*. Raymond IV of Toulouse and Godfrey of Bouillon led this campaign, which was preceded by an ill-fated adventure led by Peter the Hermit, and led to the creation of states headquartered at Edessa and Antioch. At the Council of Clermont, Pope Urban II called for this campaign. For 10 points, name this 1096-99 military campaign which managed to capture Jerusalem.

ANSWER: First Crusade [prompt on German Crusade; prompt on People's Crusade] <Bentley>

22. Programs written in Dart can be compiled to this other language. Cross-platform widgets are offered by the Dojo Toolkit, which is a library for this language. Google's V8 engine interprets this language. A framework for sending and receiving human-readable data was originally developed for this language and is called JSON (jay-sawn). Server-side applications written in this language can use the (\*) Node framework. This dynamically typed language can be used to display an alert after attaching to the onClick event in an HTML link. For 10 points, name this scripting language often used in web browsers, not to be confused with a similarly named language developed by Sun Microsystems.

ANSWER: JavaScript [or JS; do not accept or prompt on "Java"] <Bentley>

23. An author who claimed that "imagination is the only weapon in" these places wrote a novel partly titled for them in which Thomas gets a magic guitar from Robert Johnson. In a novel set in one of these locations called Turtle Mountain, Lipsha uses male and female goose hearts in an attempt to make a drug that will disrupt the love triangle between Marie, Lulu, and Nector. Abel stabs Juan Reyes to death after returning to one of these places in a novel by (\*) N. Scott Momaday, while a novel titled after their "blues" follows includes characters from the collection *The Lone Ranger and Tonto Fistfight in Heaven* by Sherman Alexie. For 10 points, name these communities that include the setting of Louise Erdrich's *Love Medicine*, a novel about Ojibwa people.

ANSWER: Indian reservations [or the rez; accept Reservation Blues] <Smart>

24. Hundreds of tribal leaders in this country signed a treaty negotiated by Harold and Doreen Ingrams in 1937. Part of this country was ruled by Imam Yahya until his assassination during the coup of the al-Wazir family. The Zaydi religious minority in this country was ravaged by civil wars between the PDRY and the YAR. After being wounded by a (\*) bomb during the Arab Spring, Ali Abd Allah Salih ceded power in this nation, which is coming under the control of the Houthis. An American citizen named Anwar al-Awlaki was killed in this country. In 2000, 17 sailors were killed in a suicide bombing of the USS *Cole* in one of this country's harbors. For 10 points, name this Middle Eastern country that was once invaded by its northern neighbor, Saudi Arabia.

ANSWER: Yemen <Bentley>



## PACE NSC 2015 - Round 16 - Bonuses

1. A teacher in this tradition used a story about mistaking a rope in a dark room for a snake to illustrate *adhyasa*, or superimposition. For 10 points each:

[10] Name this non-dualistic tradition of Vedanta whose doctrine was consolidated by Adi Shankara. It emphasizes the identity of *atman*, or self, with *brahman*, or ultimate reality.

ANSWER: **Advaita** Vedanta

[10] In Advaita, recognizing the unity of *atman* and *brahman* allows one to achieve this state of liberation from rebirth in Hinduism and Jainism, an analogue of *nirvana* in Buddhism.

ANSWER: **moksha** [or **mukti**]

[10] In Jainism, *moksha* is reached by removing all *paap* and *punya*, the two kinds of this material. More generally, this concept describes the way a person's actions affect him or her in the future.

ANSWER: **karma** <Kothari>

2. Alfred Stepan and Juan J. Linz posited that the reason why the United States has such large income inequality is because there are four branches of government with this power. For 10 points each:

[10] Name this legislative power given to every member of the Polish Sejm (**saim**). When the US President performs this action, Congress can overwrite it with a two-thirds majority.

ANSWER: **veto**

[10] The United States also fared poorly when Stepan and Linz applied this economic measure to the fairness of representation in legislative bodies. More traditionally, this measure named for an Italian statistician grades income inequality on a scale from 0 to 1.

ANSWER: **Gini** coefficient [or **Gini** index; or **Gini** ratio]

[10] This thinker's most recent book, *Political Order and Political Decay*, argues that America has turned into a dysfunctional "vetocracy". His best known book originated as a 1989 article in *The National Interest* and erroneously predicted the permanent triumph of Western democracies over every other form of government.

ANSWER: Francis **Fukuyama** [or Yoshihiro Francis **Fukuyama**] <Bentley>

3. He was one of the first artists to use an airbrush in his paintings, such as *Jazzy*, painted in 1916. For 10 points each:

[10] Identify this artist who produced his namesake photographs by placing tacks and other items on photosensitive paper. This artist added f-holes to the back of a woman in his *Violon d'Ingres*.

ANSWER: **Man Ray** [or Emmanuel **Radnitzky**]

[10] Man Ray was a member of this movement, whose manifesto was written by Tristan Tzara. Marcel Duchamp created readymades as part of this movement.

ANSWER: **Dada** [or **Dadaism**]

[10] Man Ray admired this work by Duchamp, constructed from unorthodox materials such as dust and lead wire. Duchamp called this work a "hilarious picture," and it was partially shattered prior to its installation in the Philadelphia Museum of Art.

ANSWER: *The **Bride Stripped Bare by Her Bachelors, Even*** [or *The **Large Glass*** or *The **Bride Stripped Bare by the Bachelors, Even*** or *La **mariée mise à nu par ses célibataires, même*** or *Le **Grand Verre***] <Bentley>



4. This woman was one of 20 women given to the Spanish by the Chontal Maya in a 1519 meeting on the Tabasco coast. For 10 points each:

[10] Identify this woman who, according to legend, gave birth to the first mestizo child in Mexico. This wife of Juan Jaramillo used her mastery of the *tecpillatolli* dialect of Nahuatl to negotiate with Aztec rulers for the Spanish.

ANSWER: La **Malinche** [or **Malinalli**; or **Malintzin**; or Doña **Marina**]

[10] La Malinche was the mistress of this Spanish conquistador, who led the conquest of the Aztec Empire.

ANSWER: Hernan **Cortes** [or Hernán **Cortés** de Monroy y Pizarro, 1st Marquis of the Valley of Oaxaca]

[10] La Malinche appears in nine separate illustrations in this text, a compilation of Aztec history and lore by friar Bernardo de Sahagun. It gets its most common name because it was rediscovered in the Laurentian Library.

ANSWER: **Florentine Codex** [or **Universal History of the things of New Spain**; or **General History of the things of New Spain**; or **Historia universal de las cosas de Nueva Espana**] <Bentley>

5. Although this device was invented by Antoine Louis, it was named for the physician who pitched it to the National Assembly. For 10 points each:

[10] Name this "national razor," conceived as a more humane alternative to beheading by axe or sword, that was frequently used during the French Revolution.

ANSWER: **guillotine**

[10] Guillotine usage peaked and fell in this Gregorian calendar year, during which the Reign of Terror finally came to an end and the instrument was turned on its most fanatical advocate, Maximilien Robespierre.

ANSWER: **1794** [prompt on **94**]

[10] Targets of this radical satirical newspaper published by Jacques Hebert often found themselves on a one way trip to Madame Guillotine. This newspaper is named for a pipe-smoking, musket-wielding, obscene everyman.

ANSWER: *Le* **Pere Duchesne** [or **Old Man Duchesne**; or **Father Duschene**] <Bentley>

6. This character is described as having "a rule and a pair of scales, and the multiplication table always in his pocket... ready to weigh and measure any parcel of human nature and tell you exactly what it comes to". For 10 points each:

[10] Identify this resident of Coketown from an 1854 novel who names two of his sons after Thomas Malthus and Adam Smith. He employs Mr. M'Choakumchild at his school, which is dedicated to "facts".

ANSWER: **Thomas Gradgrind**, Sr. [accept either underlined portion]

[10] Thomas Gradgrind's radical utilitarianism is satirized in this novel, whose other main characters include a young girl named Sissy Jupe and the mill worker Stephen Blackpool.

ANSWER: **Hard Times** -- *For These Times*

[10] *Hard Times* is the shortest novel by this author of *Great Expectations* and *David Copperfield*.

ANSWER: Charles **Dickens** [or Charles John Huffam **Dickens**] <Bentley>

7. Numerous Beaux-Arts train stations were inspired by versions of these buildings named for Caracalla and Diocletian. For 10 points each:

[10] Name these public works which usually included a tepidarium and a caldarium.

ANSWER: public **baths** [or **thermae**]

[10] Roman bath architecture was also influential in its own time and inspired the design of the Basilica of Maxentius, the largest building at this center of Roman civic life that was also home to the Curia Julia.

ANSWER: the Roman **Forum**

[10] Roman baths often made use of this architectural technique that involves cutting away a polygonal shape from a ceiling to reduce weight and expense of materials. This technique is particularly visible in the dome of the Pantheon.

ANSWER: **coffering** [or **coffers**] <Mehigan>

8. This man's poetry collection *Beware, Soul Brother*, sometimes published as *Christmas in Biafra*, was a co-winner of the First Commonwealth Poetry Prize. For 10 points each:

[10] Name this author, whose essay collection *Hopes and Impediments* includes "An Image of Africa," in which he asserts that Joseph Conrad was a "bloody racist" for his depiction of Africa in *Heart of Darkness*.

ANSWER: Chinua **Achebe** [or Albert Chinualumogu **Achebe**]

[10] This 1958 novel, Chinua Achebe's most famous, is about Okonkwo, a leader of a fictional Igbo village.

ANSWER: ***Things Fall Apart***

[10] Another essay in *Hopes and Impediments* discusses the "work" and "play" aspects in the writing of this fellow Nigerian author, whose novels include *The Palm-Wine Drinkard* and *My Life in the Bush of Ghosts*.

ANSWER: Amos **Tutuola** <Jose>

9. Enrico Fermi's Nobel Prize came for discovering new elements by bombarding uranium with these particles—except, actually, the new elements were really isotopes of lighter elements. For 10 points each:

[10] Name these neutral particles that are fired at uranium to induce nuclear fission.

ANSWER: **neutrons**

[10] In beta decay, a neutron decays into an electron, a proton, and an antineutrino with the help of this intermediate particle, which has a negative charge and a mass of 80 GeV. It forms when a down quark turns into an up quark.

ANSWER: **W minus** boson [prompt on partial answers]

[10] The existence of the W and Z bosons was supported by the discovery of weak neutral currents in one of these devices at CERN named for Gargamelle. These devices detect charged particles moving through a superheated liquid.

ANSWER: **bubble chambers** <Silverman>

10. *Staphylococci* and *Micrococci* are "positive" in a test for this enzyme, which was crystallized from beef liver in 1937 by Alexander Dounce and James B. Sumner. For 10 points each:

[10] Name this extremely-fast enzyme that helps convert hydrogen peroxide to water and oxygen. It is rather generically named for the general purpose that all enzymes serve.

ANSWER: **catalase**

[10] Catalase also contributes to the hangover-producing metabolism of this compound to acetaldehyde, though the majority of that process is carried out by a namesake dehydrogenase in the liver.

ANSWER: **ethanol** [or ethyl **alcohol**; or drinking **alcohol**]

[10] Catalase, glutathione, and superoxide dismutase act as these types of molecules that scavenge reactive oxygen species and other free radicals to protect cells and tissues from injury.

ANSWER: **antioxidants** <Gupta>

11. A goddess in this myth system repairs cracks in the heavens by inserting stones of five different colors into them. For 10 points each:

[10] Identify this myth system, in which the creator goddess Nu'wa builds humanity from clay.

ANSWER: **Chinese** mythology [or **China**]

[10] Nu'wa repairs the walls of heaven after Gong Gong, one of these creatures that resides in water, crashes into the pillar of heaven. This is the only fictitious creature in the zodiac, and is usually benevolent in Chinese myth, despite being malicious in European folklore.

ANSWER: **dragons** [or **serpents**]

[10] Before Nuwa creates humanity, Pangu forms everything else in the universe after waiting 18,000 years to be born in this manner. In Greek mythology, Helen, Clytemnestra, Castor, and Pollux are born in this manner.

ANSWER: **hatched** from an egg [or born from an **egg**] <Jose>

12. Spain was represented at this meeting by the notoriously annoying Marquis of Labrador. For 10 points each:  
[10] Name this meeting called by Klemens von Metternich, which attempted to restore the balance of power in Europe following the Napoleonic Wars.

ANSWER: Congress of **Vienna**

[10] This diplomat of Napoleon and former bishop represented France at the Congress of Vienna, where he skilfully prevented France from being treated as a defeated power in the negotiations.

ANSWER: Charles Maurice de **Talleyrand**-Périgord

[10] The Great Powers met again five years later at the Congress of Troppau to discuss a revolution in this city. During the Napoleonic era, it served as the capital of the Parthenopean Republic before Joseph Bonaparte and Joachim Murat ruled as its kings.

ANSWER: **Naples** [or **Napoli**] <Brownstein>

13. In a play by this author, Amanda is virtually kidnapped by the Duchess to impersonate the title deceased beauty in an effort to bring Prince Albert out of his melancholy. For 10 points each:

[10] Name this author of *Leocadia* and *The Lark*, who used Creon as a stand-in for the Vichy government in his adaptation of the Sophocles play *Antigone*.

ANSWER: Jean **Anouilh** [ah-noo-WEE]

[10] This wife of Creon is depicted knitting for almost the whole play, only stopping to calmly slit her throat after learning of Haemon's death. This character shares her name with the nymph brought back to life by Orpheus' music.

ANSWER: **Eurydice**

[10] The Old Vic premier of Anouilh's *Antigone* [on-tee-GONE] was produced by this actor, who also portrayed the title characters of the 1940s and '50s films *Henry V*, *Hamlet*, and *Richard III*.

ANSWER: Laurence **Olivier** <Smart>

14. An economic policy named for this man called for extensive Quantitative Easing but stalled after the consumption tax was raised by 3% in April 2014. For 10 points each:

[10] Name this current world leader whose monetary policy is divided into the Three Arrows. Haruhiko Kuroda is one economic advisor to this man, whose government has sought to remove references to "comfort women" in textbooks discussing World War II.

ANSWER: Shinzo **Abe** [or **Abe** Shinzo]

[10] "Abenomics" has been employed in this country, where Shinzo Abe serves as Prime Minister.

ANSWER: **Japan** [or **Nippon**; or **Nihon**]

[10] Some pundits have called on Japan to raise the retirement age to deal with its aging population, which would affect this type of people. These white-collar male workers stereotypically work routine overtime and stay at one company for their entire career.

ANSWER: **salarymen** [or **salaryman**; or **sarariman**] <Bentley>

15. The most popular of these pieces is the second, which opens with a slower lasso section before moving to a faster friska. For 10 points each:

[10] Name these 19 gypsy-inspired pieces for piano. Many of them were later arranged for orchestra.

ANSWER: **Hungarian Rhapsodies**

[10] The *Hungarian Rhapsodies* and *Mephisto Waltzes* were both written by this virtuoso pianist who pioneered the symphonic poem in pieces like *Les Preludes*.

ANSWER: Franz **Liszt** [or Ferenc **Liszt**]

[10] Liszt composed two versions of this piece for piano and orchestra, which is based on the Dies Irae theme and was also arranged as *De Profundis* by Ferruccio Busoni.

ANSWER: **Totentanz** [or **Dance of Death** or similar answers involving dancing and death or dead people, but not "Dance Macabre"] <Rosenberg>

16. Colm Toibin's novel *The Master* depicts this man bowing to a jeering crowd at the humiliating failure of his play, *Guy Domville*. For 10 points each:

[10] Name this author who collected heavily-edited versions of many of his works, including *The Portrait of a Lady*, *The Ambassadors*, and *Daisy Miller*, in the 24-volume "New York Edition".

ANSWER: Henry **James**

[10] In this novel, the second collected in the *New York Edition*, Valentin dies of wounds sustained in a duel over Noémie Nioche, while the Marquis de Bellegard interferes in the efforts of the protagonist, Christopher Newman, to marry Claire de Cintré.

ANSWER: *The **American***

[10] James omitted a number of his early novels from the *New York Edition*, including this tragicomedy in which Catherine Sloper's meddling father prevents her from marrying Morris Townsend. It is named for an elite neighborhood in New York.

ANSWER: ***Washington Square*** <Yu>

17. This woman was brought to France along with her older brother James, who went on to work extensively as a chef in Paris. For 10 points each:

[10] Identify this slave. A 1998 DNA test proved that Peter Carr was not the father of her children, thus implicating her master, Thomas Jefferson.

ANSWER: Sarah "Sally" **Hemings**

[10] While in Paris with James and Sally Hemings, Jefferson wrote a letter to William Stephens Smith asserting that this metaphorical plant "must be refreshed from time to time with the blood of patriots & tyrants".

ANSWER: the **tree of liberty**

[10] Hemings' grandson, Thomas Eston Hemings, once spent time in this place. Henry Wirz was executed in 1865 for his role as commander of this place.

ANSWER: **Andersonville** Prison Camp [or **Camp Sumter**; do not accept "Fort Sumter"] <Bentley>

18. This point for water defines the Kelvin temperature scale. For 10 points each:

[10] Name this point where three phases coexist.

ANSWER: **triple** point

[10] According to this rule, the number of degrees of freedom at the triple point for a one-component mixture is zero. Named for an American, it's usually rendered as F equals C minus P plus 2.

ANSWER: Gibbs **phase** rule [or **Gibbs** phase rule]

[10] The eutectic point is a special triple point where a liquid and two of these species are in equilibrium. In these mixtures, one solute crystallizes inside another lattice substitutionally or interstitially.

ANSWER: **solid solutions** [or **alloys**; prompt on partial answer] <Silverman>

19. The strength of these events is usually measured by a namesake explosivity index. For 10 points each:

[10] Name these events that produce lava and ash.

ANSWER: **volcanic eruption** [or obvious equivalents]

[10] Pelean eruptions can result in these deadly events, in which a hot mixture of ash, gas, and rocks moves at very high speeds.

ANSWER: **pyroclastic flow** [or **nuee ardente**]

[10] The eruption of Paricutin near Mexico City is a classic example of this type of eruption. These eruptions are less passive than Hawaiian eruptions because bursting gas bubbles throws lava several hundred meters into the air.

ANSWER: **Strombolian** eruption <Lee>

20. Answer the following about a 1951 paper by Willard van Orman Quine that attacked the reigning orthodoxies in philosophy, for 10 points each.

[10] The paper is titled for two unjustified Dogmas of" this philosophical viewpoint, which supports collecting experience and evidence to form beliefs. John Locke held this belief.

ANSWER: **empiricism** [or **empiricist**]

[10] One such dogma is the division between these definitionally-true statements and more complex "synthetic" truths. This adjective also names a highly logical style of English-language philosophy at odds with more freeform "Continental" theory.

ANSWER: **analytic** truths [or **analytical** philosophy]

[10] The second dogma concerns this process of assessing a sentence as no more than its underlying basic logic. In philosophy of science, this process explains a higher-order process such as consciousness in terms of more basic processes such as biochemistry.

ANSWER: **reductionism** [or intertheoretic **reduction**; accept word forms such as **reduce** or **reducing**] <Jackson>

21. Almost half of this man's crew was killed by scurvy in the three winters his expedition spent on an island in the St. Croix River. For 10 points each:

[10] Identify this French explorer who was wounded in an attack on an Iroquois village on Lake Huron. He founded the city of Quebec.

ANSWER: Samuel de **Champlain**

[10] Champlain's winters on the St. Croix River were in this colony in New France, whose name is a corruption of a Greek region celebrated for its pastoralism. The many French speakers in this colony deported by the British in 1755 went on to become the Cajuns in New Orleans.

ANSWER: **Acadia** [or **Acadie**; do not accept "Arcadia"]

[10] The British gained control of most of Acadia through this treaty. Spain ceded the right to the *asiento* to Great Britain in this treaty, through which the French recognized Victor Amadeus II as King of Sicily.

ANSWER: Treaty of **Utrecht** [or Peace of **Utrecht** or Treaties of **Utrecht**] <Bentley>

22. Elizabeth Bates learns that her coal-miner husband Walter has died in a cave-in in a short story by this author, while in another, Paul uses the title object to work himself into a state where he can predict the results of horse races. For 10 points each:

[10] Name this English author of "Odour of Chrysanthemums" and "The Rocking-Horse Winner", who also wrote two novels about the sisters Ursula and Gudrun Brangwen.

ANSWER: D. H. **Lawrence** [or David Herbert Richards **Lawrence**]

[10] In this controversial D.H. Lawrence novel, Clifford relies on his housekeeper Mrs. Bolton while his wife, Constance, has an affair with the gamekeeper Oliver Mellors.

ANSWER: ***Lady Chatterley's Lover***

[10] In this poem from Lawrence's collection *Birds, Beasts, and Flowers*, the speaker regrets chasing away a "king in exile, uncrowned in the underworld", after that animal "came to my water trough on a hot, hot day".

ANSWER: "**Snake**" <Yu>

23. The Weber and Rinne tests evaluate this sense, whose inputs are integrated in the inferior colliculus. For 10 points each:

[10] Name this sense that depends upon the vibration of sound waves inside the fluid within the cochlea.

ANSWER: **hearing** [or **audition**]

[10] On the way to the auditory cortex from the inferior colliculus, the auditory nerve passes through the medial geniculate nucleus in this midline relay structure within the brain. The other three structures that develop from the embryonic diencephalon are named relative to this structure.

ANSWER: **thalamus**

[10] Wernicke's area, which is located near the primary auditory cortex, controls this human ability, along with Broca's area. Aphasias are defects in this ability caused by brain damage.

ANSWER: **speech** [or **language**] <Gupta>