

NSC 2018 - Round 22 - Tossups

1. This man is the alphabetically earlier namesake of a theorem that was proven by constructing a splitting field that has no solvable Galois (gal-WAH) group. A prize named after this man is considered, after the Fields Medal, to be the second-highest honor in mathematics. A property named after this man can be verified by checking to see if the values across the diagonal on a Cayley table are symmetric. This mathematician built on the work of Paolo (*) Ruffini by proving that polynomials of degree five or higher have no closed-form radical solution. One example of a group named after this man is the integers under addition. Groups whose operation is commutative are named after, for 10 points, what Norwegian mathematician?

ANSWER: Niels Henrik Abel (AH-bull)

<Minarik, Science - Math>

2. Most conductors of this symphony ignore the very fast indication of 116 whole notes per minute for the trio within its scherzo (SCARE-tsoh), which begins (read slowly) "dotted quarter note high D, eighth note low D, quarter note low D" for strings, (pause) again for strings but on A, (pause) then again for timpani. The 1951 re-opening of the Bayreuth (BYE-royt) Festival began with this symphony, followed by Parsifal. When this piece premiered along with most of the Missa Solemnis in Vienna in 1824, Caroline Unger pointed its composer (*) toward the cheering audience. Leonard Bernstein (BURN-styne) conducted this piece after the Berlin Wall fell in 1989, substituting "Freiheit" (FRY-height), the German word for freedom, in for "Freude" (FROY-duh). "Choral" is the nickname of, for 10 points, what final Beethoven symphony? ANSWER: Symphony No. 9 by Ludwig van Beethoven [or Beethoven's Ninth Symphony; accept Choral Symphony until "Choral" is read; prompt on Symphony in D minor; "Beethoven" is not required after it is read] <Alston, Arts - Music>

3. W. J. Brennan-Whitmore wrote an account of his time at the Imperial Hotel during this event. The *Aud*, a German ship, was intercepted before it could aid participants in this event. A man executed for treason for his role in this event had earlier written a scathing namesake report on the Belgian Congo. Troops suppressing this event gathered at Trinity College. One of this event's leaders executed at (*) Kilmainham Gaol (KILL-may-num jail) was Patrick Pearse. Many participants in this event, including James Connolly and Roger Casement, had earlier agitated for Home Rule. Rebels seized the General Post Office in Dublin during, for 10 points, what 1916 rebellion in Ireland that broke out on a Christian holiday? ANSWER: Easter Rising [or Easter Rebellion; or Éirí Amach na Cásca; accept 1916 Irish Rebellion before the end]

<Bentley, History - European>

4. Dana Cloud has written about how the rhetoric of this practice has been applied to other areas of society. The "Dodo bird verdict" is the idea that all forms of this practice are equally effective. A form of this practice emphasizes the importance of congruence and unconditional positive regard. The Kierkegaardian concept of "will to meaning" influenced a form of this practice that was introduced in the book Man's (*) Search for Meaning by Viktor Frankl and whose name starts with the prefix "logo-." One of the most popular forms of this practice is its "cognitive behavioral" variety. Carl Rogers developed a "person-centered" form of this practice. For 10 points, name this general term for psychological techniques for improving mental health.

ANSWER: psycho<u>therapy</u> [accept logo<u>therapy</u> or cognitive behavioral <u>therapy</u> or person-centered <u>therapy</u> or client-centered <u>therapy</u>

<Nediger, Social Science - Psychology>

5. One astronomer with this surname devised instruments called "comet sweepers," which were used to discover a periodic comet co-named for Roger Rigollet. Another astronomer with this surname placed a thermometer in the region past the red end of the visible spectrum in an experiment that discovered infrared radiation. Those two astronomers with this surname created a star catalog of over 2,500 deep-sky objects that was revised by John Dreyer to become the still-used *New Star Catalogue*. This is the surname of astronomer (*) Caroline, and her brother, who both discovered the moons Titania and Oberon, and proved that the body those moons orbit was not a star. For 10 points, give this surname of William, the English astronomer who discovered Uranus.

ANSWER: <u>Herschel</u> [accept Caroline <u>Herschel</u> or William <u>Herschel</u>] <Jose, Science - Astronomy>

6. This man postulated working close to the Earth's surface and altering matter there or telling other people to do so as the two types of work. In another work this thinker criticized "Oriental despotisms" for their influence on thought. In that work, this man criticized the idea that the object of morals is not to make people happy. In addition to *In Praise of Idleness*, this thinker wrote about how a group "retards progress" because that organization relies on (*) inventing allies in the sky. In another work, this man included a page-long proof of how "one plus one equals two" as part of an attempt to axiomatically prove mathematics with a collaborator. For 10 points, name this thinker who wrote the essay *Why I am Not a Christian* and who collaborated with Alfred Whitehead on *Principia Mathematica*.

ANSWER: Bertrand Arthur William <u>Russell</u>, 3rd Earl Russell <Boyd, RMP - Philosophy>

7. A novel by this author that begins by recounting the historical lynching of the de Witt (VIT) brothers chronicles Cornelius van Baerle's attempt to win a competition to grow the title plant. This author of *The Black Tulip* created a character who wins an underwater fight in the Thames (TEMS) against his ex-wife's son Mordaunt; that ex-wife was a felon whose shoulder was branded with a *fleur-de-lis*. This son of a Haitian-born general employed Auguste Maquet (MAH-kay) as an (*) uncredited ghostwriter. Felton assassinates the Duke of Buckingham in a novel by this man whose protagonist presents a blank letter of pardon taken from Milady de Winter to avoid execution at the hands of Cardinal Richelieu. For 10 points, name this French author whose "D'Artagnan Romances" began with *The Three Musketeers*.

ANSWER: Alexandre **<u>Dumas</u>** [or Alexandre **<u>Dumas</u>**, *père*; or Dumas **<u>Davy de la Pailleterie</u>**; do not accept or prompt on "Alexandre Dumas, *fils*"] (The underwater fight is won by Athos, who was once married to Milady.) <Carson, Literature - European>

8. Francisco de Montejo was made Captain General of this region but repeatedly failed to fully conquer it in the early 16th century. In the early 1900s, Olegario Molina effectively controlled this region's profitable henequen export. The British eventually cut off supplies to Chan Santa Cruz, helping to end this region's long Caste War. One of the final settlements of a people that made their home in this region was (*) Tulum. In 1841, a republic named for this region considered joining with the independent state of Tabasco. El Castillo, also called the Temple of Kukulcan, is a 100-foot pyramid in this region at Chichen Itza, one of several Maya settlements in this place. For 10 points, name this peninsula shared by Belize, Guatemala and Mexico

ANSWER: **Yucatán** Peninsula [or the **Yucatán**; or Free and Sovereign State of **Yucatán**; prompt on <u>Central America</u>; prompt on <u>Mesoamerica</u>; anti-prompt on <u>Quintana Roo</u>, <u>Campeche</u>, or <u>Peten</u> Department by asking "can you be less specific?"] <Bentley, History - World>

9. This poem mocks the premature death of John Keats by describing him as a "very fiery particle" which "let itself be snuffed out by an Article." A section of this poem that appeared in 1823 is the source of the phrase "for truth is always strange; stranger than fiction." This poem's second stanza lists Burgoyne, Vernon, and "the butcher Cumberland" as "evil and good" after proclaiming "I want a hero: an uncommon want." The title character of this poem is (*) captured and sold in a slave market in Constantinople, and later meets the Muslim girl Leila in Saint Petersburg. The sixteen completed cantos of this poem describe a hero who gets Haydee pregnant before she is abandoned. For 10 points, name this satirical poem by Lord Byron about an easily-seduced libertine.

ANSWER: *Don Juan* (JU-an) <Jose, Literature - British>

10. Roberto Busa produced a lemmatized and searchable version of this thinker's oeuvre in a pioneering work of digital humanities. Upon being shown a nun levitating in prayer, this man quipped, "I didn't know nuns wore such big boots." A hymn by St. Venantius Fortunatus inspired this man to write his *Pange Lingua*. His other hymns for the *Lauda sion* sequence include *Adoro te devote* and *Sacris solemniis*, whose "Panis angelicus" strophe is often excerpted. In (*) 1273, this student of Albertus Magnus had a mystical experience that caused him to abandon his *magnum opus*, which refers to Aristotle as "The Philosopher" and includes five proofs of the existence of God called the *quinque viae*. For 10 points, name this Dominican friar who wrote the *Summa Theologiae*.

ANSWER: St. Thomas <u>Aquinas</u> [or Tommaso d'<u>Aquino</u>; prompt on <u>Thomas</u>] <Kothari, RMP - Bible/Christianity>

11. This character converses with Malaciah, a man nicknamed "Old Leather-Face," while in a drugstore in his hometown of Mason City. This character originally appeared in the author's verse play *Proud Flesh*, where he was named after Edmund Spenser's "Talos." This character is able to overcome Dolph Pillsbury's influence after three children die in a fire escape during a fire drill. The narrator of the novel frequently refers to this character as "The (*) Boss," and is tasked by this character with finding information to incriminate Judge Irwin. This character, who has an affair with his assistant Sadie Burke, is assassinated by the physician Adam Stanton. For 10 points, what governor from the novel *All the King's Men* was modeled on Huey Long?

ANSWER: Willie Stark [accept either]

<Jose, Literature - American>

12. This process produces "junction complexes" known as EJCs which can trigger nonsense-mediated decay. The Group I and Group II types of a certain molecule can self-catalytically perform this process, without requiring enzymes. The polypyrimidine tract is an important *cis*-acting element that regulates this process. This process requires a branch point and often follows the GU-AG rule. In this process, the U2 and U6 (*) snRNPs (snurps) bind to a lariat structure. The alternative type of this process, which allows for a single gene to code for multiple proteins, can occur through exon skipping. After this process, exons are ligated and exit the nucleus. For 10 points, name this post-translational modification in which introns are removed from pre-mRNA.

ANSWER: mRNA **splicing** <Wang, Science - Biology>

13. Thomas Blanchard created a copying lathe which automated the manufacture of a complicated component in these things, and Simeon North developed one of the first milling machines to make them. A government contract for these things was secured when Christopher Spencer demonstrated one to President Lincoln on the White House lawn. In 1847, Samuel Walker of Texas ordered 1,000 of these things from a (*) Hartford factory. A British factory at Enfield made these items based on the American System of manufacturing. While trying to enforce his cotton gin patents, Eli Whitney got a contract to make these devices with interchangeable parts. For 10 points, Union generals worried about supplying enough bullets for what general type of weapon?

ANSWER: **gun**s [or **firearm**s; or **rifle**s; or **musket**s; or **revolver**s; or **gun** barrels; or repeating **rifles**] <Bentley, History - American>

14. A ballet master from this country names a training method based on strictly scheduled daily exercises, which is often described as making ballet an "exact science." A ballerina from this country danced the title role in the world premiere of *Giselle* (zhee-ZELL). A ballet (emphasize) set in this country includes the "Dance of the Girls with Lilies" and the "Dance of the Knights." Before spreading to (*) France, ballet developed in this country's courts in the 15th and 16th centuries. The two highest titles awarded to female ballet dancers come from phrases meaning "first dancer" and "absolute first dancer" in this country's language. For 10 points, name this home country of Enrico Cecchetti (check-KET-tee) and Carlotta Grisi, the setting of Prokofiev's *Romeo and Juliet*.

ANSWER: <u>Italy</u> [or <u>Italian</u> Republic or Republica <u>Italia</u>na] (The two titles are *prima ballerina* and *prima ballerina assoluta*.)

<Nediger, Arts - Ballet/Dance>

15. A system of particles with this property can experience either attractive or repulsive exchange interactions, which constrain their collective wavefunction to be either symmetric or antisymmetric. In a phone call, John Wheeler humorously suggested to Richard Feynman that all the electrons in the universe have this property. When a system of particles has this property, a factor of (*) *n*-factorial is added to the denominator of the classical partition function. A pair of fermions with this property cannot exist in the same state according to the Pauli exclusion principle. If you sort *n* particles with this property into 2 boxes, there are only *n* unique ways to do it. For 10 points, name this property of particles that act exactly the same. ANSWER: indistinguishable [accept word forms such as indistinguishability; accept identical particles; accept indiscernable particles; accept the same until "same" is read]

Wang, Science - Physics>

16. Early in his reign, this emperor ordered the assassination of Lusius Quietus, the governor of a territory that later revolted against him. That revolt against this emperor may have been sparked by a ban on castration and was suppressed by his general Sextus Julius Severus. Troops under this emperor are traditionally held to have finally seized Bethar on the Ninth of Av (AHV) after fierce resistance from rebels under (*) Bar Kokhba (COKE-bah). A project started under this emperor began on the River Tyne and extended to the Solway Firth and is sometimes named for the Picts. This third of the five "good" emperors required that his successor Antoninus Pius adopt Marcus Aurelius. For 10 points, name this Roman emperor who lends his name to a defensive wall in Britannia.

ANSWER: <u>Hadrian</u> [or Publius Aelius <u>Hadrianus</u>; or Caesar Traianus <u>Hadrianus</u> Augustus] <Bentley, History - European>

17. A language in this country that unusually uses the front of a signer's body to represent the past was used by the Ka'apor people. An association with Jesuits led to a campaign against the use of Nheengatu in this country. Co-official language status in parts of this non-European country is granted to East Pomeranian and Hunsrückisch, another German dialect. The unofficial capital of Talian speakers in this country is (*) Serafina Correa, part of a state whose capital is Porto Alegre. Italian is taught in schools in this country's state of Espirito Santo. The usage of non-majority languages in this country was banned by Getulio Vargas. For 10 points, name this country home to the largest population of Portuguese speakers.

ANSWER: **Brazil** [or Federative Republic of **Brazil**; or **Brasil**] <Bentley, Geography - World>

18. A character created by this author refuses to continue playing the piano after a dismal performance of Robert Schumann's "Pleading Child" that only her deaf teacher enjoys in the story "Two Kinds." Another of this author's characters concludes that fate is shaped "half by expectation, half by inattention" and draws parallels between her dissolving marriage to Ted Jordan and an incident in her childhood when her four-year-old brother drowned. "Twenty-Six Malignant Gates," the second section of a novel by this author, opens with a story about the (*) chess prodigy Waverly Jong, whose childhood rival Jing-Mei is the daughter of Suyuan Woo, the founder of a group of women who meet to play mahjong (MAH-zhong). For 10 points, name this Chinese-American author of *The Joy Luck Club*.

ANSWER: Amy Tan

<Carson, Literature - World>

19. This artist blamed our own "ignorance and folly" for shutting us out of "the walls of Eden" at the conclusion of his manifesto "Essay on American Scenery." A recent exhibition on this artist's "Atlantic Crossings" focuses on a painting by this artist in which Hebrew letters can be seen on a hill in a view from Mount Holyoke. One painting by this artist depicts a bird nest-topped classical column; that painting by him is called *Desolation*, and is part of a (*) series that begins by showing a hunter in a North American wilderness. This artist made a series of five paintings beginning with *The Savage State*, and climaxing with a depiction of a civilization at its "consummation." For 10 points, *The Oxbow* and *The Course of Empire* were painted by what member of the Hudson River School?

ANSWER: Thomas <u>Cole</u> <Jose, Arts - Painting>

20. This god's name refers to bronze male figures found in talaiots (tah-lah-YOTS) on Majorca (my-OR-kah). Cato's *De Agri Cultura* describes the triple sacrifice called *suovetaurilia* (soo-OH-vay-tau-REE-lee-ah) that was made to this god. Ovid's *Fasti* includes a story of this god's conception in which Flora presses a flower to his mother's belly. A golden statue of the goddess Ultio stood in a temple erected by Augustus and dedicated to this god's "avenger," or "Ultor," form. Twelve (*) "leaping priests" called the Salii (SAH-lee-eye) served this god, whose seduction of a princess of Alba Longa named Rhea Silvia resulted in the birth of a pair of sons who were later suckled by a she-wolf. He formed the Archaic Triad with Quirinus and Jupiter. Romulus and Remus were the sons of, for 10 points, what Roman god of war?

ANSWER: Mars [accept Mars Balearicus or Mars Ultor; do not accept or prompt on "Ares"]

Carson, RMP - Greco-Roman Myth>

21. This novel contrasts the simplicity of seamen's yarns, the meaning of which "lies within the shell of a cracked nut," with the stories of a character for whom meaning was like a "misty halo." The protagonist of this novel becomes aware of a "flabby, pretending, weak-eyed devil" while watching a chain-gang walk up a hillside. In the frame story of this novel, its main character imagines a Roman soldier here at "the very end of the world" while looking out at the Thames from the deck of the (*) *Nellie*. At the end of this novel, the narrator submits a report on the "Suppression of Savage Customs" after tearing off a postscriptum reading "exterminate all the brutes!" and lies to the Intended to conceal that a man's last words were "the horror! The horror!" For 10 points, name this novel in which Marlowe searches for Kurtz in the Congo by Joseph Conrad.

ANSWER: *Heart of Darkness* <Brownstein, Literature - European>



NSC 2018 - Round 22 - Bonuses

1. The massive scale of Pop Artist James Rosenquist's F-111 may have been inspired by his previous career painting these things. For 10 points each:

[10] Identify these objects, one of which that proclaims "World's Highest Standard of Living" is visible behind a line of Ohio River flood victims in a 1937 photograph.

ANSWER: **billboard**s [prompt on advertisements]

[10] The aforementioned photograph was taken by this woman, who captured an image of Gandhi at his spinning wheel just hours before his death.

ANSWER: Margaret Bourke-White

[10] Felix Gonzalez-Torres, who placed billboards depicting a double bed at 24 locations around Manhattan, died from complications related to this disease in 1993. The production of an enormous quilt commemorating victims of this disease is directed by the NAMES Project.

ANSWER: AIDS [or acquired immune deficiency syndrome; prompt on HIV]

<Bentley, Arts - Misc>

2. Many members of this class derived from Uradel families, and the 1808 Scharnhorst-Gneisenau reforms ended their monopoly on officer posts. For 10 points each:

[10] Identify this Prussian class of landowners, whose name is German for "country squire."

ANSWER: **Junker** [or **Yunker**]

[10] This "Iron Chancellor" advanced Junker interests in Germany. He gave the "Blood and Iron" speech.

ANSWER: Otto von <u>Bismarck</u> [or Otto Eduard Leopold, Prince of <u>Bismarck</u>, Duke of Lauenburg]

[10] Junkers formed the Bund der Landwirte to oppose this politician's commercial treaties, which lowered grain tariffs. This chancellor also angered expansionists by signing a treaty that ceded Zanzibar to Great Britain.

ANSWER: Leo von <u>Caprivi</u> [or Georg Leo Graf von <u>Caprivi</u> de Caprera de Montecuccol]

<Bentley, History - European>

3. Birutė (bee-roo-TAY) Galdikas performed pioneering studies on these animals, of which a third species, Tapanuli, was discovered in 2017. For 10 points each:

[10] Name these great apes that are classified in the genus Pongo. The other two species of these animals are the Bornean and Sumatran ones.

ANSWER: orangutans

[10] All three orangutan species have this designation by the International Union for Conservation of Nature. This designation is more severe than endangered species but less severe than "extinct in the wild."

ANSWER: critically endangered [prompt on endangered]

[10] Orangutans belong to this order of mammals, characterized by such features as opposable thumbs and stereoscopic vision. This order includes tarsiers (TAR-seers), gibbons, and hominids.

ANSWER: **Primate**s

<Ramaswami, Science - Biology>

- 4. This black-and-white image is connected to a cat with whiskers on a grey wall looming over two animals huddled in yellow and green jackets. For 10 points each:
- [10] Name this controversial visual element on the cover of a Pulitzer-winning graphic novel. It required a special scholarly exception to be published and got the book whose cover it appears on banned in Russia.

ANSWER: the **swastika** on the cover of *Maus*

[10] Maus is a book by this author, who framed it as an interview with his father Vladek.

ANSWER: Art **Spiegelman** [or Itzhak Avraham ben **Zeev**]

[10] Other criticism of *Maus* centered on its depiction of Polish people as these non-kosher animals. Napoleon and Snowball are these kinds of animals in *Animal Farm*.

ANSWER: **pig**s [or domestic **pig**] <Grames, Literature - American>

5. Building on his 1954 book *The Doors of Perception*, this dying author had his wife inject him with LSD. For 10 points each:

[10] Identify this author who wrote about a "euphoric, narcotic, pleasantly hallucinant" substance called soma in his book *Brave New World*.

ANSWER: Aldous **Huxley** [or Aldous Leonard **Huxley**]

[10] This man both kicked off interest in, and helped contribute to the banning of, psychedelic research. He conducted the Marsh Chapel Experiment and popularized the phrase "turn on, tune in, drop out."

ANSWER: Timothy **Leary** [or Timothy Francis **Leary**]

[10] This man addressed "The New Science of Psychedelics" in his 2018 book *How to Change Your Mind*. He also wrote *The Omnivore's Dilemma*.

ANSWER: Michael Pollan

<Bentley, Mixed/Other/General Knowledge>

6. In Jean Cocteau's *The Infernal Machine*, this piece of information is provided willingly so as to secure the death of the provider, who had spent much of the previous scene arguing with Anubis while disguised as a girl. For 10 points each:

[10] Describe this piece of information that, in most tellings of the story involving it, is "man."

ANSWER: the <u>answer</u> to the <u>riddle</u> of the <u>Sphinx</u> [prompt on partial answers like "the <u>answer</u> to the riddle"; do not accept or prompt on "the riddle of the Sphinx"]

[10] The riddle is solved by this king of Thebes, who inadvertently kills his father Laius and marries his mother Jocasta in the first entry of a trilogy by Sophocles.

ANSWER: **Oedipus** [accept **Oedipus Rex**]

[10] Oedipus tells Theseus that only the gods can never die, while all else is obliterated by time, in the second of Sophocles's Theban plays, which as its title indicates is set in a grove sacred to the Furies near this village.

ANSWER: Colonus [accept *Oedipus at Colonus*]

<Carson, Literature - World>

- 7. This character refuses the offer of a third wish after a scene in which an attempt to disrobe her is foiled when her *sari* becomes infinitely long. For 10 points each:
- [10] Name this princess of Panchala who was born out of a sacrificial fire.

ANSWER: **Draupadi**

[10] Draupadi was simultaneously married to these five brothers, including Arjuna, Bhima, and Yudhisthira, who fought a war against their rivals the Kauravas.

ANSWER: **Pandava**s

[10] The conflict between the Pandavas and Kauravas, which is called the Kurukshetra War, is chronicled in this ancient Hindu epic that is traditionally attributed to Vyasa.

ANSWER: *Mahabharata* <Jose, RMP - Other Myth>

- 8. Twenty-eight figures in this painting were inspired by their artist looking upon a carton of *Venus* brand drawing pencils. For 10 points each:
- [10] Name this painting where the mountain landscape of Cape Creus is overlooked by an arena for the title individual, while the artist's wife appears in the upper left embodied by a yellow light.

ANSWER: The **Hallucinogenic Toreador**

[10] This artist depicted his wife Gala's dislike of bullfighting in *The Hallucinogenic Toreador*. This Spanish surrealist painted melting clocks in *The Persistence of Memory*.

ANSWER: Salvador <u>Dalí</u> [or Salvador Domingo Felipe Jacinto <u>Dalí</u> i Domènech, Marquis of Dalí de Púbol] [10] In a Dalí painting intended to depict the brutality of the Spanish Civil War, these items are scattered over the legs of a trapezoidal-shaped monster propped up on a tree stump and a brown wooden box.

ANSWER: boiled **beans** [accept Soft Construction with Boiled **Beans**]

< Kalathiveetil, Arts - Painting>

- 9. One book on this subject was allegedly composed over a year in prison and entirely typed up by the author's student, leading to the quip that it contained "not a word of Landau and not a thought of Lifshitz." For 10 points each:
- [10] Name this subject, whose textbooks include one based on the lectures of Richard Feynman.

ANSWER: **physics** [prompt on science]

[10] Many example problems in physics textbooks feature characters with these two names. The use of these names first arose in cryptography since names are easier to follow than the letters A and B.

ANSWER: Alice AND Bob

[10] This former Reed College professor's *Introduction to Electrodynamics* and *Introduction to Quantum Mechanics* are considered quintessential undergraduate physics textbooks. His quantum mechanics textbook has a picture of a cat on the cover.

ANSWER: David Jeffrey Griffiths

<Wang, Science - Physics>

- 10. This issue first gained widespread attention after James Hansen, the director of the Goddard Institute at NASA, spoke before Congress in 1988. For 10 points each:
- [10] Identify this issue, also the subject of frequent reporting by Bill McKibben. Countries sent delegates to Kyoto in the 1990s to discuss this issue.

ANSWER: **global warming** [or man-made **climate change**; or **greenhouse gas** emissions]

[10] Six months after Hansen's testimony, this magazine founded by Henry Luce declared on its cover that the "Endangered Earth" was its "Planet of the Year."

ANSWER: *Time*

[10] It's not Vienna, but in 1987 the United States signed on to an agreement negotiated in this city to protect the ozone layer by reducing CFC emissions.

ANSWER: Montreal

<Bentley, History - American>

- 11. This composer's piece, catalogued as HWV 76, borrowed heavily from Gottlieb Muffat's *Componimenti musicali* and his own *Concerto Grosso*. For 10 points each:
- [10] Identify this composer who set a John Dryden poem to music in his Ode for St. Cecilia's Day.

ANSWER: George Frideric Handel [or George Frederick Handel; or Georg Fredrich Handel]

[10] It's unlikely that the "Suite in G," typically included in this collection of Handel pieces, was originally performed with the others for King George I on the River Thames since flutes and strings would be hard to hear

ANSWER: Water Music

[10] *Ode for St. Cecilia's Day* premiered at the King's Theater alongside a Handel concerto in B-flat major for this instrument. The "concert" variety of this string instrument has a set of features that let it play in any key.

ANSWER: **harp** [or pedal **harp**; or concert **harp**]

<Bentley, Arts - Music>

- 12. A book by this writer opens with the essay "On Parables," which asserts "if you only followed the parables," you "rid yourself of all your daily cares." For 10 points each:
- [10] Name this author whose *Parables and Paradoxes* includes a story that also appears in one of his novels, in which a man is repeatedly told by a doorkeeper that he is not allowed to enter an open door leading to "the law." ANSWER: Franz **Kafka**

[10] A priest relates the parable "Before the Law" to Josef K. (YO-zef KA) near the conclusion of this Kafka novel.

ANSWER: *The Trial* [or *Der Prozess*]

[10] Another fragment in Kafka's *Parables and Paradoxes* asserts that this literary character made the correct decision in leaving "the most visible point of his island," and was thus rescued due to a "logically inevitable" chain of causality.

ANSWER: **Robinson Crusoe** [accept either underlined portion]

<Jose, Literature - European>

- 13. This scientist names a "ripening" process where large precipitates in a colloid draw material from smaller precipitates. For 10 points each:
- [10] Identify this scientist who developed a process that oxidizes the product of the Haber process.

ANSWER: Wilhelm **Ostwald** [or **Ostwald** process]

[10] The Ostwald process oxidizes ammonia to produce this strong mineral acid. Aqua regia is comprised of hydrochloric acid and this acid with formula HNO3 (H-N-O-three).

ANSWER: nitric acid [prompt on HNO3]

[10] A mixture of red fuming nitric acid and nitrogen tetroxide is an example of a hypergolic one of these mixtures, since they spontaneously react with each other without a source of ignition. The first one of these systems using only liquids had gasoline as the fuel and liquid oxygen as the oxidizer.

ANSWER: liquid-**propellant** [prompt on rocket <u>fuel</u>] (The propellant described is Goddard's first liquid-propelled rocket.)

<Prieto, Science - Chemistry>

- 14. Philippe Van Parijs and Yannick Vanderborght included sixteenth century Antwerp in their book on these types of programs. For 10 points each:
- [10] Identify this type of program, one of which was piloted in Ontario. Italy's Five Star party proposes one of these things at 560 euros per month.

ANSWER: universal <u>basic income</u> [or <u>basic income</u> guarantee; or unconditional <u>basic income</u>; or universal <u>demogrant</u>; or <u>guaranteed income</u>; or <u>citizen's income</u>; or <u>basic living stipend</u>]

[10] This startup seed accelerator is running a basic income pilot program in Oakland. This company runs the website Hacker News and has funded companies such as Dropbox and Airbnb.

ANSWER: **Y Combinator** [prompt on **YC**]

[10] In June 2016, voters in this European country overwhelmingly rejected a basic income measure. This neutral country has slowly been making its prominent banking industry more transparent.

ANSWER: **Switzerland** [or **Swiss Confederation**]

<Bentley, Current Events - Foreign>

- 15. Stuart William Hughes Rawlins drew a map for the Baligeni Expedition while serving in this unit in 1904, and Roald Dahl was also a member of it. For 10 points each:
- [10] Identify this colonial military force, formed from separate Ugandan and East and Central African units by the British in 1902.

ANSWER: King's African Rifles [or KAR]

[10] This future dictator of Uganda was a member of the King's African Rifles and proclaimed himself "Conqueror of the British Empire." He took power from Milton Obote.

ANSWER: Idi **Amin** [or Idi **Amin** Dada]

[10] The King's African Rifles fought in an "emergency" named for this no-longer-extant country in the late 1940s. This country was formed after World War II from British territories such as Sarawak.

ANSWER: Federation of <u>Malaya</u> [or British <u>Malaya</u>; accept <u>Malayan</u> Emergency; do not accept or prompt on "Malaysia"; do not accept or prompt on "Malayan Union"]

<Bentley, History - World>

- 16. Opponents of this movement, or *mitnagdim* (meet-nog-DEEM), such as the Vilna Gaon (gah-OWN), opposed the worship that its members lavished on wise men called *tzaddikim* (sah-dee-KEEM). For 10 points each:
- [10] Name this branch of Orthodox Judaism founded by the Baal Shem Tov, whose male members, like other Ultra-Orthodox Haredi (ha-ray-DEE) Jews, wear dark coats and uncut sidelocks.

ANSWER: **<u>Hasidism</u>** [or **<u>Hasidic</u>** Judaism; or **<u>Hasidim</u>**; accept **<u>Hasid</u>**]

[10] The conflict between Hasidism and its opponents was overshadowed in this century by the Jewish enlightenment, or Haskalah. Thomas Paine advocated deism during this century's broader Enlightenment. ANSWER: **18**th century [or **1700**s]

[10] Hasidic Jews often belong to dynasties founded by leaders given this Yiddish title meaning "master." Menachem Mendel Schneerson (muh-NAHK-um MEN-del SHNEER-son), the leader of the Chabad-Lubavitcher (huh-BODD luh-BUV-itch-er) sect, was widely known by this title.

ANSWER: <u>rebbe</u> (REB-ee or REB-uh) [or <u>reb</u>; do not accept or prompt on "rabbi" (RAB-eye)] <Brownstein, RMP - Other Religion>

- 17. A character who divides the world up into "in-laws" and "out-laws" deliberately sabotages his performance in one of these events to spite the Warden. For 10 points each:
- [10] Identify these events. An Alan Sillitoe novella depicts one featuring competitors from various borstals. ANSWER: long distance **races** [or a **track meet**; prompt on runs]
- [10] *The Loneliness of the Long Distance Runner* is a novella from the British Angry Young Men movement that developed during this decade. This decade's Beat Generation authors influenced the next decade's hippie subculture.

ANSWER: 19<u>50</u>s

[10] Smith ends up in the Essex Borstal after stealing from one of these businesses. The title twenty-six men of a Maxim Gorky short story make goods for one of these businesses.

ANSWER: **bakeries** [or obvious equivalents of **bake** shops or **bread** shops; prompt on a retail **shop** or **store**s; prompt on **food** shop]

<Bentley, Literature - British>

- 18. In 1358, supporters of Étienne Marcel (ay-tee-EN mar-SELL) killed two advisers to the man who held this title and forced him to reaffirm the Ordinance of 1357. For 10 points each:
- [10] Identify this title given to the heir apparent to the French throne. It's equivalent to the Prince of Wales in the United Kingdom.

ANSWER: **<u>Dauphin</u>** (DOFF-in or doh-FAN) of France

[10] Several men claimed to be this king's son, the "Lost Dauphin," following the Bourbon Restoration. This king was executed during the French Revolution.

ANSWER: Louis XVI [prompt on Louis]

[10] The dauphin targeted by Étienne Marcel's insurrection was this future king known as "the Wise," who signed the Treaty of Brétigny to free his father John the Good from the English.

ANSWER: Charles V [prompt on Charles]

<Bentley, History - European>

19. In the *Meno*, Socrates illustrates this concept by teaching geometry to a slave boy. For 10 points each:

[10] Name this theory according to which learning is simply rediscovering knowledge that we are born with.

The title concept of Kierkegaard's *Repetition* is set in contrast to this Platonic theory.

ANSWER: **recollection** [or **anamnesis**]

[10] In the *Phaedo*, Socrates uses the theory of recollection in one of his four proofs that this immaterial part of a person is immortal.

ANSWER: soul

[10] Along with the *Meno* and *Phaedo*, one of Plato's key middle-period dialogues was this one, in which Socrates describes how Diotima taught him about the *scala amoris*, or ladder of love.

ANSWER: **Symposium**

<Kothari, RMP - Philosophy>

20. In 2009, Sir Anthony Hoare claimed that his invention of this concept was a "billion dollar mistake" that has "led to innumerable errors, vulnerabilities, and system crashes." For 10 points each:

[10] Name this kind of reference that does not refer to any valid data, but is not necessarily uninitialized.

Dereferencing one of these things often leads to segmentation faults.

ANSWER: **null** pointers [or **null** references]

[10] In some languages, dereferencing a null pointer will lead to one of these things being thrown. In general, code that can produce these things is often surrounded by "try-catch" blocks.

ANSWER: exceptions [accept null pointer exception or NullPointerException; prompt on error]

[10] To dereference a pointer in many languages, this symbol is used. In the language BASIC, this symbol is used to multiply two numbers.

ANSWER: asterisk [or star]

<Jose, Science - Computer Science>

- 21. Compared to their ancestral home, a very low percentage of Americans with this ethnicity are practicing Muslims. For 10 points each:
- [10] Identify this ethnic group, which grew significantly in the late 1970s and early '80s. The Westwood neighborhood in Los Angeles is sometimes nicknamed for the high concentration of people of this ethnicity living there.

ANSWER: <u>Iranian</u>-Americans [or <u>Persian</u>-Americans; accept <u>Little Persia</u>; prompt on <u>Tehrangeles</u>]

[10] Around 50,000 Iranians in Los Angeles practice this faith. The Likud party was helped by a large immigration of Persians of this faith to cities such as Tel Aviv.

ANSWER: <u>Judaism</u> [or <u>Jew</u>ish]

[10] This other Westside "Tehrangeles" neighborhood became infamous in the 1990s when Ron Goldman and Nicole Brown Simpson were found stabbed to death in a condo here.

ANSWER: **Brentwood**

<Bentley, Geography - United States>