



NSC 2019 - Round 12 - Tossups

This round is sponsored by Bryn and Eric Douglass

1. This organization's policies were presaged by the terms of the Blair House Agreement, in which the U.S. settled some issues with a policy called CAP ("C-A-P"). Bill Clinton gave a speech advocating the confirmation of China as a member of this organization in 2001. This organization was created via the Marrakesh Agreement after eight years of meetings in the (*) Uruguay Round. This organization, which replaced GATT ("g-a-t-t") in its function, met in 1999 for a conference which occasioned "black bloc" activists to fight the "Battle for Seattle." This organization's dispute settlement system is meant to avoid direct economic conflicts between member countries. For 10 points, name this intergovernmental organization which regulates commerce.

ANSWER: **World Trade** Organization [or **WTO**; do not accept or prompt on partial answers]

<Alston, History - Cross, Historiography, and Miscellaneous>

2. For a magnetized plasma, this value is given by the Appleton-Hartree equation. Filament propagation occurs due to an increase in this value. This quantity is given as the sum of 3 terms of the form B times lambda squared over lambda squared minus C in the Sellmeier ("SELL-my-ur") equation, which is more accurate than the Cauchy ("COW-shee") equation at extreme wavelengths. This quantity scales with the square of the electric field in the (*) Kerr effect, which in turn causes self-focusing. Brewster's angle is equal to the arctangent of this quantity. The ratio of two values of this quantity are set equal to a ratio of sines in Snell's law. For 10 points, name this value equal to the ratio of the speed of light to its speed in a given medium.

ANSWER: **index of refraction** [accept **refractive index**]

<Mitchell, Science - Physics>

3. In the *Iliad*, this deity is given the epithet "of the golden reins" in a verse describing this deity's murder of Sarpedon's mother Laodamia ("lao-dah-mee-ah"). Later, in Book 21, Hera steals this deity's weapons, after which this deity runs away crying to Zeus. When this deity stops the winds of the Aegean from blowing, the seer Calchas ("KAL-kuss") advises a sacrifice so that the Greeks can sail to Troy. After the Greeks slay an animal in this deity's sacred (*) grove, Agamemnon sacrifices his daughter Iphigenia to appease her. This goddess, who was worshipped by queen Penthesilea ("pen-theh-sih-LEE-ah") and her Amazons, also punished King Oeneus ("EE-nee-us") by sending the Calydonian Boar. After she was born on Delos ("DEE-loss"), she helped her mother Leto give birth to Apollo. For 10 points, name this Greek goddess of the hunt.

ANSWER: **Artemis** [do not accept or prompt on "Diana"]

<Alston, RMP - Greco-Roman Mythology>

4. This story's title derives from a section of Pierre Teilhard de Chardin's ("teh-yar duh shar-dan'z") *The Omega Point* that argues love will allow humanity to evolve into the divine. A woman in this story goes on a long tangent about the time her father paid off the mortgage for the Godhighs' mansion, which had double stairways. A character in this story wears a hat that resembles a green "cushion with the stuffing out" and has a purple velvet flap. This story is set during a trip to (*) Mrs. Chestny's "reducing classes" at the downtown Y. In this story, the narrator's mother has a stroke shortly after being struck by a black woman for giving her son Carver a penny. A young man named Julian is the protagonist of, for 10 points, what story by Flannery O'Connor?

ANSWER: "Everything That Rises Must Converge"

<Smith, Literature - American>

5. Barnabas Calder's book on this material celebrates Denys Lasdun's use of it. A "king" of this material uses blue plastic cones to create his trademark holes within it, and used it for the Church of the Light in Osaka. The taxidermist Carl Akeley made a "gun" used to spray this material, which was used to create the "gunnite" sections of a building whose irregularly-placed windows produce a speckled effect on the wall behind the (*) altar. An unfinished form of this material was used in Marseille's Unité d'Habitation ("oo-nee-TAY dah-bee-tah-SYOHN") and is referred to by the French term "Béton brut" ("BAY-ton broo"). Thick walls of this material support the curved roof of the Notre Dame du Haut ("NOH-truh DAHM doo OWE"). For 10 points, name this material used in many Modernist buildings of Le Corbusier, and which can be "reinforced" with steel.

ANSWER: reinforced concrete [accept reinforced cement concrete or Portland cement concrete or ready-mixed concrete; do not accept or prompt on just "cement"]

<Bentley, Fine Arts - Architecture>

6. A key decision node during this process is made by an enzyme named for the fact that it's uninhibited by benzimidazoles ("ben-zim-uh-DA-zoles"). The kinase kinase kinase Raf is an enzyme named for this process which eventually activates it through lower accessory kinases like ERKs. Wee1 prevents activation of this process by controlling the activity of Cdk1. MAP kinases are named for being activated by compounds named for inducing this process. This process (*) stalls midway until the cell validates that all the kinetochores are attached to the spindle fibers. The checkpoint at the end of the G2 phase leads into this process, though cancer cells typically do it without any regulation. For 10 points, name this pathway by which cells divide.

ANSWER: mitosis [or cell division until it is read; accept yeast budding; anti-prompt on metaphase; anti-prompt on anaphase; do not accept or prompt on "meiosis"; do not accept or prompt on "fission"]

<Silverman, Science - Biology>

7. In a series of phone calls, this man threatened to invade Wilhelm Miklas' ("VILL-helm MEEK-las") country unless Miklas resigned. This man developed a morphine addiction as a result of wounds sustained in a 1923 coup attempt. This man enacted the "Four Year Plan" after replacing Hjalmar Schacht ("HYALL-mar shocked") as minister of economic affairs. This man and his wife, actress Emmy Sonnemann, lived in the Carinhall Estate, home to his massive art collection. While this man's only superior was trapped at the (*) Führerbunker ("FYUR-er-BOON-kur"), he tried to take power through his namesake "telegram." This man swallowed cyanide after he was convicted of war crimes at Nuremberg. This man led a military force that was responsible for the Blitz. For 10 points, name this Nazi who led the Luftwaffe.

ANSWER: Hermann Wilhelm Göring [accept Hermann Wilhelm Goering or Goering telegram]

<Singh, History - European>

8. In *The Blank Slate*, Steven Pinker noted that personality effects arising from this variable could not be observed by neutral third parties, and dismisses a book by Frank J. Sulloway that made a popular claim about this variable. In a pioneering study of historiometrics, Francis Galton argued that "genius" can be explained by this variable; Galton also theorized that this variable's eminence was the result of "primogeniture laws." The fact that this variable can be noticed determines (*) which subject is "dethroned" by new human additions is one component of Alfred Adler's theory of child personality. Dilution theory holds that this variable can be accounted for by tracking new additions on a family's resources. For 10 points, what variable is said to result in the "middle child" being "excluded," or the "youngest child" being pampered?

ANSWER: **birth order** [accept equivalents indicating the **order of birth** or **relative age** of children; prompt on **age**; prompt on **family size**]

<Bentley, Social Science - Psychology>

9. In one scene in this play, the philosophers Thales ("THAY-leez") and Anaxagoras debate whether the "Neptunist" or "Vulcanist" origin of the Earth is correct before they are interrupted by a homunculus. This play's final scene, which depicts the title character being blinded by Care, ends with a "Chorus Mysticus" proclaiming that "the eternal feminine draws us on." Its title character is shown translating the *logos* of the (*) Gospel of John, and at one point drinks a witch's potion to turn himself into a young man. After walking with his servant Wagner, the protagonist of this play is followed by a poodle who transforms into a demon. Mephistopheles ("mef-ih-STOFF-uh-leez") bargains for a scholar's soul in, for 10 points, what tragedy in two parts written by Johann Wolfgang von Goethe?

ANSWER: **Faust** [accept **Faust, Part II** before "logos"]

<Jose, Literature - European>

10. In 2018, Congressman Ed Royce received the Order of Brilliant Star from this nation after passing a travel bill named for it. This nation's international calling code of 886 lends its name to a restaurant serving "three cup" dishes in the East Village. Machine learning chipmaker TSMC has revived this nation's tech industry, once dominated by firms such as ASUS and HTC. This nation's president rejects the 1992 consensus and scored a diplomatic coup in 2016 when she made a (*) congratulatory call to President-Elect Trump. The 2014 Sunflower Student Movement in this nation opposed the Cross-Strait Trade Agreement of its KMT party. For 10 points, Tsai Ing-wen leads what island nation that is not recognized as independent by China?

ANSWER: **Taiwan** [or **Republic of China**; or **ROC**; do NOT accept or prompt on "China"]

<Bentley, Current Events - World>

11. This man makes a midnight visit to a woman later mocked for her madness who "was so overjoyed" at hearing his voice she forgot to open her gate. The maid Rhoda failed to help this man, who once resurrected a woman who provided clothes to widows and who was named Dorcas. Although Paul criticized this man for discriminating against gentiles, he converted the first Gentile to Christianity, a centurion named Cornelius. This man's repentance comes after he hears a (*) rooster crow, reminding him of a prophecy told by a man he thrice denies knowing. This man, the brother of Andrew, is declared a "rock" by Jesus, who states, "upon this rock will I build my Church." For 10 points, name this apostle and first Catholic pope.

ANSWER: Simon **Peter** [or **Cephas**; or Simeon **Peter**; or **Peter** the Apostle; prompt on **Simon** or **Simeon**]

<Suh, RMP - Judeo-Christian, Bible>

12. This output quantity decreases with the square root of time upon a step input in the Cottrell equation. The equivalence point of a coulometric ("koo-low-MEH-trik") titration occurs when this quantity is measured to be zero. The response of this quantity, plotted on the y-axis, produces a curve shaped like a duck when the input is a cyclic ramp potential. The sum of the values for this quantity at the anode and the cathode is named for (*) Faraday and is proportional to the reaction rate. The mass of electroplated metal is proportional to this quantity times the duration that the electrolytic cell operates. This quantity scales linearly with the e.m.f. provided by a galvanic cell by one form of Ohm's law. For 10 points, name this quantity measured using amperometry ("am-pair-AH-muh-tree").

ANSWER: electrical current [prompt on i; prompt on j]

<Silverman, Science - Chemistry>

13. This author called the human heart the "mind's Bible" in a letter analogizing the world to "a vale of soul-making." The critic John Gibson Lockhart wrote "it is better to be a starving apothecary than a starving poet" after reading one of this writer's poems mentioning an object that "will never Pass into nothingness; but still will keep a bower quiet for us." This writer praised Shakespeare as "the Man of Achievement" for his negative (*) capability. The forger Thomas Chatterton was the dedicatee of a four-book poem by this author, which begins by describing "a thing of beauty is a joy forever." A poem about a mythological shepherd named "Endymion" was written by, for 10 points, what Romantic poet who declared "beauty is truth, truth beauty" in "Ode on a Grecian Urn"?

ANSWER: John Keats

<Jose, Literature - British>

14. In this state in the 1920s, the Federation of Patriotic Societies and KKK backed an anti-Catholic campaign to make public education compulsory. Its early white settlers included Methodist missionary Jason Lee, but George Washington Bush was prohibited from settling here by an 1844 Black Exclusion Law. Champoege ("sham-POO-eh") was a provisional capital of this state, whose earliest non-Native town was named for the president of the American (*) Fur Company. In 1994 this state's namesake ballot measure system produced the Death with Dignity Act, the US's first euthanasia law. The border for a territory that shares its name with this state was the subject of the slogan "54-40 or Fight." For 10 points, name this state where a namesake trail brought people to Portland.

ANSWER: Oregon [accept Oregon Territory]

<Bentley, History - American>

15. "Lágrima," "Endecha," and "Oremus" are the three named pieces in this genre by Francisco Tarrega, who wrote 14 standard examples of them for guitar. Pieces subtitled "Homage to Bach" and "Lyrical Melody" are among the set of five pieces in this genre for guitar by Heitor Villa-Lobos ("ay-TOR VEE-lah LOH-boos"). In a piece in this genre for piano, the left hand plays a repeated A-flat, possibly intended to evoke a (*) drizzle the composer experienced on Majorca ("mah-YOR-kah"). Sergei Rachmaninoff's pieces in this genre span all 24 major and minor keys, as does the Opus 28 set of them by Frederic Chopin. Pieces in this genre are paired with fugues in *The Well-Tempered Clavier*. For 10 points, give this musical genre whose name indicates that it is meant to precede another piece.

ANSWER: preludes [accept preludios]

<Alston, Fine Arts - Music>

16. This country's public schools were made more secular by Gabino Barreda. An 1856 law passed in this country seized all church land not used in daily operations. Dwight W. Morrow helped resolve a church conflict in this country, whose leaders upset Pope Pius IX by passing the Reform Laws. Clergy in this country supported a rebellion known as the (*) Cristeros following anti-clerical laws passed by Plutarco Elias Calles ("plooo-TAR-koh eh-LEE-as KAI-yays"). The Ley Iglesias and Ley Lerdo curbed the power of the Catholic Church in this country. Pre-Columbian traditions in this country influenced the calaveras made here each November 2nd for the Day of the Dead. For 10 points, name this country once led by Benito Juarez ("HWAH-rez").

ANSWER: Mexico [accept United Mexican States or Estados Unidos Mexicanos]
<Bentley, History - World>

17. One algorithm used to perform this task applies alternating rounds of S and P-boxes allowing for inherent parallelism which isn't possible when implementing a Feistel network. A textbook named for this process by William Buchanan is one of many to use "Eve" as a third participant. The introduction of the Merkle Damgård construction allowed for the construction of MD5 and SHA-1 ("shah one"), two (*) hash functions whose properties make it useful for this task. Since Shor's algorithm would make prime factorization a polynomial time task, it would render an algorithm used to perform this task useless. A "public-key" algorithm used for this task is RSA. For 10 points, name this task, which involves securing data so that only the intended recipient can read it.

ANSWER: encryption [accept word forms such as encrypting; accept cryptography or words forms, accept building ciphers or any answers mentioning cipher text; accept securing data or other such equivalents]
<Etzkorn, Science - Computer Science>

18. In the essay that first discussed this object in a certain context, it is compared to a judge who "frames an innocent person" to restore the public order since "the real culprit is unknown." A book by Frances Kamm titled for the "Mysteries" of this object includes a debate with Judith Jarvis Thomson, who drew on a doctrine by Thomas Aquinas to answer a question about it in the negative. Philippa Foot's essay about "The Problem of (*) Abortion and the Doctrine of Double Effect" discussed the problem centering around this object, which asks if it is reasonable to ensure this thing kills only one person. Flipping a switch to save several lives is at the heart of the philosophical problem named after, for 10 points, what vehicle?

ANSWER: trolleys [accept trams; accept the switch or lever that controls the trolley before "kills"; prompt on vehicles before "vehicle"]
<Jose, RMP - Philosophy>

19. In a letter to Marguerite Mason, the author of these works claims their "secret thesis" is that the "most painful event" of life is also "the greatest." One of these poems mentions the legendary musician Linus, who wrote the "first notes of song" that pierced "barren numbness." These poems declare "beauty is nothing but the beginning of terror," and were partly inspired by a painting depicting a family of (*) acrobats made by Pablo Picasso. The first of them wonders if their addressee has "read the poet Gaspara Stampa sufficiently yet?". After looking out at the Adriatic from a castle, their author wrote the first line of these works: "Who, if I cried out, would hear me among the angelic hierarchies?" For 10 points, name this group of ten poems by Rainer Maria Rilke.

ANSWER: Duino Elegies [or Duineser Elegien]
<Jose, Literature - European>

20. A painting in one of these places depicts a bird on a pole next to an apparently dead man with a bird-like head, and is called the "shaft scene." A 3D documentary filmed in another of these places by Werner Herzog, titled for one "of Forgotten Dreams," contains images of the steppe wisent ("vee-zent"). Different colors of ochre were used to create the "Ceiling of the Polychromes" in one of these places in Spain. In 1940, three (*) French teenagers discovered one of these locations decorated in the Late Magdalenian style, which shows four aurochs in its "Hall of the Bulls" as well as a number of extinct deer. For 10 points, Chauvet ("show-VAY"), Altamira ("all-tah-MEE-rah"), and Lascaux ("lass-COE") are examples of what natural formations in which many prehistoric humans made paintings?

ANSWER: caves [accept cuevas; accept Cave of Forgotten Dreams]

<Dees, Fine Arts - Painting>

21. Following this battle, Scottish folk singer Ewan MacColl composed a ballad praising the leader of this battle's winning side. Czech-made Favorit bicycles were used by the victors of this battle to channel in supplies. Bernard Fall's *Hell in a Very Small Place* describes the experiences of Colonel Christian de Castries's forces at this battle. Béatrice ("bay-uh-TREES") was the first stronghold to be stormed by the victors in this battle. (*) Chinese official Wei Guoqing ("way gwoh-cheeng") revealed General Henri Navarre's ("on-REE nuh-VAHR'z") plans to the victors of this battle. This battle preceded a settlement between its opposing sides at the Geneva Conference. Vo Nguyen Giap ("voh nu-win zyahp") led the Viet Minh to victory in, for 10 points, what 1954 battle that ended French influence in Indochina?

ANSWER: Battle of Dien Bien Phu

<Husar, History - World>



NSC 2019 - Round 12 - Bonuses

1. Polarizable examples of these substances are known as dielectrics. For 10 points each:

[10] Name these materials which contain few mobile charge carriers. They typically have large band gaps.

ANSWER: electrical **insulator** [prompt on but do not reveal nonconductor]

[10] The two bands separated by the band gap are given these names. The energy of these bands is close to the Fermi level.

ANSWER: **valence** and **conduction** bands

[10] The critical electron density is the cutoff where the length scale of this effect prevents electrons from being bound in a Mott transition, in which a metal begins acting as a non-metal or vice versa. This effect refers to the weakening of Coulombic ("koo-LOME-bik") interactions due to the presence of mobile charge carriers.

ANSWER: electric-field **screening**

<Wang, Science - Physics>

2. This woman's declaration that she shouldn't have to wash her hair in the same water as Gudrun prompts Gudrun to produce a ring that once belonged to this woman. For 10 points each:

[10] Name this female warrior who, in the *Völsunga saga*, orders her husband Gunnar to have her former betrothed Sigurd killed.

ANSWER: **Brunhild** [or **Brunhilda**; or **Brünnhilde**; or **Brynhildr**]

[10] In Norse myths, Brunhild is generally identified as a shield-maiden or as one of these female warriors, who bring half of those who die in battle to Valhalla.

ANSWER: **valkyries**

[10] Performing this action was a prerequisite for marrying Brunhild. Gunnar failed to perform this task twice even though he used two different horses, after which Sigurd took his shape and did it for him.

ANSWER: riding **through** the ring of **fire** around her tower [accept any answer that indicates crossing or passing **through fire** or **flames**]

<Jose, RMP - World Mythology>

3. The success of "Whistling Dick's Christmas Stockings" inspired an author to use a pseudonym he got while at one of these places in Columbus, Ohio. For 10 points each:

[10] Name this sort of place which Soapy tries to repeatedly gain entry to in a 1904 story. In a "twist ending," Soapy gains entry into this kind of place by doing nothing.

ANSWER: **prison** [or **jail**; or **penitentiary**; accept **Blackwell's Island**] (the story is "The Cop and the Anthem")

[10] That story, "The Cop and the Anthem", is by this author, who also wrote the Christmas classic "The Gift of the Magi."

ANSWER: **O. Henry** [or William Sydney **Porter**]

[10] Two criminals kidnap a rowdy child who "plays Indian" throughout this story by O. Henry, but the "twist ending" of this story is that the criminals must pay the father to take the title character back.

ANSWER: "The **Ransom of Red Chief**"

<Smith, Literature - American>

4. An 1889 play staged in the town of Meerut portrayed one of these languages as having "stayed too long in the jungle" and symbolized the other as a woman of low moral character. For 10 points each:

[10] Name these two languages that are very similar despite one being written with an Arab-Persian script and the other with the Devanagari ("deh-vuh-NAH-guh-ree") script.

ANSWER: **Hindi** and **Urdu** [or Modern Standard **Hindi** and Modern Standard **Urdu**; prompt on partial answers]

[10] The "correct" Hindi broadcast on All-India Radio was so purged of Urdu words that this first Indian Prime Minister complained he couldn't understand it.

ANSWER: Jawaharlal **Nehru** [or Pandit **Nehru**]

[10] A Scientific Terms Society was established in 1916 to purge this other language of Sanskritic words. The attempted imposition of Hindi over this language led to 1965 riots in Madurai.

ANSWER: **Tamil**

<Bentley, History - World>

5. One posh suburb of this city sells lots exclusively to members of the Redeemed Christian Church of God and is known as Redemption City. For 10 points each:

[10] Name this city, where developers are building 10 million square meters of new land dredged from the ocean in a project called Eko Atlantic.

ANSWER: **Lagos**

[10] Lagos was once the capital of this country, and it's still this country's most populous city.

ANSWER: **Nigeria** [or Federal Republic of **Nigeria**]

[10] Nigeria's richest man, Aliko Dangote ("uh-LEE-koe dahn-GOE-tay"), is currently building the largest structure in the world for processing this stuff. Extraction of this resource in the Niger Delta has threatened the livelihood of Nigeria's Ogoni people.

ANSWER: crude **oil** [or **petroleum**]

<Bentley, Geography - World>

6. In the US, the Capron Mill produced many of these things, which were among the first examples of ready-to-wear clothing. For 10 points each:

[10] Name this type of clothes, which were usually colored gray when worn by Confederates.

ANSWER: military **uniforms** [accept answers mentioning **military** or **army** clothes]

[10] This color gets its name from being used in one country's military uniforms throughout the Napoleonic Wars. This shade, sometimes named for Paris or Turnbull, was created by Johann Dippel while attempting to alchemize gold.

ANSWER: **Prussian blue** [or **Belin blue**; prompt on **blue**]

[10] An 1847 postage stamp printed in Prussian blue by the British in this colony is now one of the most valuable to stamp collectors. Dutch colonists named this country for the stadtholder who succeeded William the Silent.

ANSWER: **Mauritius** [or Republic of **Mauritius**; or République de **Maurice**; or Repiblik **Moris**]

<Bentley, History - Cross, Historiography, and Miscellaneous>

7. The protagonist of this novel briefly works as a "mute," a silent mourner at funerals, and is referred to as "work'us" by Noah Claypole. For 10 points each:

[10] Name this novel in which the protagonist runs away from Mr. Sowerberry, walking some 70 miles to Barnet in London. Its full title indicates it depicts the "parish boy's progress."

ANSWER: ***Oliver Twist***, or, the Parish Boy's Progress

[10] Oliver Twist is a novel by this author of *David Copperfield*.

ANSWER: Charles **Dickens** [or Charles John Huffam **Dickens**]

[10] This character from *Oliver Twist* names his "fondlings" in alphabetical order, with Unwin and Vilkins coming after Twist. This unlikeable character marries Mrs. Corney and ends up in poverty in the very workhouse he used to run.

ANSWER: Mr. **Bumble**

<Bentley, Literature - British>

8. Ove Arup ("oe-VAY AHR-up") attended a party on the top floor of a building complex named for this road where water wouldn't stay in the sink due to all the swaying. For 10 points each:

[10] Give this expressway that names a row of twenty-six story apartments built in Chicago by Ludwig Mies van der Rohe.

ANSWER: **Lake Shore Drive** [accept 860-880 **Lake Shore Drive**; prompt on LSD or The Drive]

[10] The Lake Shore Drive apartments were the first apartment buildings to be made with a frame of this material. Its commercial uses skyrocketed thanks to the Bessemer Process.

ANSWER: **steel** [accept stainless **steel**]

[10] Herbert Greenwald did not pay for this technology in the Lake Shore Drive apartments. This technology has allowed modern skyscrapers to have larger floor plans and was largely developed by Willis Carrier.

ANSWER: **air conditioning** [accept **AC**; prompt on building cooling or ventilation]

<Bentley, Fine Arts - Architecture>

9. Answer some things about ions in gel electrophoresis. For 10 points each:

[10] An electromotive force can move DNA through a gel because these ions in the DNA backbone impart a negative charge. Conversion of ATP to ADP releases one of these ions.

ANSWER: **phosphate** [accept **PO₄³⁻**]

[10] This chelating agent is often added to electrophoresis buffers to sequester metal cations and prevent degradation of DNA by nucleases. TAE buffer consists of Tris base, acetic acid, and this hexadentate ligand.

ANSWER: **EDTA** [or **ethylenediaminetetraacetic acid**]

[10] The anionic "head group" of the surfactant SDS allows it to break non-covalent bonds in a common variant of protein electrophoresis that uses this polymer as a medium.

ANSWER: **polyacrylamide** [or **polyacrylamide** gel electrophoresis; prompt on SDS-PAGE]

<Narayan, Science - Biology>

10. The name for this phenomenon was first used in a book by John Wesley Powell studying "American Indians." For 10 points each:

[10] Give this term in which an outsider group slowly adopts and integrates another group's system of beliefs, ways of life, and rituals. It is usually contrasted with the more forceful process of assimilation.

ANSWER: **acculturation** [accept word forms; do not accept or prompt on "cultured" or "culture"]

[10] W. I. Thomas and Florian Znaniecki's ("znah-NYEZ-skee'z") five volume study of acculturation discussed how European peasants adopted to this country's culture, such as being patriotic by purchasing war bonds.

ANSWER: **United States** [or **USA** or **America** or **US**]

[10] Thomas and Znaniecki's study exemplifies this paradigm in sociology, which argues that the laws of social structures are discoverable like nature. Auguste Comte was a pioneer of it.

ANSWER: **positivism** [or **empirical** sociology or **empiricism**]

<Jose, Social Science - Sociology>

11. An analysis of moments called *discrimen* opens a 2004 book titled for this river by popular historian Tom Holland. For 10 points each:

[10] Name this Italian river which Julius Caesar famously crossed in 48 B.C.

ANSWER: **Rubicon** River [or **Rubico** or **Rubicone**]

[10] The region of Gaul designated by this adjective was separated from Italia by the Rubicon river. Napoleon later used this adjective to name a republic that he set up as a puppet state in Northern Italy.

ANSWER: **Cisalpine** [accept **Cisalpine** Gaul or **Cisalpine** Republic or Gallia **Cisalpina**]

[10] This emperor merged the regions of Cisalpine Gaul and Italia, thus removing the Rubicon's status as a boundary. This emperor began the tradition of referring to himself as "Princeps Civitatis" or "First Citizen of the State."

ANSWER: **Augustus** Caesar [accept **Octavian** or Gaius **Octavius** Thurinus; do not accept or prompt on "Caesar"]

<Alston, History - European>

12. Edward Bouverie Pusey, a member of the Oxford Movement, was found to be wearing one of these items under his other clothes when he died. For 10 points each:

[10] Name this type of clothing intentionally designed to be irritable to wear. John the Baptist wore one of these objects made from a camel.

ANSWER: **hair shirt** [or **cilice**; or **sackcloth**; or **hair cloth**]

[10] This saint and author of *Letter to Coroticus* was known to wear a hair shirt. This patron saint of Ireland is reputed to have driven the snakes out of that country.

ANSWER: St. **Patrick** [or **Patricius**; or **Pádraig**; or **Padrig**]

[10] St. Augustine relates how it was common for Christians in his era to stand on hair cloth while undergoing this ritual. Catholics repeat the phrase "I do renounce" three times before performing this action.

ANSWER: **baptism** [or **christening**; prompt on things like immersing someone in holy water or washing]

<Bentley, RMP - Judeo-Christian, Bible>

13. In the late 19th century, Women's Art Clubs in the U.S. began hosting examples of these classes specifically for female artists. For 10 points each:

[10] Give this term for art classes where student artists make studies of nude models.

ANSWER: **life** classes

[10] This American-born Impressionist did not join a Women's Art Club to avoid being stigmatized as an amateur. A mother washes her child's feet in this artist's *The Child's Bath*.

ANSWER: Mary **Cassatt** [accept Mary Stevenson **Cassatt**]

[10] Cassatt was from this city, whose Women's Art Club offered some of the first life classes for women. An Academy of Fine Arts based in this city and directed by Thomas Eakins ("AY-kins") also offered women's life classes.

ANSWER: **Philadelphia** [accept **Philly**] (Eakins led the Pennsylvania Academy of the Fine Arts.)

<Bentley, Fine Arts - Painting>

14. An essay about this language appears in "The Quest for Relevance," and discusses how being taught in English turns education into a "process of alienation." For 10 points each:

[10] Name this African language discussed in the essay "Decolonizing the Mind," which its author decided to use instead of English for his future novels.

ANSWER: **Kikuyu** [accept **Gikuyu**]

[10] This author wrote *Decolonising the Mind*. In his novel *A Grain of Wheat*, Mugo, who is valorized for performing a hunger strike, secretly betrays the freedom fighter Kihika.

ANSWER: **Ngugi** wa Thiong'o [accept James Thiong'o **Ngugi**; do not accept or prompt on "Thiong'o"]

[10] Ngugi wa Thiong'o is a native of this former British colony, where he was imprisoned for his work co-writing the play *I Will Marry When I Want*.

ANSWER: **Kenya** [accept Republic of **Kenya**]

<Dees, Literature - World and Miscellaneous>

15. This type of reaction is used for elemental analysis of fuels since carbon, hydrogen, and oxygen stoichiometry can be calculated by the amount of CO₂ and water formed. For 10 points each:

[10] Name this oxidation reaction catalyzed by heat, such as a fire.

ANSWER: **combustion** reaction

[10] This element also combusts to form a dioxide. Chemoautotrophs that don't rely on carbon typically respire by oxidizing this element's reduced gaseous form, resulting in this solid element.

ANSWER: **sulfur** [or **S**]

[10] In thermal analysis, the heat of combustion is also measured by conducting the entire reaction inside one of these constant-volume devices, where the heat equals the change in internal energy.

ANSWER: **bomb** calorimeter [prompt on calorimeter]

<Silverman, Science - Chemistry>

16. This play ends with characters screaming "It's not that way, it's over here" in the dark before the lights come on and the first lines of the play are repeated. For 10 points each:

[10] Name this play in which Mr. and Mrs. Smith and Mr. and Mrs. Martin engage in increasingly absurd dialogues before they are interrupted by the Fire Chief.

ANSWER: *The **Bald Soprano*** [or *La **Cantatrice Chauve***]

[10] *The Bald Soprano* is a play by this Romanian playwright. One of his four plays depicting Berenger (BAIR-un-jay) is *Rhinoceros*.

ANSWER: Eugène **Ionesco** [or Eugen **Ionescu**]

[10] *The Bald Soprano* opens with a bizarre stage direction in which various things such as armchairs, a fire, and silence are described by this eponymous adjective.

ANSWER: **English** [do not accept or prompt on other answers]

<Guedes, Literature - European>

17. In 1979, a computer program written to play this game by Hans Berliner defeated a champion in it, the first time that a computer beat a human in an intellectual competition. For 10 points each:

[10] Name this game. A board for this game can be seen on the left-hand side of Caravaggio's *The Cardsharps*.

ANSWER: **backgammon**

[10] In 1997, a computer built by this company called Deep Blue defeated Garry Kasparov in a chess match. This company's Watson competed on *Jeopardy!*

ANSWER: **IBM** [accept **International Business Machines** Corporations]

[10] Google's AlphaGo program makes moves after performing many traversals of these objects. In machine learning, boosting is a technique to combine "decision" examples of these objects together.

ANSWER: **trees** [accept decision **trees** or boosted decision **trees**]

<Bentley, Other - Other Academic and General Knowledge>

18. These items were placed into a "freedom trash can" during a protest at the 1969 Miss America contest. For 10 points each:

[10] Name these undergarments that the *New York Post* incorrectly reported were burned by feminists during that Miss America demonstration.

ANSWER: **bras** [or **brassiere**]

[10] Unlike bras, these objects were frequently burned in the 1960s. In *United States v. O'Brien*, the Supreme Court ruled that David O'Brien could be charged with non-possession of one of these objects after burning one.

ANSWER: **draft cards** [or **Selective Service Registration Certificates**]

[10] O'Brien was attacked by a mob and then arrested after burning his draft card in front of a courthouse in this city. In the 1970s, Louise Day Hicks chaired an organization called ROAR in this city.

ANSWER: **Boston** [ROAR was involved in the Boston Busing Crisis]

<Bentley, History - American>

19. While working for this company in the 1910s, Carl Bosch industrialized ammonia synthesis and helped create its spinoff, IG Farben. For 10 points each:

[10] Name this German titan of the chemical industry, the world's largest supplier of chemicals today.

ANSWER: **BASF** SE [or **Badische Anilin und Soda Fabrik**; or **Baden Aniline and Soda Factory**]

[10] Bosch is often considered the father of chemical engineering, since he industrialized nitrogen fixation whereas this man, his collaborator, figured out the chemistry.

ANSWER: Fritz **Haber**

[10] BASF first came to prominence for commercializing the production of one of these compounds from aniline ("AN-uh-lin"). One of these compounds derived from euxanthone ("yook-ZAN-thun") was made by feeding mango leaves to cows.

ANSWER: **pigments** or **dyes** [prompt on coloring agents]

<Silverman, Science - Engineering and Miscellaneous>

20. This man's contributions to the solo flute repertoire include the "Hamburger" Sonata and a Sonata in A minor. For 10 points each:

[10] Name this late Baroque composer from a famous musical family. His popular solo keyboard pieces include "La Caroline" and the *Solfeggietto* in C minor.

ANSWER: **Carl** Philipp Emanuel **Bach** [or **C. P. E. Bach**; prompt on Bach]

[10] C. P. E. Bach's godfather was this musician, whose decision to turn down the role of *Kapellmeister* ("KAH-pell-my-stir") in Leipzig ("LYPE-seeg") led to J. S. Bach receiving the job. This composer wrote more than 3,000 known pieces of music.

ANSWER: Georg Philipp **Telemann** ("TELL-uh-mon")

[10] Telemann's notable pieces include a D major concerto for this transposing brass instrument, which is typically pitched in B-flat. This instrument is larger than the similar cornet.

ANSWER: **trumpet**

<Alston, Fine Arts - Music>

21. This leader instituted the policy of Françafrique, using his country's close alliance with France to maintain political stability. For 10 points each:

[10] Name this longtime leader of Côte d'Ivoire who names a peace prize given out by UNESCO.

ANSWER: Félix **Houphouët-Boigny** [or Papa **Houphouët**]

[10] Under Houphouët, Côte d'Ivoire's economy was largely based on cocoa and this other cash crop. A Brazilian period in the late 19th century was named for this crop and milk.

ANSWER: **coffee** [or **café**; accept **Café** com leite]

[10] Houphouët moved the capital from Abidjan to Yamoussoukro, where he built the world's largest one of these religious buildings. Despite its size, that building of this type is not a cathedral as it is not the seat of a bishop.

ANSWER: **church** [or Roman Catholic **church**; or minor **basilica**; accept **Basilica** of Our Lady of Peace]

<Raje, History - World>