

Tossups

0. Fans of this free game linked the remarks of a commentator named Juan with players messing up during a 2015 livestream. This game was originally based on a 2005 game centering on a group called the Ouendan. Early in a best-of-13 championship match for this game, the U.S. team ironically lost to China on a stage called “Freedom Dive.” This game’s mascot, Pippi, makes a cameo appearance in (*) *Yandere Simulator*. In a mode of this game, the player controls a character named Yuzu, who catches fruit falling from the sky. Other modes in this game include ones based on *Taiko no Tatsujin* and *Beatmania IIDX*. Cookiezi and cptnXn are top players of this game, which includes spinners and sliders in levels called “beatmaps.” For 10 points, name this computer rhythm game in which players must use keys and a trackpad to hit a series of circles.

ANSWER: osu! [pronounced “AHSS”] <KG>

1. Wheeler J. North studied the effects of El Niño on this type of ecosystem. Jon M. Erlandson theorized that the Americas were populated by people traveling along a “highway” consisting of these ecosystems. Along with grasslands, this type of ecosystem made its first appearance in the Miocene epoch. The predominant species in these ecosystems are *Lessonia*, *Ecklonia*, *Laminaria*, and the most common, *Macrocystis*. These ecosystems stay upright with the help of (*) gas-filled pneumatocysts located at the base of fronds near the stipe. These ecosystems are farmed to extract alginic acid. These ecosystems are destroyed due to unchecked grazing by sea urchins, which is why sea otters are a keystone species for them. For 10 points, name these aquatic ecosystems formed by a type of brown seaweed.

ANSWER: kelp forests [or kelp beds] <AG>

2. The pre-Buddhist Mongol war god known as Jamsaran or Begtse wielded a flaming copper sword whose handle was one of these animals’ tails. In an ancient Persian tale, a bull sent by Mithras to fertilize the universe with its blood is attacked by one of these animals at the behest of the evil spirit Ahriman. Tjetet, Mestetef, and Telen are three of the seven of these animals that Thoth sends to protect the Egyptian goddess Isis from her brother Set. Shamash’s sacred entrance to (*) Kurnugi, the Land of Darkness, is guarded on Mount Mashu by men with the bottom half of these animals in the Babylonian legend of Gilgamesh. According to Ovid’s *Fasti*, Gaea sent a giant one of these animals after a son of Zeus and friend of Artemis who claimed he could kill any living creature. For 10 points, name these arachnids, one of which killed the hunter Orion.

ANSWER: scorpions [or scorpiones] <JM>

3. According to a letter by Charles D. Cooper, one of these two people expressed a “despicable opinion” about the other, prompting a failed attempt to extract an apology. One of these two people convinced James A. Bayard and several of his colleagues to abstain from voting, in order to prevent the other from being elected President. To compete with the other’s (*) Bank of New York, one of these two people founded the Manhattan Company bank under the guise of establishing a shoddy water system. One of these two people won a Senate seat against the other’s father-in-law, Philip Schuyler. One of these two people was tried for treason a few years after he was acquitted of killing the other in Weehawken, New Jersey. For 10 points, name these two people who were involved in an 1804 duel.

ANSWER: Aaron Burr and Alexander Hamilton <KG>

4. A work in this genre is divided into the sections “The Land of the Dead,” “The Land of the Living,” and “Amazed by Sadness.” That book’s prologue tells the story of a woman witnessing the physical deterioration of her fireman husband. An author best known for his works in this genre got his nickname from an Irish-

American literary character whose life in Chicago is the subject of a trilogy by James T. Farrell. In a work in this genre, a member of the United Nations Postwar Commission investigates a zombie plague. Works in this genre include (*) *Hard Times* and “*The Good War*” by Studs Terkel, Svetlana Alexievich’s *Voices from Chernobyl*, and Max Brooks’ *World War Z*. For 10 points, name this genre of writing which uses excerpts from interviews to narrate real or fictional historical events.

ANSWER: oral history [prompt on history; prompt on books with interviews; prompt on biographies] <WN>

5. The coda of this symphony’s scherzo reprises the first eight bars of the trio section, before suddenly breaking off and ending the movement. This symphony’s second movement begins with dotted falling octaves played by the strings on D and A, the timpani on F, and finally tutti on D. A passage in 3/4 time comes in between a variation in 4/4 and one in 12/8 in this symphony’s B-flat major slow third movement, which features a prominent horn solo for the fourth player. The celli and basses (*) introduce the main theme of this symphony’s last movement, which is often called a “symphony within a symphony.” In the finale of this D minor symphony, the bass soloist enters on the words “O freunde, nicht diese Töne!” before the other voices sing about a “beautiful spark of divinity.” For 10 points, name this symphony that ends with a choral setting of Schiller’s “Ode to Joy,” the final one by Beethoven.

ANSWER: Beethoven’s Symphony No. 9 in D minor, Op. 125 “Choral” [or Beethoven’s Ninth Symphony; or Choral Symphony; accept Beethoven op. 125] <AG>

6. One of these reactions causes the color change measured in the MTT assay for cell viability. The CoRR hypothesis argues that the co-localization of genes and products in chloroplasts and mitochondria allows for control of gene expression through these reactions. A tripeptide that undergoes these types of reactions gives rise to the GSH/GSSG ratio, a marker of a type of cellular stress; that tripeptide is (*) glutathione. In lactic acid fermentation, as pyruvate acts as both an acceptor and a donor, it undergoes a specific type of these reactions called disproportionation. These reactions are responsible for the interconversion between NAD⁺ and NADH. Cellular respiration is one example of these reactions. For 10 points, name these reactions exemplified by free radical reactions, as they involve electron transfer.

ANSWER: redox reactions [accept oxidation-reduction reactions; accept reduction-oxidation reactions; prompt on “oxidation reactions”; prompt on “reduction reactions”; anti-prompt on “disproportionation”] <SD>

7. This king interpreted the prophecy that he was to die in Jerusalem as a sign that he would die during a Crusade, although he actually died in the Jerusalem Chamber of Westminster Abbey. Before becoming king, this man joined Vytautas the Great’s forces during a siege of Vilnius. Within months of this king’s coronation, he was targeted by the Epiphany Rising. Under this king, Parliament passed an act that authorized burning at the stake for heretics, targeting the (*) Lollards. This king opposed his predecessor by joining the Lords Appellant, and was himself opposed by a Tripartite Indenture that included Edmund Mortimer and Owen Glendower. The leader of an uprising against this king, Harry Hotspur, was shot in the face at the Battle of Shrewsbury. For 10 points, name this king who succeeded Richard II and was known as Bolingbroke.

ANSWER: Henry IV [accept Henry of Bolingbroke until “Bolingbroke” is read] <KG>

8. In a painting by this artist, a man with a bulging back walks with his wife behind a fool carrying a torch. A man straddles a barrel with a pork chop attached to it in that painting by this artist, whose two contrasting halves are separated by a well in the middle. A boy with a red cap covering his eyes licks a plate next to a basket full of jugs in another painting by this man. In that painting, a paper (*) crown hangs in front of a green cloth in the background, and a foot which seems to belong to nobody appears beneath a tray of plates being carried by two men to provide food for the title celebration. For 10 points, name this painter of *The Fight Between Carnival and Lent* and *The Peasant Wedding*, as well as *Landscape with the Fall of Icarus*.

ANSWER: Pieter Bruegel the Elder <WN>

9. A character in this play disapproves of a pearl wedding ring, because pearls signify tears. A gossip character in this play howls the word “Amen” to imitate the wolf-like prior sexton, and laughs about the time she slaughtered her ex-husband’s pet linnets with a rolling pin. The second act of this play culminates a woman clutching her belly and repeating “No! No!” to a chorus calling for the death of an adulteress who killed her infant, as well as (*) Martirio being punished for stealing a photograph from under her sister’s pillow. In the climactic scene of this play, the title character grabs her shotgun and fires at a man who never appears onstage. This play begins on the funeral day of the husband of the title employer of La Poncia, who beats Angustias for flirting with Pepe el Romano during the ceremony. For 10 points, name this play about a tyrannical matron, written by Garcia Lorca.

ANSWER: *The House of Bernarda Alba* [or *La casa de Bernarda Alba*] <AG>

10. Because the relevant statute’s purpose was sanitary conditions, sheep washed overboard did not involve this concept in the case *Gorris v. Scott*. The doctrine of last clear chance can be used to circumvent a defense for this. The Hand formula can be used to determine whether or not an element of this exists. The ruling in *Palsgraf v. Long Island* established foreseeability as a test for proximate cause, which is a condition for this to hold. (*) Res ipsa loquitur can infer this activity from the nature of the situation. Its “contributory” form is sometimes replaced by its “comparative” form, and the right to sue for the “gross” form of this action cannot usually be waived in a contract. For 10 points, name this tort that requires a duty and a breach of that duty, which often causes car accidents.

ANSWER: negligence [accept negligence per se before “last clear chance”] <NC>

11. One type of this operation acts on a form the same way as would the commutator of the contraction with a vector field and another type of this operation, according to Cartan’s magic formula. In curved space this operation is generalized by adding a term which includes the Christoffel symbols; that type of this operation is used to define parallel transport. It’s not a product, but a type of this operation which squares to zero and maps an n-dimensional form to an (n + 1)-dimensional form is called an (*) “exterior” one. Functions that go through the origin twice have a location where this value is zero according to Rolle’s theorem. For the square root of x, this operation gives one over the two times the square root of x, and it equals zero at a function’s min or max. For 10 points, name this operation which is the inverse of an “integral” according to the fundamental theorem of calculus.

ANSWER: derivative [accept specific types like Lie, covariant, partial, exterior] <BM>

12. In the aftermath of this event, Laura Silsby and other Baptist missionaries from Ohio were arrested for child trafficking. Responses to this event included Operation White Crane and Operation Hestia. Jonathan M. Katz criticized the response to this event in his book *The Big Truck That Went By*. Nepalese soldiers were widely blamed for spreading disease after this event. Hédi Annabi and other members of the (*) UN peacekeeping mission MINUSTAH were killed in this event. Google Person Finder was created in response to this event. Raymond Joseph, the ambassador to the US, rallied humanitarian aid during this event alongside his nephew Wyclef Jean. This event, which caused a massive cholera outbreak, took place during the presidency of René Préval. For 10 points, name this 2010 natural disaster which ravaged Port-au-Prince.

ANSWER: 2010 Haitian earthquake <WN>

13. In November 2011, citizens of this non-Texas state rejected Senate Bill 5, a ballot initiative to limit collective bargaining rights for this state’s public employees, via referendum. A proposed 2015 bill in this state would make it illegal to abort a pregnancy if tests show that the child will have Down syndrome. A January 2016 lawsuit originating from this state seeks to remove the phrase (*) “In God We Trust” from U.S. currency. During a 2012 primary in this state, Marcy Kaptur defeated a political icon from the 2008 election

nicknamed “Joe the Plumber.” In 2013, Gina DeJesus, Amanda Berry, and Michelle Knight were freed from being held by Ariel Castro, who lived in this state’s most populous city. For 10 points, name this swing state whose governor, John Kasich, is a candidate for the GOP’s 2016 presidential nomination.

ANSWER: Ohio <JM>

14. Bertrand Russell warned that this man’s philosophy would contribute to the danger of “cosmic impiety” in the penultimate chapter of the *History of Western Philosophy*. One of this man’s essays is a five-article “creed” whose fourth article is called “The Nature of Method.” During his two-year stay in China, this thinker published many articles about his experiences there in *The New Republic*. With Arthur Bentley, he wrote a book on epistemology called (*) *Knowing and the Known*. This philosopher bemoaned the fact that technology distracts the title group from political issues in a book written as a response to Walter Lippmann called *The Public and Its Problems*. He was the most famous early proponent of experiential education. For 10 points, name this pragmatist and philosopher of education who wrote *Democracy and Education*.

ANSWER: John Dewey <WN>

15. The “april touch” of a person of this kind “drove sleeping selves to warm their fates” in an E. E. Cummings poem concluding that “love is the whole and more than all.” A person of this kind worked “in the blueblack cold” on Sundays in a poem by Robert Hayden. Another person of this kind “beat time on my head / With a palm caked hard by dirt” in a poem in which the speaker’s “right ear scraped a buckle” with every (*) step this person missed. The speaker notes the dizzying potential of the whiskey on the breath of this sort of person in Theodore Roethke’s poem about waltzing with him. Another person of this kind has a stake in his “fat black heart,” inspiring the speaker to make a model consisting of a “man in black with a meinkampf look.” That poem ends with the speaker telling this person: “You bastard, I’m through.” For 10 points, name this sort of person who Sylvia Plath compared to a Nazi in that poem.

ANSWER: the poet’s father [accept obvious synonyms, like the poet’s daddy or the poet’s papa; prompt on “the poet’s parent” or similar answers] <AG>

16. Prior to the Bethe-Bloch formula, this man derived a classical expression for the stopping power which is proportional to the log of the ratio of maximum to minimum impact parameter. He’s the first namesake of the theorem which states that for confined classical systems, magnetic susceptibility will be zero. He’s the first namesake of a condition which states that the phase space integral of $p \, dq$ equals n times h , implying that allowed orbits have action which is an (*) integer multiple of Planck’s constant. Electron charge times \hbar over two times electron mass is equal to a unit of magnetic moment named for him, and he names another unit which is equal to \hbar over electron mass times speed of light times the fine structure constant. For 10 points, name this Danish physicist whose radius describes the distance between the proton and electron in the ground state.

ANSWER: Niels Bohr [with van Leeuwen, and Sommerfeld, respectively] <BM>

17. Clifford Geertz described how this ritual took place in an eleven-tiered tower in Negara. In Japan, this ritual is the only time when it is not taboo for two people to hold the same item with chopsticks at the same time. In Hinduism, adults, but not children, undergo this ritual as part of the *antyeshti* ceremony, which is initiated by the *karta* and attended only by males. Objects used in this ritual in Christianity are stored in (*) columbaria, although this practice has traditionally been discouraged or banned in Christianity, especially in the Orthodox tradition. Wives of men who had undergone this ceremony committed suicide in the Indian practice of *sati*. For 10 points, name this type of funeral rite in which the body is burned.

ANSWER: cremation [prompt on “funeral rites”] <WN>

18. In the mid 19th century, French police created a fake radical feminist organization named after this place in order to discredit real feminists, and hired prostitutes as members. After a battle at this location, Titus

Manlius Torquatus executed his own son for agreeing to single combat with an enemy. Luigi Denza's most famous composition commemorates the opening of a cable car at this location. Troops rappelled down cliffs at this geographical feature, leading to the (*) Romans' defeat at the hands of Spartacus during the Third Servile War. A pair of letters addressed to Tacitus by Pliny the Younger contain the only surviving eyewitness accounts of a 79 A.D. event at this location. For 10 points, name this volcano whose eruption destroyed Herculaneum and Pompeii.

ANSWER: Mount Vesuvius <WN>

19. Adrienne Rich identified a passage in this novel beginning "It is in vain to say human beings ought to be satisfied with tranquility" as its author's feminist manifesto. This novel's protagonist paints a watercolor depicting a shipwreck featuring a cormorant carrying a gold bracelet in its beak. A devoutly Christian woman in this novel is buried in a grave marked only by a tablet with the inscription "Resurgam." Early in this novel, the protagonist sees an (*) apparition in the "red-room," where her uncle had died. The protagonist of this novel agrees to go to India on a missionary trip with, but not to marry, her cousin St. John Rivers. The male lead of this novel loses his eyesight trying to rescue his suicidal first wife Bertha Mason, who burns down Thornfield Hall. For 10 points, name this novel whose title character falls in love with Edward Rochester, written by Charlotte Brontë.

ANSWER: Jane Eyre <AG>

20. One of these buildings incorporates acrylic glass canopies designed by Frei Otto to imitate the Alps. The firm Populous has designed several of these buildings, including one which can be reconfigured from an oval to a rectangular shape in 12 hours. A building constructed for this purpose in Montreal is nicknamed "The Big O" and was plagued by (*) financial problems. A Herzog & de Meuron-designed structure built for this purpose uses steel beams to hide the supports for its retractable use, giving it a "bird's nest" appearance; Ai Weiwei was a consultant for the design of that building in Beijing, which opened in 2008. For 10 points, name this type of building used to host a certain biennial international sporting event.

ANSWER: (Summer) Olympic stadiums [prompt on partial answers] <WN>

Tiebreaker: This archipelago's most populous island is home to the second-oldest synagogue in the Western Hemisphere. The barking noises of monk seals inspired the name of this archipelago's Dog Islands. A city in this island group originally had a name meaning "beer hall" and is home to Bluebeard's and Blackbeard's Castles. The large Hovensa refinery in this island group processes Venezuelan oil. An airport on Beef Island serves a capital city in this archipelago called (*) Road Town. Part of this archipelago is the only U.S.-owned territory that drives on the left, a remnant from when it was owned by the Danish. For 10 points, name this Caribbean archipelago divided between British and American parts, the latter of which includes St. Thomas and St. Croix.

ANSWER: Virgin Islands [accept United States Virgin Islands; accept British Virgin Islands; prompt on "Leeward Islands"; prompt on "Lesser Antilles"] <JM/KG>

MLK 2016: Amusing Subtitle

Packet 5

Bonuses

1. A 1928 obscenity trial over a novel of this kind prompted a cartoon depicting the author and the book's critics nailed together to a cross. For 10 points each:

[10] Name this characteristic shared by Radclyffe Hall's *The Well of Loneliness*, Rita Mae Brown's *Rubyfruit Jungle*, and Jeanette Winterson's *Oranges Are Not the Only Fruit*.

ANSWER: **lesbian** fiction [or novels focusing on **gay women**; or novels depicting **homosexual women**; prompt on “novels depicting **homosexuality**”]

[10] This 1952 novel by Patricia Highsmith, in which the store clerk Therese falls in love with a customer, Carol, who is going through a divorce, was unique among lesbian novels for its relatively happy ending. It was made into the 2015 movie *Carol*.

ANSWER: *The **Price of Salt***

[10] This author depicted her relationship with her partner in the somewhat-fictional *Autobiography of Alice B. Toklas*. She wrote that “a rose is a rose is a rose,” and coined the term “lost generation.”

ANSWER: Gertrude **Stein** <AG>

2. This episode is briefly interrupted when the person narrating it asks his Phaeacian hosts if he can go to sleep. For 10 points each:

[10] Name this episode, recounted in Book XI of the *Odyssey*, in which Odysseus goes to consult Tiresias and meets his mother Anticleia, but ends up getting overwhelmed by people asking about their relatives.

ANSWER: Odysseus’s **journey into the underworld** [or Odysseus **going to Hades**; or Odysseus’s **katabasis**; or the **Nekyia**; accept clear equivalents]

[10] The first shade Odysseus meets in the underworld is Elpenor, who had broken his neck falling from the roof of this enchantress, who had turned Odysseus’s crew into swine.

ANSWER: **Circe**

[10] Odysseus enters the underworld after crossing this world-encircling landmark to get to the land of the Cimmerians.

ANSWER: **Oceanus** [or the **River Ocean**; or the **world-ocean**] <AG>

3. Following his exile from Heaven, this figure stopped the dragon-like wind god Fei Lian from causing massive storms. For 10 points each:

[10] Name this divine archer in Chinese mythology who is married to the moon goddess Chang’e.

ANSWER: **Houyi** [or **Shenyi**; or **Yi**]

[10] Houyi was banished from Heaven for killing nine of the ten birds that personified this astronomical body after they scorched the earth with intense heat.

ANSWER: **sun** [accept **sunbirds**]

[10] The sunbirds were offspring of this God of the Eastern Heaven and consort of Xihe and Changxi. This god gave Houyi his bow in the first place.

ANSWER: Di **Jun** [or Emperor **Jun**] <JM>

4. This opera’s score specifies the exact pitch and size of eighteen anvils which beat out a dotted rhythm at the end of its second scene, representing a descent into Nibelheim. For 10 points each:

[10] Name this opera in which the bass instruments sustain an E-flat major chord drone for the whole prelude. In it, Alberich curses a ring such that whoever possesses it will be killed by its next owner.

ANSWER: *Das **Rheingold*** [or *The **Rhinegold***]

[10] *Das Rheingold* is the first opera in this anti-Semitic composer’s *Ring Cycle*.

ANSWER: Richard **Wagner** [or Wilhelm Richard **Wagner**]

[10] These three characters, the only ones in the Ring cycle not drawn from Norse mythology, lament the loss of the gold at the end of *Das Rheingold*, and drag Hagen to his death while reclaiming the ring in *Götterdämmerung*.

ANSWER: the **Rhine Maidens** [or **Rheintochter**; or **Rhine Daughters**; or **Woglinde**, **Wellgunde**, and **Flosshilde**; need all three] <AG>

5. Answer some questions about calculating distances in astronomy. For 10 points each:

[10] One of the lowest rungs of the distance ladder is the distance between the earth and the sun, which defines this important unit.

ANSWER: **astronomical** unit [or **AU**]

[10] For stars within a few hundred thousand light years, one may look at the difference between absolute and apparent magnitude on an HR diagram to compute this quantity. Log of distance is one plus this quantity over five.

ANSWER: **distance modulus**

[10] For galaxies which are too far for main sequence fitting, one can use this relation discovered by Henrietta Leavitt, which relates two quantities for Cepheid variables.

ANSWER: **period-luminosity** relation [or **luminosity-period** relation] <BM>

6. The drug addict Christer Pettersson was acquitted during a trial following this event. For 10 points each:

[10] Identify this unsolved 1986 event that may have been carried out by South African police, since its target made a speech criticizing apartheid a week before it happened.

ANSWER: **assassination** of Olof **Palme** [accept obvious equivalents for “assassination”]

[10] Palme was assassinated while walking from a theater in this city. A 1973 bank robbery in which hostages began sympathizing with their hostage-takers took place in this city, exemplifying its namesake “syndrome.”

ANSWER: **Stockholm**, Sweden

[10] Palme was preceded by this longest-serving Swedish prime minister, who established his country’s universal health care and made Sweden’s air force the fourth-largest in the world despite remaining neutral in the Cold War.

ANSWER: Tage **Erlander** <KG>

7. As the frontispiece to one of his books, this artist drew a bearded old man pointing a compass downward. For 10 points each:

[10] Name this artist of *Ancient of Days*, who illustrated many of his own poetic works, such as *Songs of Innocence and Experience*.

ANSWER: William **Blake**

[10] Blake’s *The Ghost of a Flea* is part of a series depicting these “visionary” objects. In the 1940s, Francis Bacon made a series of paintings depicting these body parts, the sixth of which is modeled on *Portrait of Innocent X*.

ANSWER: **heads**

[10] Blake’s *The Night of Enitharmon’s Joy* depicts this Greco-Roman goddess.

ANSWER: **Hecate** <WN>

8. He posed as an inmate at Folsom Prison to investigate the conditions of schools in a Los Angeles neighborhood following the Watts Riots. For 10 points each:

[10] Name this one-time mayor of South San Francisco who became the first, and thus far only, sitting U.S. representative to be assassinated when he was shot in Guyana in 1978.

ANSWER: Leo **Ryan** [or Leo Joseph **Ryan**, Jr.]

[10] Ryan was killed near Jonestown while investigating this religious movement started by Jim Jones. Immediately after Ryan’s assassination, members of this movement all drank cyanide-laced Flavor Aid.

ANSWER: the **Peoples Temple** of the Disciples of Christ

[10] Prior to his death, Ryan co-authored a law with Harold Hughes that put a deadline on the president to report this organization’s covert operations to congressional committees.

ANSWER: **CIA** [or **Central Intelligence Agency**] <JM>

9. The parABS and parMRC systems ensure that single-copy versions of these molecules are distributed to both daughter cells during mitosis. For 10 points each:

[10] Name these small, generally circular pieces of DNA found in bacteria apart from the main chromosome. They are the most commonly-used cloning vectors.

ANSWER: **plasmids**

[10] These methods of extracting and purifying plasmid DNA are given prefixes like “mini-,” “midi-,” or “maxi-” depending on the volume of the starting *E. coli* culture and the expected yield.

ANSWER: plasmid **preparations** [or **preps**; accept mini**prep**; accept midi**prep**; accept maxi**prep**; accept mega**prep**; accept giga**prep**]

[10] To clone DNA fragments longer than 15 kbp, one can design plasmids with these 200 bp sequences derived from lambda phage. DNA is nicked by terminase at these sites, linearizing the plasmid so they can be packaged into a phage head.

ANSWER: **cos** sites [or **cosN**; or **cosB**; or **cosQ**; this is how you get a cosmid] <AG>

10. In the Sermon on the Mount, Jesus says that you cannot serve both God and this thing, and Peter tells Simon the Sorcerer “may your *this thing* perish with you!” For 10 points each:

[10] Name this thing which Judas received in the form of silver for his betrayal of Jesus.

ANSWER: **Money** [accept equivalents like wealth, coins, etc]

[10] The first of these Epistles includes the line “For the love of money is the root of all evil”. In this book, Paul says “Do not let anyone look down on you because you are young.”

ANSWER: **Timothy**

[10] In 2nd Timothy 4:7, Paul says “I have fought the good fight, I have finished the race, I have” done this three word phrase.

ANSWER: **kept the faith**

11. Subgroups of this ethnicity include the Chaoui, Shilha, and the Kabyle. For 10 points each:

[10] Name this broad ethnic group indigenous to North Africa. Their name is derived from the Latin word “barbaros.”

ANSWER: **Berbers** [or **Amazighs**]

[10] After the French invasion of Algeria, many Berber soldiers were recruited into the French army. Those soldiers, known for their baggy red trousers, were known by this term.

ANSWER: **zouaves**

[10] This Muslim scholar of Berber descent documented his extensive travels through Central and East Asia in his *Rihla*.

ANSWER: **Ibn Battuta** [or Muhammad **ibn Battuta**; or Abu Abd al-Lah Muhammad ibn Abd al-Lah l-Lawati t-Tangi **ibn Batutah**] <KG>

12. This quantity’s upper limit for isotropic materials is .5, and a foam with a negative value was found in 1987. For 10 points each:

[10] Name this quantity which is equal to the negative strain in the direction of the load over the strain in transverse directions.

ANSWER: **Poisson**’s ratio

[10] Materials with a negative Poisson’s ratio are given this name. Stretching them in one dimension would make them fatter in other dimensions. They are commonly illustrated with a bowtie structure.

ANSWER: **auxetic** materials

[10] This number is equal to two times the shear modulus times one plus Poisson’s ratio. It is equal to stress over strain, and its British namesake also designed an experiment that demonstrated the wave nature of light.

ANSWER: **Young**’s modulus <BM>

13. These writings by this author declare that “what shocks the virtuous philosopher, delights the camelion (“chameleon”) poet,” and that poetry should “surprise by a fine excess and not by Singularity.” For 10 points each:

[10] Name these writings by a specific author. The best-known one claimed that poems allowing the reader to remain in “uncertainties, mysteries, and doubts” possess “negative capability.”

ANSWER: the **letters** of John **Keats**

[10] In another letter, Keats likened life to a “large Mansion of Many Apartments,” in a nod to an image in this William Wordsworth poem about his visit to a ruined church on the banks of the river Wye.

ANSWER: “**Tintern Abbey**” [or “Lines Written a few miles above **Tintern Abbey**, on revisiting the banks of the Wye during a tour, July 13, 1798”; or Lines composed a few miles above **Tintern Abbey**, on revisiting the banks of the Wye during a tour, July 13, 1798”]

[10] Keats wrote that he would “sooner fail than not be among the greatest” in a letter defending the boldness of this poem, which contains a section whose speaker realizes that sorrow “is so constant to me, and so kind,” titled “Song of the Indian Maid.”

ANSWER: “**Endymion**” <AG>

14. An independent state was established on this island in 1898, and lasted until 1913. For 10 points each:

[10] Name this island, home to the Minoan palace complex of Knossos.

ANSWER: **Crete**

[10] From the 13th to 17th centuries, Crete was controlled by Venice and was known by this name.

ANSWER: Kingdom of **Candia** [or Duchy of **Candia**; or Regno di **Candia**; or Ducato di **Candia**]

[10] Prince George of Greece, the High Commissioner of the Cretan State, prevented the assassination of this future tsar of Russia in the Otsu incident. More than a thousand people died in a human stampede after his coronation.

ANSWER: **Nicholas II** [or **Nikolai II**] <WN>

15. Cesium chloride gradients can be used to augment the density of the solution in this technique. For 10 points each:

[10] Name this technique that can employ velocity or equilibrium sedimentation to separates components of a mixture through rapid rotation and use of the namesake force.

ANSWER: **centrifugation** [accept analytical ultra**centrifugation**]

[10] The most common density gradient centrifugation experiments, when they don’t use cesium chloride, often uses concentrated solutions of this sugar to create the gradient.

ANSWER: **sucrose**

[10] This man developed analytical ultracentrifugation and names a unit used to measure sedimentation rate.

Ribosome subunits are usually also described in terms of his namesake unit.

ANSWER: Theodor **Svedberg** <SD>

16. Centuries after its onset, this philosophical tradition was carried on by Spanish Jesuits like Luis de Molina. For 10 points each:

[10] Name this philosophical tradition which arose out of medieval universities, whose practitioners included Albertus Magnus and Duns Scotus.

ANSWER: **scholasticism**

[10] Another Spanish Jesuit scholastic was this member of the School of Salamanca, nicknamed Doctor Eximius. He wrote the wide-ranging *Metaphysical Disputations*,

ANSWER: Francisco **Suárez**

[10] This principle, also known as the law of parsimony, states that simpler theories are preferred over more complex ones, and is named after an English scholastic.

ANSWER: **Occam’s razor** <WN>

17. Name these areas home to “Trees of Life,” for 10 points each.

[10] A 400-year-old tree on this island country is dubbed the Tree of Life since it is the only tree in the middle of a desert. This country was once home to the Dilmun civilization and was a historic pearl-fishing hub.

ANSWER: **Bahrain** [or Kingdom of **Bahrain**; or Mamlakat al-**Bahravn**]

[10] Several guns were used to make a sculpture from this country called the Tree of Life. This country, whose flag depicts an AK-47, lies across a namesake channel from Madagascar.

ANSWER: **Mozambique** [or Republic of **Mozambique**; or República de **Mocambique**]

[10] The Árbol del Tule, sometimes called the Tree of Life since it has the widest trunk of any living tree, is found in this Mexican state. It is the present-day home of Mitla and Monte Albán.

ANSWER: **Oaxaca** <KG>

18. This term was coined by the historian R. B. McCallum. For 10 points each:

[10] Identify this term for the statistical analysis of polls and elections.

ANSWER: **psephology**

[10] Perhaps the most famous psephologist is this editor-in-chief of FiveThirtyEight.com, who usually manages to predict the outcomes of almost every state in federal elections. He wrote the book *The Signal and the Noise*.

ANSWER: Nate **Silver** [or Nathaniel Read **Silver**]

[10] Some psephologists believe that, when polled, people will often falsely claim that they are planning to vote for a candidate with this quality, which is known as the Bradley effect, since Tom Bradley lost the 1982 California governor's race despite leading the polls.

ANSWER: a **non-white** candidate [or a **minority** candidate; accept specific minorities, like **black** candidates]
<WN>

19. This line is spoken after a policeman raises his baton, causing a taxi to stop and two characters to press against each other. For 10 points each:

[10] Name this line, which the narrator says in response to a woman saying "We could have had such a damned good time together."

ANSWER: "**Isn't it pretty to think so?**"

[10] Jake Barnes says "Isn't it pretty to think so?" to this woman, who has an affair with Robert Cohn and seduces the teenaged matador Romero.

ANSWER: Lady **Brett Ashley** [accept either name]

[10] Brett Ashley appears in *The Sun Also Rises*, a novel by this bullfighting enthusiast.

ANSWER: Ernest **Hemingway** <WN>

20. This composer pared down the orchestra to just strings, minus double basses, a harp, and pairs of clarinets and horns for his opus 21 *Symphony*. For 10 points each:

[10] Name this composer who included twenty-three variations on a theme in his opus 1 *Passacaglia*, but is better known for his *Five Pieces for Orchestra* and *Variations for Piano*.

ANSWER: Anton **Webern**

[10] Webern was a key part of the "Second" school of music in this European city, which experimented with serialism and Arnold Schoenberg's twelve-tone technique.

ANSWER: **Vienna**

[10] Elizabeth Sprague Coolidge commissioned Webern's opus 28, a piece of this type using a tone row based on the BACH motif. Bela Bartok jam-packed his six pieces in this genre with extended techniques.

ANSWER: **string quartets** <AG>

Extra: In his painting *Death and Fire*, this man painted a skull containing the letters "T," "O," and "D," representing the German word for death. For 10 points each:

[10] Name this painter whose *Pedagogical Sketchbook* includes statements from his lectures at the Bauhaus.

ANSWER: Paul Klee

[10] This other painter of many so-called “compositions” also taught at the Bauhaus. One of his paintings gave its name to Der Blaue Reiter, an artistic group whose members included Franz Marc and August Macke.

ANSWER: Wassily Kandinsky

[10] This Hungarian artist, who was fond of experimenting with light, taught at the original Bauhaus before traveling to the United States and founding the New Bauhaus in Illinois.

ANSWER: László Moholy-Nagy <KG>