## PACE NSC 2022 - Round 14 - Tossups

1. Árni Magnússon and Páll Vídalín were dispatched by the King of Denmark to carry out a pioneering one of these operations in Iceland in 1703. For political reasons, the last of these operations in Lebanon was conducted in 1932. One of these operations that concluded in 1888 was made 16 times more efficient thanks to an invention of Herman Hollerith, the founder of IBM. The Roman official in charge of this operation was also tasked with protecting public (\*) morality. Following one of these operations, the US frontier was declared closed. A 1980 operation of this type in the US was the first to ask about Hispanic descent. For 10 points, name this procedure done every 10 years that determines the population of the US. ANSWER: census [prompt on survey or land survey]

<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~23115~

2. Astronomer Nicolaus Kratzer helped this artist paint the zodiac for his panorama of the Siege of Therouanne. Portraits by this artist of two political enemies face each other at the Frick Collection. This artist may have used a corpse fished out of the Rhine to model a painting that Fyodor Dostoevsky claimed "one could lose one's faith from." A book on arithmetic by Petrus Apianus is partially open in a double portrait by this artist that also features a large lute with a broken string. This artist of the grim (\*) Dead Christ and a portrait of Sir Thomas More placed an anamorphic skull between Georges de Selve and Jean de Dinteville. For 10 points, name this artist who painted *The Ambassadors* at the court of Henry VIII. ANSWER: Hans Holbein the Younger

Michael Bentley, Fine Arts - Painting - European > ~23004~

3. This country's town of Tinerhir ("TIN-gur") has grown as tourists flock to nearby Todra Gorge. A replica Colosseum used to film *Gladiator* is in the world's largest film studio in this country. A medieval city in this country entered through the Blue Gate is home to al-Qarawiyyin ("al-KAH-lah-wee-in"), the world's oldest university. Caravans once passed through the Telouet ("TELL-oo-ay") Kasbah in an (\*) Amazigh ("ah-mah-ZICK")-controlled part of this country. This kingdom's Toubkal National Park contains the highest peak in the Atlas Mountains. This country surrounds the autonomous city of Ceuta ("THOO-tah"), the closest point between it and Spain. A tasseled hat also called a tarboosh is usually named for this country's city of Fez. For 10 points, name this North African country home to Casablanca and Rabat.

ANSWER: <u>Morocco</u> [or Kingdom of <u>Morocco</u>] <Michael Bentley, Geography - World> ~23678~

4. Unlike this family's PACMAD clade, its BOP clade exclusively undergoes C<sub>3</sub> photosynthesis. Coprolite-contained phytoliths of this plant family suggests its members began proliferating in the late Cretaceous period. These plants dominate an ecosystem that the Pleistocene Park project seeks to revive by reintroducing large herbivores. Graminivores primarily feed on this family of plants, whose low growth point allows them to recover from regular (\*) grazing. These plants dominate ecosystems that experience frequent fires and constant trampling, which prevent establishment of a forest. These plants include cereal grains such as wheat and barley. For 10 points, name these plants that dominate prairies and meadows. ANSWER: grasses [accept grasslands; accept Poaceae or Gramineae]

<Eric Yin, Science - Biology> ~23865~

5. In this novel's final chapter, the narrator declares that future generations "will be superfluous even to ourselves." This novel was popularized by Lewis Milestone's 1930 film adaptation, which ends with the protagonist reaching towards a butterfly. While attempting to put horses out of their misery in this novel, Detering ("DETT-er-ing") is stopped by a former cobbler who has a "sixth sense" for finding food. In this novel, the protagonist spends a night pressed against the corpse of the (\*) printer Gerard Duval after he stabs him. Kantorek teaches this novel's protagonist, who receives Kemmerich's ("KEM-er-ick's") boots prior to Kat dying in his arms. Paul Bäumer ("BOW-mer") is killed in – for 10 points – what World War I novel by Erich Maria Remarque?

ANSWER: All Quiet on the Western Front [or Im Westen nichts Neues]

<Michael Bentley, Literature - European - Long Fiction> ~22713~

6. In the Argonautika, Medea picks an herb that grew from this figure's blood to create the ointment that makes Jason invulnerable. Apollodorus claims that after Chiron died, this figure received the centaur's immortality. In a play, this figure delivers a "Catalog of the Arts" and converses with a chorus of Oceanids. Hesiod claims this figure stored an important substance in a giant (\*) fennel stalk. This god once instructed humans to cover a pile of bones with delicious-looking fat to trick the gods into accepting only bones from sacrifices. For 10 points, name this Titan who had his liver eaten every day while chained to a rock for giving fire to mankind.

ANSWER: **Prometheus** 

<Matthew Bollinger, RMP - Greco-Roman Mythology> ~23862~

7. Earl Miner's book on this author's "school" is titled for one of their collections that breaks from "royal anthology" tradition. In one book, this author states that "all that remains" of "soldiers' dreams" is "summer grass" after passing a destroyed "Castle-on-the-Heights." The phrase "the months and days are the travelers of eternity" opens one collection by this author of *The Monkey's Straw Raincoat* and (\*) Record of a Travel-Worn Satchel. This author, whose pen name means "banana tree," pioneered mixing poetry and prose in travelogues which he called haibun, and which include his book The Narrow Road to the Deep North. For 10 points, name this Japanese author who described a frog jumping into a pond in a famous haiku. ANSWER: Matsuo Bashō [accept either underlined part; accept Matsuo Kinsaku or Matsuo Chūemon Munefusal

<Michael Bentley, Literature - World and Miscellaneous> ~23482~

8. The presence of this phenomenon may cause the TTL to reach zero, indicating a hop limit error. Measuring this phenomenon in an error-free system is the primary use case of ICMP packets. Using UDP instead of TCP is common in applications where reducing this phenomenon is a higher priority than the reliability provided by handshakes. This phenomenon can be produced when packets are sent to (\*) geographically-distant routers and is particularly pronounced for satellite broadband. The round trip of an echo request and echo response is measured to quantify this phenomenon in the ping protocol. For 10 points, name this phenomenon in which packets experience delay while traversing a network.

ANSWER: network <u>latency</u> [or <u>lag</u>; accept round-trip, end-to-end, or one-way <u>delay</u>; accept high <u>ping</u> before "ping"; prompt on network <u>congestion</u> or <u>traffic</u> with "what phenomenon does that cause?"; do not accept or prompt on "low bandwidth"]

<Michael Bentley, Science - Computer Science> ~23001~

- 9. Charcoal pencils and numerous erasers are used to create works in this medium such as What Will Come by South African artist William Kentridge. Registration marks were used to minimize jittering in a pioneering work in this medium by Winsor McCay titled for a character named Gertie. Ollie Johnston was one of the "Nine Old Men" who mastered the technique of (\*) "squash and stretch" in this medium. A Top 50 list compiled by Jerry Beck recognized auteurs in this medium such as Tex Avery and Chuck Jones. In 1914, Earl Hurd patented a system that used transparent cels to make producing works in this medium easier by reducing the amount of drawing needed per frame. For 10 points, name this medium of Disney's Snow White. ANSWER: animation [or cartoons; prompt on film or movies or television or video or short films or film directing or storyboarding; prompt on drawing before mentioned; do not accept or prompt on "comics"] <Michael Bentley, Fine Arts Film> ~22649~
- 10. This concept is likened to a "chain novel" with each chapter written by a different person in a book promoting interpretivism. An analogy of a gunman robbing a bank was used to criticize John Austin's "command theory" of this concept. A character named Hercules is used to explain the idea of this concept "as integrity" in a book by Ronald Dworkin about its *Empire*. This concept has no necessary connection with morality according to the (\*) positivist philosophy of H. L. A. Hart, who wrote a book titled *The Concept of* it. Thomas Aquinas thought that only the "natural" kind of this concept was valid. Jurisprudence is the philosophical study of this concept. For 10 points, name this body of rules interpreted by judges and enforced by police.

ANSWER: the <u>law</u> [do not accept "justice"] <Anson Berns, RMP - Philosophy>~23129~

11. Late in life, one leader of this organization controversially gave a speech at a July 4th celebration held by the Independent Order of Pole Bearers. Governor "Parson" Brownlow gave the order to kill any member of this organization on sight. A Wikipedia hoax claimed that this organization's name was used to disparagingly refer to the 1924 Democratic National Convention. A movie inspired by Thomas (\*) Dixon's novel about this organization then inspired William Simmons to lead a 1915 ceremony on Stone Mountain. The 1871 Force Acts sought to bring about this organization's decline. This organization was founded by a man who committed the Fort Pillow Massacre. For 10 points, Nathan Bedford Forrest was the first "Grand Wizard" of what terrorist organization?

ANSWER: Ku Klux <u>Klan</u> [or <u>KKK</u>; accept First <u>Ku Klux Klan</u> or Second <u>Ku Klux Klan</u>; accept "<u>Klan</u>bake"]

< Hari Parameswaran, History - American - 1865-1945> ~23886~

12. Erik Satie parodied a composer from this country by writing a "bureaucratic" version of one of his pieces. Another composer from this country depicted exotic bird calls in a D major string quintet that was nicknamed "Aviary." Like his student Carl Czerny, a composer from this country published 100 piano studies and exercises in the collection *Gradus ad Parnassum*. After moving to Spain, another composer from this country wrote (\*) Night Music of the Streets of Madrid as well as an E major string quintet with a frequently performed third movement minuet. Many composers across Europe adopted this country's language to notate scores and musical terminology during the Renaissance. For 10 points, name this home country of composers Muzio Clementi and Luigi Boccherini.

ANSWER: <u>Italy</u> [or <u>Italia</u>]

<Jonathan Magin, Fine Arts - Music - Classical> ~23749~

13. An "information panic" during this event held that secret messages were passed from town to town by being stored in a type of flatbread at rates faster than the postal service. John Nicholson is called a "psychopath" in William Dalrymple's book about this event that ends with an 82-year-old king being sent to exile in Burma. The number of gun salutes at *durbars* ("dar-baars") were in proportion to the amount of assistance (\*) "princely states" rendered during this event. Post offices were special targets of one side in this event, which began in the town of Meerut. During this event, a siege of the Red Fort ended with Bahadur Shah II becoming the last Mughal Emperor. For 10 points, name this 1857 rebellion which led to the establishment of the British Rai.

ANSWER: <u>Sepov</u> Revolt [or <u>Sepov</u> Mutiny; or <u>Sepov</u> Insurrection; or <u>Indian</u> Rebellion of 1857; or <u>Indian</u> Mutiny; or <u>Revolt of 1857</u>; prompt on <u>Great Rebellion</u>; prompt on <u>First War of Independence</u>] (The flatbread was chapatis.)

<Michael Bentley, History - World - Asian> ~22648~

14. During takeoff, pilots of certain planes must apply "right rudder" to counter a form of this non-aerodynamic process. A form of this process with a characteristic value of "minus gamma times B" is crucial to NMR. The time derivative of the argument of periapsis equals the rate of the apsidal ("ap-SIGH-dull") form of this process, which in general corresponds to a change in the first (\*) Euler ("oiler") angle. The observation of this process affecting Mercury's perihelion helped confirm general relativity. A bicycle wheel hanging from a ceiling is used to demonstrate this process's "torque-induced" form, which causes angular momentum to change direction. Gyroscopes can exhibit, for 10 points, what process in which the orientation of a body's rotational axis changes?

ANSWER: <u>precession</u> [accept gyroscopic <u>precession</u> or Larmor <u>precession</u> or apsidal <u>precession</u> or torque-induced <u>precession</u>]

<Benjamin Chapman, Science - Physics> ~23304~

15. In a eulogy for this character, a woman describes touching his feet, knees, and "upward and upward" along his body, and finding it "cold as any stone." In another scene, this character pleads that to banish him would "banish all the world," only to receive the cold reply, "I do; I will." This character asks if honor can set a broken arm or take away the grief of a wound in a speech dismissing it as a "mere scutcheon." He gives that speech at the Battle of (\*) Shrewsbury, where he stabs the leg of the already-dead Hotspur. He gives a speech about his love of sack, and meets drinking companions like Bardolph at the Boar's Head Tavern. For 10 points, name this fat knight who is abandoned by Prince Hal in Shakespeare's two *Henry IV* plays.

ANSWER: Sir John <u>Falstaff</u> [prompt on the <u>fat knight</u> before mentioned] <Michael Bentley, Literature - British - Drama> ~22927~

16. In 2007, a cult leader from this country mailed thousands of copies of his massive Atlas of Creation around the world, establishing himself as the face of Islamic creationism. Imams called dede lead a ritual inspired by a heavenly banquet of "forty saints" in the central ceremony of this country's Alevism tradition. A movement from this country is called Hizmet by its adherents and has opened over a hundred charter (\*) schools in the U.S. This country's laiklik policy of separation of church and state led to the institution of a headscarf ban after a 1980 coup. The cleric Fethullah Gülen ("fet-hoo-LAH goo-LEN") was born in this country, where a historic cathedral was redesignated a mosque in 2020. For 10 points, name this country, the site of the Hagia Sophia.

ANSWER: <u>Turkey</u> [or <u>Türkiye</u>; or Republic of <u>Turkey</u>] <Michael Bentley, RMP - Islam> ~23778~

17. Two atoms of this non-carbon element are bonded to each other in the middle of allicin ("Allison"). A selenium-containing amino acid assists in the oxidation of two atoms of this element in a mechanism for mitigating oxidative damage. The extremely high energy bond between this element and a carbonyl group allows acetyl CoA ("uh-SEE-til koh-'A'") to serve as an effective intermediate in several processes involving ATP. A bond forms between two atoms of this element when oxidizing the antioxidant (\*) glu·ta·thi·one. Beta-mercapto·ethanol is used to reduce bonds between this element, which often links segments of protein chains via namesake bridges. Cysteine's thi·ol side chain contains, for 10 points, what element found in foul-smelling chemicals?

ANSWER: sulfur

<Andrew Wang, Science - Chemistry> ~24031~

18. Books co-authored by this man include the kid's book George and the Unbreakable Code and an atheist tract co-written with Leonard Mlodinow ("muh-LOW-din-ov") titled The Grand Design. This man formulated a "chronology protection conjecture" backed up by the evidence that "we have not been invaded by hordes of tourists from the future." This onetime spokesman for IBM presented a baseball encyclopedia to John Preskill and a gift subscription to Penthouse to (\*) Kip Thorne after losing high-profile bets. This man's gravestone includes the formula for his namesake radiation temperature. A 1988 book by this author included a cover photo of him in front of a blackboard in a wheelchair. For 10 points, name this physicist who wrote A Brief History of Time.

ANSWER: Stephen <u>Hawking</u> [or Stephen William <u>Hawking</u>]

<Michael Bentley, Other - Other Academic and General Knowledge> ~22468~

19. Description acceptable. This character's boots have a cross in them on the left heel that another character made "with big nails, to keep off the devil." One night, this character chases another character "round and round the place, with a clasp-knife" during an alcohol-fueled hallucination of an "Angel of Death." A judge in St. Petersburg refuses to grant one character a legal (\*) separation from this other character after he reappears and demands some money transferred to Judge Thatcher. Following this character's disappearance, another character is adopted by the Widow Douglas. This man's body is eventually discovered by Jim. For 10 points, name this character from a Mark Twain novel whose son goes down the Mississippi on a raft.

ANSWER: <u>Huck</u>leberry Finn's <u>father</u> [or <u>Pap</u>; accept answers that indicate he's <u>Huck</u> Finn's <u>dad</u>; prompt on <u>Finn</u>; prompt on answers generally indicating a <u>dad</u> or <u>father</u> character] <Michael Bentley, Literature - American> ~22668~

20. Nigel Pollard's book on "bombing" this city documents the destruction of Amedeo Maiuri's Antiquarium building. Giuseppe Fiorelli added plaster arms to this city's "Muleteer." Dolia jars were found at the Thermopolium of Asellina, one of over 80 "snack bars" in this city, which is also home to the Lupanar Grande brothel. An inscription found here in 1763 corrected confusion between this city and the nearby city of Stabiae. Modern visitors to this city often walk through the House of (\*) Sallust and House of the Faun. Emperor Titus offered his personal funds to help relieve members of this city following a 79 CE disaster. For 10 points, name this city which, along with Herculaneum, was destroyed by the eruption of Mount Vesuvius.

ANSWER: <u>Pompeii</u> [or <u>Cornelia Veneria Pompeianorum</u>] <Michael Bentley, History - European - Classical> ~22926~

21. A painting set in this country got such a bad reception at the 1864 Salon that the artist cropped an animal out of it, leaving only the dead title figure. A cloister named for this country at the Gardner Museum houses a John Singer Sargent painting set here where a musician claps in time to the title dance. An artist from this country made an aquatint of a man face down on a desk with (\*) bats looming behind him. That same artist from this country painted a gray-haired deity taking a bite out of one of his children in the painting Saturn Devouring His Son, one of the Black Paintings he produced after the Disasters of War series. For 10 points, name this country, the setting of Edouard Manet's The Dead Toreador and Francisco Goya's Third of May.

ANSWER: <u>Spain</u> [or <u>España</u>; or Kingdom of <u>Spain</u>] <Michael Bentley, Fine Arts - Painting - European>~23069~

## PACE NSC 2022 - Round 14 - Bonuses

- 1. The author of this collection wrote his own praiseworthy review of it for *The United States Review*, calling himself an "American Bard" whose "voice [brought] hope and prophecy to the generous races of young and old." For 10 points each:
- [10] Name this poetry collection which contains a poem that describes how "the armies of those I love engirth me and I engirth them."

ANSWER: Leaves of Grass

[10] Leaves of Grass was written by this man, who may have been fired by the Bureau of Indian Affairs after it was discovered he was the author of that collection.

ANSWER: Walt Whitman

[10] This is the name given to the final edition of *Leaves of Grass*, completed by the author in his Camden home in 1891.

ANSWER: **Deathbed** Edition

<Michael Bentley, Literature - American>~17717~

2. Answer the following about developments in printing outside of Europe, for 10 points each.

[10] Bi Sheng invented the first movable-type printing by imprinting characters into blocks of this material. This material is baked to make pottery.

ANSWER: <u>clay</u> [accept <u>kaolin</u> or china <u>clay</u>; prompt on <u>ceramics</u> or <u>earth</u>]

[10] Before Gutenberg, this kingdom's inventor Choe Yun-Ui ("CHO yun-ui") came up with the idea of using a corkscrew shaft in a printing press. This dynasty unified Korea in 918 and ruled until its overthrow in 1392.

ANSWER: **Goryeo** dynasty [or **Koryo**; do not prompt on or accept "Goguryeo"]

[10] Two edicts banning printing in the Ottoman empire were issued by Bayezid II and an emperor with this name. That emperor with this name conquered Egypt and was known as "the grim".

ANSWER: Selim [accept Selim I or Selim the Grim]

<Hari Parameswaran, History - World - Miscellaneous> ~18991~

- 3. A *Times* investigation found that a medical examiner had ruled that a Black man named Lamont Perry died due to complications related to this condition and not a brain hemorrhage. For 10 points each:
- [10] Name this condition widely used as a cover for police brutality. Vertex Pharmaceuticals's CTX001 gene therapy seeks to treat beta-thalassemia and a disease linked to this condition.

ANSWER: sickle cell trait [or sickle cell anemia; or sickle cell disease]

[10] Lawyers for Derek Chauvin tried to argue that sickle cell trait was responsible for the death of this man in Minneapolis in 2020.

ANSWER: George Floyd

[10] This medical condition has also been dubiously used by coroners. A 2020 study found that a demarcation of 120 mm of mercury for diagnosing this condition was too high.

ANSWER: <u>high blood pressure</u> [or <u>hypertension</u>; or <u>HBP</u> or <u>HTN</u>]

<Michael Bentley, Current Events - U.S.>~18049~

4. For 10 points each, identify the following about the evolution of concert etiquette:

[10] Superfans of Yekaterina Sankovskaya threw a dead cat on the stage to show disapproval for Elena Andreianova after Andreianova started performing at this ballet company, which, alongside the Mariinsky and Kirov companies, is considered the most prestigious in Russia.

ANSWER: <u>Bolshoi</u> Ballet [or <u>Moscow Academic Choreographic School</u>; prompt on <u>Great</u> Ballet; prompt on <u>Moscow</u> Ballet]

[10] This Austrian conductor helped shape modern concert etiquette by banning both late arrivers and claques from performances. He also composed the *Tragic Symphony* and *Symphony of a Thousand*.

ANSWER: Gustav Mahler

[10] Another father of modern concert etiquette was Arturo Toscanini, who helped shape American middlebrow tastes with this orchestra, later called the *Symphony of the Air*.

ANSWER: <u>NBC Symphony</u> Orchestra [some sources refer to this as just the <u>NBC</u> Orchestra so accept that answer]

<Michael Bentley, Fine Arts - Music - Miscellaneous> ~14362~

5. You are an engineer designing a bridge. For 10 points each:

[10] You decide to build this kind of bridge, which uses a cable across its span to support the deck.

ANSWER: **suspension** bridge

[10] You calculate these two forces which are balanced in such a bridge. One of these forces is experienced by the towers and is equal in magnitude to the other, which is felt by the attached cables.

**ANSWER:** compression AND tension

[10] After finding the maximum tension, you multiply by this factor to obtain the value you will design around. Using this factor ensures that the bridge will be capable of withstanding several times more force than is required, reducing the risk of accidents.

ANSWER: factor of safety [or safety factor; prompt on FOS or SF]

<Benjamin Chapman, Science - Engineering and Miscellaneous>~18769~

6. John Mueller wrote a book about the "Stupidity" of these events, which he argues have been less frequent since the mid-20th century. For 10 points each:

[10] Name these events. "Crimes" named for these events violate the Geneva Conventions.

ANSWER: wars [or conflicts; accept war crimes; prompt on organized violence]

[10] Another key text of the "War Obsolescence" school is this psycholinguist's *The Better Angels of Our Nature*. He also wrote *The Blank Slate*.

ANSWER: Steven **Pinker** [or Steven Arthur **Pinker**]

[10] Although wars and coups have decreased since the Cold War, this phenomenon of states gradually becoming more authoritarian has increased. Yascha Mounk used Rodrigo Duterte's Philippines to illustrate how populism caused this phenomenon.

ANSWER: democratic <u>backsliding</u> [or <u>democratic decay</u>; <u>de-democratization</u>; prompt on <u>autocratization</u>] <Michael Bentley, Social Science - Other> ~18624~

7. For 10 points each, identify the following about printing Parliamentary proceedings.

[10] This monarch who signed the Treaty of Dover renewed a Parliament printing ban following his Restoration to the English throne in 1660.

ANSWER: Charles II [accept Charles the Merry Monarch; prompt on Charles]

[10] This man made a tidy profit on reporting on speeches in Parliament. This Tory wrote the Letter to Chesterfield while preparing a prescriptivist reference text in 1755.

ANSWER: Samuel Johnson [accept Dr Johnson]

[10] The right to print the proceedings of Parliament were secured after this MP intervened on behalf of the publisher of the *Middlesex Journal*. His own newspaper, *The North Briton*, published the scandalous Issue 45 in 1763.

ANSWER: John Wilkes

<Michael Bentley, History - European - 1500-1900> ~17927~

8. For 10 points each, answer the following about the blind people that Jesus healed.

[10] In Mark 10, the blind beggar Bartimaeus repeatedly calls out to Jesus, saying "Son of [this man], have mercy on me." That messianic title calls back to 2 ("Second") Samuel 7, when God makes a promise with this king of Israel, who became famous for slaying Goliath.

**ANSWER: David** 

[10] In John 9, Jesus heals another man by applying a mixture of these two substances on his eyes. Name both substances.

ANSWER: <u>dirt</u> and <u>spit</u> [accept equivalents like <u>mud</u>, <u>sand</u>, or <u>earth</u> for dirt and <u>saliva</u> for spit]

[10] In Matthew 9, Jesus heals two blind men from this general region. Jesus also hailed from this region, as he grew up in the city of Nazareth; he also walked on the waters of a lake named for this region.

ANSWER: <u>Galilee</u> [accept Sea of <u>Galilee</u>; prompt on Lake <u>Tiberias</u>, <u>Kinneret</u>, or <u>Kinnereth</u> by asking, "what is an alternate name for that body of water taken from the name of the surrounding region?"]

<Jon Suh, RMP - New Testament> ~19298~

9. In the 18th century, books such as *Secretaire des dames* ("SECK-ruh-tair day dams") contained model examples of these documents that could be used for different social occasions. For 10 points each:

[10] Name these documents that make up epistolary novels.

ANSWER: <u>letter</u>s

[10] This author, who collected 272 model letters in his book *Letters written to and for particular friends*, found greater fame with his epistolary novel *Pamela*; or, *Virtue Rewarded*.

ANSWER: Samuel Richardson

[10] This author wrote two best-selling books on the art of letter writing. Other didactic works by this writer include *The Education of a Christian Prince*, intended as an instruction manual for a young Charles V.

ANSWER: Erasmus [or Desiderius Erasmus Roterodamus; or Erasmus of Rotterdam]

<Michael Bentley, Literature - European - Other> ~17903~

10. When three of these things are present, the star-mesh transform reduces to the Y-delta transform. For 10 points each:

[10] Name these things. An "equivalent" one of these devices results when carrying out simplifications with *either* Norton's theorem or Thévenin's ("TAY-vuh-nin's") theorem.

ANSWER: <u>resistor</u>s [accept electrical <u>resistance</u>s; prompt on <u>circuits</u> asking "what part of the circuit?"]

[10] Y-delta transforms, Norton's theorem and Thévenin's theorem can all be used to simplify these systems, in which current flows around a loop through things like batteries and wires.

ANSWER: electrical circuits [or electrical networks]

[10] An easy case of circuit simplification is that a simple circuit with a cell connected solely to two resistors in parallel, both of resistance *R*, will have this equivalent resistance measured across the whole circuit.

ANSWER: one-**half R** [or **half** the resistance or similar answers]

<Joseph Krol, Science - Physics>~18153~

- 11. Yank Levy wrote one of the first manuals on this practice based on his experiences in Mexico and Nicaragua. For 10 points each:
- [10] Identify this practice whose *foco* form was written about by Régis Debray. The name for this practice was coined during the Peninsular War.

ANSWER: <u>guerrilla</u> warfare [prompt on <u>insurgency</u> or <u>irregular war</u>fare or <u>asymmetric war</u>fare; prompt on terrorism]

[10] Foco was inspired by the tactics of this participant in the Cuban Revolution who was killed in Bolivia in 1967. An iconic photo of this man by Alberto Korda depicts him wearing a hat with a star on it.

ANSWER: <u>Che</u> Guevara [or Ernesto <u>Guevara</u>]

[10] This man compared guerrilla fighting to gas dispersal in an *Encyclopedia Britannica* entry. This man's other writings include *Seven Pillars of Wisdom*.

ANSWER: T. E. <u>Lawrence</u> [or Thomas Edward <u>Lawrence</u>; or <u>Lawrence</u> of Arabia]

<Jon Suh, History - Cross, Historiography, and Miscellaneous> ~18901~

- 12. David Cope played computer-generated compositions made in the style of this composer for a 1993 album. For 10 points each:
- [10] Name this composer who is "Switched On" in the title of a 1968 Wendy Carlos album.

ANSWER: Johann Sebastian Bach [accept Bach by Design or Switched-On Bach]

[10] Carlos popularized the usage of the "Moog" variety of these instruments on *Switched-On Bach*, leading to the development of their analog and digital varieties. These electronic musical instruments work by generating audio signals.

ANSWER: <u>synth</u>esizers [or Moog <u>synth</u>esizers or analog <u>synth</u>esizers or digital <u>synth</u>esizers; accept modular <u>synth</u>esizers]

[10] Switch-On Bach II closes with this piece, consisting of an Allegro, Affettuoso, and another Allegro movement. This piece's first movement contains a famous harpsichord solo, while its second movement adapts a theme composed by Louis Marchand.

ANSWER: <u>Brandenburg Concerto No. 5</u> [accept answers like the <u>Fifth Brandenburg Concerto</u>; prompt on Brandenburg Concerto]

<Michael Bentley, Fine Arts - Music - Baroque> ~18051~

- 13. In one novel, this is the ethnicity of a character who becomes her tribal chief's successor when she becomes the title "Whale Rider." For 10 points each:
- [10] Name this ethnicity, whose traditions partly inspired a Booker Prize-winning 1984 novel in which Joe Gillayley beats the mute boy Simon.

ANSWER: <u>Māori</u> ("MAO-ree") [The latter novel is *the bone people*.]

[10] The author of *The Whale Rider*, Witi Ihimaera ("witty ih-hee-mah-AIR-ah"), is from this country, where he taught at the University of Auckland.

ANSWER: New Zealand [or Aotearoa]

[10] Ihimaera ("ih-hee-mah-AIR-ah") was the 1993 recipient of a fellowship named for New Zealand author Katherine Mansfield, who is best-known for this story in which Laura Sheridan delivers leftovers from the title celebration.

ANSWER: "The Garden Party"

<Chauncey Lo, Literature - World and Miscellaneous> ~18550~

- 14. In the 1930s, the term "Reno-vated" referred to people who took advantage of Nevada's reduced residency requirement for this procedure. For 10 points each:
- [10] Identify this procedure. Most states have moved to the "best interest of the child" standard in assigning custody following these proceedings.

ANSWER: get a <u>divorce</u> [accept word forms; prompt on <u>ending a marriage</u> or <u>separation</u>]

[10] Before Reno, a city in this state was called the "divorce capital" of the world. Today's visitors to this state are more likely to visit the Crazy Horse Memorial.

ANSWER: **South Dakota** (The city is Sioux Falls.)

[10] Reno divorces are central to this woman's all-female play *The Women*. As Connecticut's first female representative, this woman opposed Indian colonization.

ANSWER: Clare Boothe <u>Luce</u> [or Ann Clare <u>Boothe</u>]

<Michael Bentley, History - American - 1865-1945> ~17922~

- 15. This trait can be measured in a Torrance Test, which might involve coming up with ways to improve a toy. For 10 points each:
- [10] Name this trait that could produce "something original and worthwhile" in a brainstorming session.

ANSWER: <u>creativity</u> [accept <u>creative</u> thinking; accept <u>ideation</u>; accept <u>divergent</u> thinking; prompt on originality]

[10] J. P. Guilford designed a timed test to measure creativity that involved coming up with novel uses for one of these objects. An operation named for this type of office equipment recruited Nazi scientist Wernher von Braun to the US.

ANSWER: <u>paperclip</u>s [accept Operation <u>Paperclip</u>]

[10] This author divided creative types into categories such as Artist, Sage and Jester in his book *The Act of Creation*. He wrote a history of cosmology called *The Sleepwalkers* and the novel *Arrival and Departure*.

ANSWER: Arthur **Koestler** [or **Kösztler** Artúr]

<Michael Bentley, Other - Other Academic and General Knowledge> ~18297~

16. People with this disorder often have their nipples spaced far apart in a "shield chest." For 10 points each: [10] Name this genetic disorder that causes infertility, short stature, and a webbed neck. This disorder occurs when a female has one single X chromosome.

ANSWER: Turner syndrome

[10] 3 out of 10 women with Turner syndrome have this form of it where only some cells have one X chromosome. In general, this condition is when multiple cells in an organism have different genotypes.

ANSWER: mosaicism [accept mosaic Turner syndrome]

[10] Roughly half of the cases of Turner syndrome involve congenital defects of this organ, often due to improperly shaped valves or coarctation of the aorta.

ANSWER: heart

<Benjamin Chapman, Science - Biology>~18799~

- 17. Kerry James Marshall's update of this painting features a protective black pelican in the foreground. For 10 points each:
- [10] Name this painting that originally did not have a schooner in the background. Numerous sharks swim beside a stranded fisherman in the foreground of this 1899 painting.

ANSWER: The Gulf Stream

[10] Winslow Homer, who painted *The Gulf Stream*, covered this conflict as an illustrator, creating works such as *The Army of the Potomac - A Sharp-Shooter on Picket Duty*.

ANSWER: US Civil War

[10] *The Gulf Stream* drew on numerous works Homer made in this medium in the Bahamas such as *Sloop*, *Nassau*. Gouache ("goo-AHSH") is sometimes called the "opaque" form of this medium, popular among amateur artists in the 19th century.

ANSWER: watercolor [or aquarelle]

<Michael Bentley, Fine Arts - Painting - U.S.> ~18782~

- 18. Bernardino de Sahagun translated Christian psalms and gospels into the language of these people, adding elements such as Mary being impregnated by a quetzal feather. For 10 points each:
- [10] Name these people whom Sahagun attempted to get to stop worshiping indigenous gods such as Quetzalcoatl.

ANSWER: <u>Aztec</u>s [accept answers such as <u>Mexica</u> or people from <u>Aztlan</u>; prompt on <u>indigenous</u> people or Indians or Mexicans]

[10] Sahagun disparagingly equated this Aztec god of darkness with the pagan Jupiter. In many depictions, one of this god's feet is replaced with an obsidian mirror.

ANSWER: <u>Tezcatlipoca</u> [or Black <u>Tezcatlipoca</u>]

[10] Sahagun included many of his observations on indigenous religion in this twelve-book compendium on Aztec culture, which is commonly named for a city in Italy.

ANSWER: <u>Florentine Codex</u> [or <u>General History of the Things of New Spain</u>; or <u>Historia General de las Cosas de Nueva España</u>]

<Michael Bentley, RMP - World Mythology> ~18372~

- 19. This author vilified American foreign policy in his 2005 Nobel lecture "Art, Truth and Politics." For 10 points each:
- [10] Name this British playwright, who included a mixture of slapstick elements with a threatening aura in "comedies of menace" like one featuring the hitmen Gus and Ben waiting near the title conveyance.

ANSWER: Harold Pinter

[10] One of the first plays called a comedy of menace was this Pinter play, in which the mysterious strangers Goldberg and McCann come to take away Stanley Webber from the title celebration.

ANSWER: The Birthday Party

[10] This Pinter play, also called a "comedy of menace," involves the philosophy professor Teddy seeing his family, who plot to get his wife Ruth to work as a prostitute.

ANSWER: The **Homecoming** 

<Joseph Krol, Literature - British - Drama> ~19079~

- 20. These events provide a non-biological means to demarcate time intervals called "chrons". For 10 points each:
- [10] Name these events which are preserved by thermoremanence in igneous rocks.

ANSWER: <u>geomagnetic reversal</u>s [accept answers indicating the Earth's <u>magnetic field reversing</u> or changing polarity]

[10] The random intervals between successive reversals is considered strong evidence for this theory, which holds that the Earth's magnetic field is produced by the motion of a fluid outer core.

ANSWER: geodynamo theory

[10] There have been attempts to link geomagnetic reversals with these events, in which large fractions of the biosphere disappear. One such theory is that a reversal will lower the magnetic field enough for solar wind to strip the Earth's oxygen, triggering one of these die-offs.

ANSWER: mass extinction events

<Benjamin Chapman, Science - Earth>~18985~

- 21. Many of this man's buildings had a granary above the main bedrooms owing to the Venetian custom of storing goods in attics rather than marshy basements. For 10 points each:
- [10] Identify this Renaissance architect who wrote *The Four Books on Architecture*. He shouldn't be confused with Leon Battista Alberti.

ANSWER: Andrea Palladio

[10] This Palladian Villa built for Paolo Almerico has a temple pediment for each of its four facades. Thomas Jefferson based Monticello on this building.

ANSWER: Villa La **Rotonda** [prompt on Villa Almerico-Capra]

[10] Chiswick House is an example of a style of Palladian architecture named for this country. Inigo Jones helped bring Palladianism to this country and designed its Banqueting House at Whitehall.

ANSWER: **England** [accept Great **Britain** or the **U**nited **K**ingdom]

<Michael Bentley, Fine Arts - Architecture> ~18831~