

## Harvard Fall Tournament XI

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And with thanks to Harvard College, MIT Quiz Bowl, and various playtesters



Round 2

Tossups

1. He's not Torricelli, but this man names a point  $P$  in acute triangles for which the sum of the distances from  $P$  to the vertices is minimized. This man's namesake numbers have the form " $2$  to the  $2$  to  $n$  plus  $1$ ," and he names a statement that for a prime  $p$ , then [read underlined part slowly]  $(*)$   $p$  divides " $(a$  to the  $p$ ) minus  $a$ ." One of this man's statements was proven using the Taniyama-Shimura conjecture by Andrew Wiles and states that there are no nontrivial integer solutions to the equation " $a$  to the  $n$ " plus " $b$  to the  $n$ " equals " $c$  to the  $n$ " for  $n$  greater than two. For 10 points, name this French mathematician with namesake "Little" and "Last" theorems.

ANSWER: Pierre de Fermat (accept answers like Fermat's Last Theorem)

2. Mike Lazzo oversees this channel at its "Williams Street" headquarters, and many of this channel's first shows were created using recycled Hanna-Barbera material. This channel stylized words in square brackets for its "bumps", and its former shows include  $(*)$  *Aqua Teen Hunger Force* and *The Boondocks*. This channel has an anime-themed block called Toonami, and both *Family Guy* and *Futurama* were resurrected after being cancelled by Fox and running on this channel. This channel's current shows include *Robot Chicken* and *Rick and Morty*. For 10 points, name this more mature channel that runs on Cartoon Network after eight o'clock PM.

ANSWER: Adult Swim (prompt on Cartoon Network; accept [adult swim]; anti-prompt [ask for less specific] on Toonami before read)

3. This writer complained about the theft of a poetic foot preventing his writing a heroic epic, instead writing about his affair with Corinna. A collection of letters titled *Tristia* or "Lamentations" were written by this man after a "poem and error" caused his  $(*)$  exile to the Black Sea. This man wrote several letters from spurned heroines in his *Heroidae*. One of this writer's works has the Latin title *Ars Amatoria* and teaches skills in seduction, and another contains several mythological tales centering on transformations. For 10 points, name this Roman writer, the author of *The Art of Love* and *The Metamorphoses*.

ANSWER: Ovid (or Publius Ovidius Naso)

4. The background of this painting depicts *Minerva Punishing Arachne* and *Apollo's Victory over Marsyas* hanging from the wall, both by Peter Paul Rubens. The vanishing point of this painting is the hand of a man standing on a staircase in a  $(*)$  doorway at the right rear of the work. The artist of this work appears in it wearing a breastplate with a red cross and working at an easel. A mirror in the background of this painting reflects the royals who commissioned it, while in the foreground, two servants and a dwarf flank the Infanta Margarita. For 10 points, name this depiction of the Spanish court, the most famous work of Diego Velázquez.

ANSWER: *Las* Meninas (or *The* Maids of Honor)

5. One poem about this figure opens the collection *The Town Down the River*, was written by E.A. Robinson, and terms this figure “The Master.” Because “kings must murder still,” this figure cannot “sleep upon his hill” in a Vachel Lindsay poem in which this figure “Walks At (\*) Midnight.” The “western orb sailing the heaven” is compared to this man in a poem observing when “the great star early droop’d in the western sky” that’s titled “When Lilacs Last in the Dooryard Bloom’d.” A poem declares “our fearful trip is done,” though this man is “fallen cold and dead.” For 10 points, Walt Whitman’s “O Captain! My Captain!” laments the death of what president?

ANSWER: Abraham “Abe” Lincoln

6. One of these objects unofficially named Bellerophon was discovered in 1995 using the pulsar timing method by Michel Mayor and Didier Queloz. These objects can be observed using small shifts in radial velocity, or by observing periodic (\*) dimming events using the “transit” method. Examples of these objects include 51 Pegasi b and Gliese 229 B, and their discovery is the main goal of the Kepler Mission. Ideally, these objects would lie in the Goldilocks zone, since they would then likely have liquid water and be habitable. For 10 points, name these bodies that orbit stars other than the Sun.

ANSWER: exoplanets (accept extra-solar planets; accept descriptions like “planets outside our solar system” before “For 10 points”; prompt on just planets; anti-prompt [ask for less specific] on hot Jupiters)

7. This man’s daughter was the first person to be married at Niagara Falls, and she disappeared while traveling aboard the *Patriot*. This man was the first real leader of the Tammany Society, and he became a senator after defeating Philip (\*) Schuyler in an election. James Wilkinson co-organized one plan with this man, and the Twelfth Amendment was passed in response to an election this Democratic-Republican lost. This man led a conspiracy to create an independent country in the Texas Territory after losing the Election of 1808 and becoming Jefferson’s Vice-President. For 10 points, name this man who shot Alexander Hamilton.

ANSWER: Aaron Burr Jr. (Ed’s note: Burr took Hamilton’s “my shot” song too seriously...)

8. At a Halloween party set in this city, a character plays a blindfolded game and selects the title object, which symbolizes death. A boy living in this city fails to buy a gift at the title (\*) bazaar, and in this setting of “Clay” and “Araby,” Gabriel Conroy’s wife has memories of Michael Furey. A novel ending “yes i said yes i will yes” is set in this city, and it titles a short story collection including “The Dead.” This city is home to the residents Blazes Boylan, Stephen Dedalus, and Molly and Leopold Bloom. For 10 points, name this city, the setting of the novel *Ulysses* by James Joyce.

ANSWER: Dublin, Ireland (accept Dubliners)

9. An action Naaman took to heal his leprosy is typologically used as evidence for this action. In Catholicism, a catechumen is preparing to do this action, and it can be done “of desire” if not done before death. In Matthew 28, Jesus instructs the listeners to make (\*) “disciples of all nations” by doing this action. It can be performed by affusion or aspersion, and the largest Protestant group in the United States is named for this sacrament. Most perform this sacrament “in the name of the Father, and of the Son, and of the Holy Spirit.” For 10 points, name this sacrament in which a person is adopted into Christianity by having water poured on them.

ANSWER: baptism (accept word forms like Baptists or Southern Baptist Convention; prompt on ablution or washing)

10. An upper value of 10 to the -28 was set for the EDM of this particle, though a non-zero electric dipole moment for it would violate PT-symmetry. The “fast” forms of these particles are converted into their “thermal” forms by a namesake moderator. (\*) Spallation usually refers to the production of these particles, and they have a lifetime of approximately 15 minutes. Two down quarks and one up quark compose this baryon that was discovered by James Chadwick in 1932. Isotopes differ in their number of these particles. For 10 points, name these chargeless particles found in atomic nuclei along with protons.

ANSWER: neutrons (do not accept “neutrinos”)

11. Henri Hubert collaborated with Marcel Mauss on a “General Theory” of this phenomenon. This was the third thing listed in the title of E.E. Evans-Pritchard book about the Azande people, and Malinowski’s final book on the Trobriand Islanders is titled after (\*) “Coral Gardens” and this practice. Frazer’s *The Golden Bough* proposes this practice precedes science and religion, and a non-rational reasoning underlies a “thinking” named after it. Grimoires, pentagrams, and chants might be used in the Western form of this practice. For 10 points, name this practice common in early societies and performed by people like shamans with the use of rituals and spells.

ANSWER: magic (accept obvious synonyms like spells or sorcery or rituals if they haven’t been read yet; prompt on specific practices, like witchcraft or oracles or Satanism)

12. The current heir to this office rose to it in 2009 after the death of Ertugul. This was the office most famously represented by a monogram called the tughra, and the “Valide” was the mother of its holder. This office sat atop a government metonymically called the Sublime Porte, and the “Chief (\*) Black Eunuch” served this office by supervising the Seraglio. These rulers belonged to the Osman dynasty, and the Prime Minister under this ruler was called the Grand Vizier. For 10 points, name this office, held by people like Mehmet the Conqueror and Suleiman the Magnificent from their throne in what’s now Istanbul, Turkey.

ANSWER: sultan of the Ottoman Empire (prompt on partial answer; accept caliph, emperor, khan, Shah, or other synonyms in place of sultan but do not accept or prompt on “Ottoman king”; accept head of the House of Osman before “Osman” is read)

13. The radicular arteries supply blood to this structure, and it develops under influence of the Sonic hedgehog gene on the basal plate. This structure is the lower of the two protected by three membranes called the meninges, and its top begins at the (\*) medulla oblongata. This structure has 31 individual segments, and like the structure surrounding it, it has cervical and lumbar regions. This structure oversees the knee jerk reflex, and together with the brain, it makes up the central nervous system. For 10 points, name this collection of nerves running down the back of the body and enclosed by a similarly named vertebral column of bones.

ANSWER: spinal cord (do not accept or prompt on “spine”; those are the bones)

14. A specific early aspect of this entity was represented by the god Khepri. The uraeus was an image that combined the snake-like Wadjet and another item representing this entity, and the Khufu ship symbolized a mythical version of this entity that was regularly confronted by (\*) Apep. A “disk” of this entity was deified as the god Aten, and a namesake “barge” represented this entity. The rolling of dung beetles was compared to the movement of this entity, and the city of Heliopolis is literally named after this astronomical object. For 10 points, name this cosmic entity represented by the Egyptian god Ra.

ANSWER: sun (accept solar and word forms)

15. **This party's principles are outlined in a section of its constitution called Clause Four, and it lost power after the release of a probably forged letter attributed to Grigory Zinoviev. One of this party's platforms was termed the (\*) "longest suicide note in history," and came in an election in which Michael Foot and allies were trounced. The first prime minister from this party was Ramsay MacDonald. Under this party's leader Clement Attlee, the National Health Service was inaugurated, and a "new" form of this political party was championed by Tony Blair. For 10 points, name this British political party that opposes the Conservatives.**

ANSWER: Labour Party

16. **Several rivers in this location collect from a statue of the Old Man of Crete that leaks tears from its cracks, and this place contains a series of ditches connected by rock bridges known as the Malebolge. A fiery citadel forming the city of (\*) Dis appears in this place. The lowest point in this place is a frozen lake, and it contains the Wood of Suicides. The gate to this location is inscribed "Abandon all hope, ye who enter here," and usurers, heretics, and frauds are among those imprisoned in the nine circles that make up this location. For 10 points, give this setting of the first work in Dante's *Divine Comedy*.**

ANSWER: Dante's hell (accept *The Inferno*; accept obvious synonyms like the underworld, but do not accept or prompt on "purgatory"; prompt on the afterlife and synonyms; anti-prompt [ask for less specific] on specific sections/circles of hell; *Ed's note: prompt on Yale*)

17. **Maurice Ravel wrote this many string quartets, and Zoltan Koldáy's ["ko-DIE-ee"] Opus 8 is a B-minor sonata for this many performers. This is the number of independent voices in Gregorian chant. A symphony of this number quotes its composer's *Songs of a Wayfarer* and features a (\*) funeral march based on a minor-key version of *Frere Jacques*. A perfect cadence ends on the chord denoted by this number, which is also known as the tonic. Gustav Mahler's *Titan* symphony has this number, which is also the number of sharps in the key signature of G major. For 10 points, name this number of performers in a solo.**

ANSWER: one (accept equivalents like first)

18. **Bob Geldof led a flotilla in opposition to another flotilla supporting this initiative, and it was opposed by an operation to hand out croissants. Jo Cox was possibly killed for her opposition to this initiative, and "350 million" was mentioned on a (\*) bus ad supporting this initiative. The goal of this initiative is governed by Article 50 of the Lisbon Treaty. Theresa May became the head of government in the wake of this campaign, and Nigel Farage of the Independence Party and Boris Johnson of the Conservatives led its winning side. For 10 points, "Remain" and "Leave" were the two sides of what campaign for Britain to leave the European Union?**

ANSWER: Brexit (accept synonyms like Britain leaving the European Union before "Britain" is read; *Ed's note: the derisively nicknamed "Battle of the Thames" was way less serious than I made it sound*)

19. **In this film, a shot of a group portrait of one company's staff zooms in until changing to the same staff sitting for a portrait at another company they've all defected to. The trailer for this film was a mockumentary about its production. This film popularized the (\*) "deep focus" technique, and it incorporates a newsreel entitled "News on the March" at its beginning. Use of extreme close-ups in this film include one of a snowglobe being dropped and the title character's lips as he says "Rosebud" before dying. For 10 points, name this movie directed by Orson Welles, which documents the rise and fall of the title newspaper mogul.**

ANSWER: Citizen Kane

20. A massive 1657 fire in this city was legendarily begun by a priest attempting to burn a cursed robe. The Akō incident in a namesake castle in this city began a legend involving forty-seven warriors, and the Boshin War culminated in the capture and (\*) renaming of this city. The Treaty of Amity and Commerce was signed on a ship in the bay of this city, and the capital of the Showa period was this city. The Tokugawa shogunate was also named after this city, and following the beginning of the Meiji Restoration, the capital was moved from Kyoto to this city. For 10 points, name this city that was known as Edo before taking its modern name as Japan's capital.

ANSWER: Tokyo (accept Edo before mention)

21. This author's last book contains poems about "Stages" and "Soap Bubbles" and ends with a story about Dasa killing his half-brother as one of a collected "Three Lives." In one of this author's books, the title character briefly works for the businessman (\*) Kamaswami and falls in love with the courtesan Kamala before meeting the ferryman Vasudeva. In another of his books, Pablo brings Harry Haller to the Magic Theatre after Harry reads the title treatise about an animalistic man. For 10 points, name this German author of the books *The Glass Bead Game*, *Siddhartha*, and *Steppenwolf*.

ANSWER: Hermann Hesse

## Bonuses

1. While leading an expedition up the Río de la Plata, this man faced a mutiny from his subordinates Martin Méndez and Miguel de Rodas, so he left them to die on an island. For 10 points each:

[10] Name this Italian-born explorer. He led several English attempts to find the Northwest Passage after accompanying an expedition led by his father John which discovered the North American mainland.

ANSWER: Sebastian Cabot (or Sebastiano Caboto; prompt on Cabot)

[10] Sebastian Cabot may have been the second explorer to accomplish this feat. The first instance of this travelling feat is usually credited to Ferdinand Magellan.

ANSWER: circumnavigating the world (accept word forms; accept synonyms for sailing around the world)

[10] Sebastian Cabot may also have discovered the entrance to a body of water named for this captain of the *Half-Moon*. A mutiny against this man led him to be cast adrift in that body of water, where he probably died.

ANSWER: Henry Hudson (accept Hudson Bay)

2. This author included a symbol from *Tristram Shandy* at the beginning of his book *The Wild Ass's Skin*. For 10 points each:

[10] Name this French author who included *The Wild Ass's Skin*, as well as *Old Goriot* and *Cousin Bette* in his extremely ambitious series *The Human Comedy*.

ANSWER: Honoré de Balzac

[10] Upon reading *The Wild Ass's Skin*, Eveline Hańska sent Balzac a letter signed with this name, leading to a correspondence and their eventual marriage. In an Albert Camus novel with this title, Meursault suffers an existential crisis before shooting the Arab.

ANSWER: “The Stranger” (or L'Étrangère; accept L'Étranger)

[10] In the book *S/Z*, Roland Barthes [“bart”] analyzed five codes used by Balzac in this novella. The title character of this novella falls in love with Zambinella before discovering she's actually a male castrato.

ANSWER: Sarrasine

3. The study of this subject is paired with rhetoric and grammar in the trivium of the liberal arts education. For 10 points each:

[10] Name this subfield of philosophy, the systematic study of arguments and their structures. Syllogisms are examples of arguments studied in this subject, as well as statements like “A implies B.”

ANSWER: logic

[10] This German philosopher founded analytic philosophy and tried to ground mathematics in logic with works like *Foundations of Arithmetic* and *Begriffsschrift*. In his namesake “Puzzle,” he contrasted calling a certain entity by the names of either Hesperus or Phosphorus.

ANSWER: Gottlob Frege

[10] This British logician continued Frege's project with his *Principia Mathematica*, in which he and Alfred North Whitehead proved that “ $1 + 1 = 2$ .” He also names a paradox in set theory.

ANSWER: Bertrand Russell

4. The largest ecoregion of this biome in the world is located in Siberia. For 10 points each:

[10] Name this largest land biome on Earth. It is dominated by coniferous forests, and the acidic and nutrient-poor soils of this biome are called spodosols.

ANSWER: **taiga** (or **boreal forest**)

[10] A better known biome is this extremely dry kind. The typical imagery of them is the hot and dry kind, though there are also coastal and cold varieties.

ANSWER: **desert**

[10] The climate of taigas is classified as Dfc, Dwc, and Dsc according to this climate classification system. Within this system, tropical climates fall under Group A, while dry climates fall under Group B.

ANSWER: **Köppen** climate classification

5. To avoid dying out, these people visited the all-male Gargareans. For 10 points each:

[10] Name these mythical Greek warrior women. In some accounts, they cut off their left breast to improve their skill with the bow and arrow.

ANSWER: **Amazons**

[10] This man briefly fought the Amazons when they tried to invade Lycia. In a far more notable tale, this man used Pegasus and a lead block on a spear to kill the Chimera.

ANSWER: **Bellerophon**

[10] Theseus once abducted this Amazon while Heracles tried to obtain the girdle of her sister. Theseus then had the child Hippolytus ["hip-POL-uh-tus"] with this woman, who later died during the Attic war.

ANSWER: **Antiope** ["an-TIE-uh-pee"]

6. This novel was written while its author was in Honduras on the run from Texas authorities trying to arrest him for embezzlement. For 10 points each:

[10] Name this collection of stories. It is set in the Republic of Anchuria, which served as the basis for the modern term "banana republic."

ANSWER: ***Cabbages and Kings***

[10] In this short story by the author of *Cabbages and Kings*, Jim sells his gold watch to buy a set of "combs," and Della sell her hair to buy a new watch chain.

ANSWER: **"The Gift of the Magi"**

[10] *Cabbages and Kings* and "The Gift of the Magi" are both works by this pseudonymous American writer fond of twist endings.

ANSWER: O. **Henry** (or William Sydney **Porter**)

7. For 10 points each, name the following things related to the deadliest animal in the world:

[10] First, name this animal whose bites result in the death of more than a million people every year. These blood-sucking pests carry diseases such as yellow fever, West Nile fever, and dengue.

ANSWER: **mosquitoes** (accept ***Culicidae***; accept specific species; *Writer's note: prompt on those annoying little @#\$% that bit me non-stop during my summer in New York*)

[10] Mosquitoes of the genus *Anopheles* transmit this protozoan disease caused by various *Plasmodium* species. Patients lacking the Duffy antigen on red blood cells are genetically resistant to this disease.

ANSWER: **malaria**

[10] Tu Youyou received the 2015 Nobel Prize in Physiology or Medicine for discovering this antimalarial drug that isn't quinine. This drug contains an endoperoxide bridge that researchers believe is essential for its mechanism.

ANSWER: **artemisinin**

8. In one work from this movement, the performer walks around an art gallery covered in honey and carrying the corpse of the title animal. For 10 points each:

[10] Name this avant-garde movement which created many “happenings,” such as Joseph Beuys’ *How to Explain Pictures to a Dead Hare*. Its manifesto was written by George Maciunas.

ANSWER: **Fluxus** (prompt on “Neo-Dada”)

[10] Beuys lived with a coyote for three days in a performance called *I Like [this country] and [this country] Likes Me*. 20<sup>th</sup> century artists from this nation included Robert Rauschenberg and Andy Warhol.

ANSWER: **United States** of **America** (accept either underlined part; accept **USA**)

[10] This Fluxus artist had audience members snip off her clothing in *Cut Piece*. An Annie Leibovitz photo shows her lying naked with her husband and was taken the day he was shot by Mark David Chapman.

ANSWER: Yoko **Ono** (do not accept or prompt on “Lennon”)

9. The agency that manages this lake came under fire in July 2016 for allowing algae-polluted discharges from it to flow into the St. Lucie River. For 10 points each:

[10] Name this expansive inland body of water situated near the Everglades, the largest freshwater lake in the state of Florida.

ANSWER: Lake **Okeechobee** (prompt on The **Big O**)

[10] The flora of Lake Okeechobee and the Everglades are dominated by this type of plant in the genus *Cladium*. They are the eponymous “grasses” in the Everglades’ nickname, the “River of Grass.”

ANSWER: **sawgrass** (or **fen-sedge**; or **twin-sedge**; prompt on **sedge**)

[10] Roughly 100 miles north of Lake Okeechobee lies this seat of Orange County. Attractions accessible in this city via International Drive include Universal Studios and SeaWorld.

ANSWER: **Orlando**

10. Name the following related to American female photographers, for 10 points each:

[10] One of Margaret Bourke-White’s most iconic photographs depicts this Indian independence leader reading next to his spinning wheel.

ANSWER: Mohandas (Karamchand) **Gandhi** (or Mahatma **Gandhi**)

[10] Dorothea Lange took this photograph of Florence Owens Thompson during the Great Depression. Lange incorrectly recalled that the subject of this photograph had sold her family’s tires for food.

ANSWER: **Migrant Mother**

[10] This photographer used prosthetics and mannequins to make her *Sex Pictures*, and she depicted herself in sixty-nine stereotypical film roles in the series *Untitled Film Stills*.

ANSWER: Cindy **Sherman**

11. Answer the following about hip-hop music made before y’all were born, for 10 points each:

[10] This West Coast artist of the album *All Eyez on Me* was killed in an unsolved 1996 drive-by shooting in Las Vegas, which some claim was orchestrated by his rival Notorious B.I.G.

ANSWER: **Tupac Shakur** (accept either underlined portion; or Lesane Parish **Crooks**; or **Makaveli**; or **2Pac**, if you can somehow tell the difference)

[10] This 1988 N.W.A. album kickstarted gangster rap with songs like “F--- the Police.” It was produced by Dr. Dre, and is named for a suburb of Los Angeles.

ANSWER: **Straight Outta Compton** (Ed’s note: good for you if you know the song’s real title, but regrettably this was written for high school)

[10] The term “hip-hop” was coined by Keith Cowboy, a member of this group that also included Melle Mel and The Kidd Creole. They pioneered socially-conscious hip-hop with songs like “The Message.”

ANSWER: **Grandmaster Flash and the Furious Five** (prompt on partial answer)



12. This religion celebrates April 21st as Grounation Day. For 10 points each:

[10] Name this religion. Its followers adhere to a natural diet meant to enhance their “livity” called *I-tal*, and they believe that Jesus Christ was reincarnated as Haile Selassie I.

ANSWER: **Rastafarianism** (or **Rasta**)

[10] Rastafarianism is particularly popular on this Caribbean island nation. Its neighborhood of Trench Town was home to Rastafari elder Mortimer Planno, who mentored a young Bob Marley.

ANSWER: **Jamaica**

[10] Some Rastafarians belong to these smaller sects whose name derives from John 14:2. Examples of these groups include the Niyabinghi, Bobo Ashanti, and one named for the Twelve Tribes of Israel.

ANSWER: **Mansions** of Rastafari

13. According to Wikipedia, this man recovered to become a successful moose hunter after having half of his face blown off by a bullet. For 10 points each:

[10] Name this marksman nicknamed “White Death” for his 505 confirmed sniper kills, the most in history.

ANSWER: Simo **Häyhä** (or Simuna **Häyhä**)

[10] Häyhä helped this country inflict massive casualties on the Soviets during the Winter War. This country then signed the Moscow Peace Treaty, but resumed fighting with the USSR in the Continuation War.

ANSWER: Republic of **Finland** (or **Suomi** or **Suomen** tasavalta)

[10] The Soviet Union was expelled from this organization for instigating the Winter War. It really didn’t matter, since this ineffectual organization would be replaced by the United Nations less than a decade later.

ANSWER: **League of Nations**

14. Apple just released another new Mac, and naturally you’re too poor to buy one, so instead you decide to build your own PC. For 10 points each:

[10] Not knowing much, you ask the store clerk where you can download some RAM. The clerk informs you that RAM is actually a physical component that holds the “Random Access [this].” There’s also a Read-Only component for this data storage medium.

ANSWER: **memory** (accept “Random Access **Memory**” or “Read-Only **Memory**”)

[10] Knowing a little more now, you learn you need one of these main components. These circuit boards are the foundation of the computer, and are connected to memory and the CPU.

ANSWER: **motherboard** (accept **mainboard** or **system board** or **logic board** or **mobo**)

[10] The motherboard is also attached to these components that allow the various PC components to talk to each other. In a computer, there are internal and expansion kinds, and USB is just an industry standard for these components.

ANSWER: **buses** (accept different kinds of **buses**; accept Universal Serial **Bus**, but not just, like “Serial”)

15. This piece was inspired by the composer hearing the sounds of his heartbeat and nervous system in an anechoic chamber. For 10 points each:

[10] Name this composition performable by any combination of instruments. At its premiere, David Tudor marked the beginning and end of movements by raising and lowering the lid of a piano, and it’s marked “Tacet.”

ANSWER: **4’33”** [“four minutes thirty-three seconds” or “four thirty-three”]

[10] The totally silent 4’33” is the most famous work by this modern American composer, who used the *I Ching* to write his *Music of Changes*.

ANSWER: John (Milton) **Cage**(, Jr.)

[10] Cage also wrote five pieces with this two-word name. The fourth of these pieces calls for 24 performers to adjust the dials on 12 radios.

ANSWER: **Imaginary Landscape** (accept the plural since it’s a set of multiple works, but note that each individual one is called *Imaginary Landscape No. whatever*, with no plural)

16. Answer the following about so-called “great” things in American history, for 10 points each:

[10] This president’s “Great Society” included initiatives such as Medicare and Medicaid, as well as a “War on Poverty.”

ANSWER: Lyndon B(a)ines **Johnson** (or **LBJ**; prompt on “Johnson”)

[10] The 1929 stock market crash and subsequent Great Depression led to the creation of shantytowns named after this president, who would be defeated by Franklin Roosevelt in the 1932 election.

ANSWER: Herbert (Clark) **Hoover** (accept **Hoover**ville)

[10] After the fall of Louisbourg during the French and Indian War, the Great Expulsion displaced more than 10,000 of these French-speaking people from Canada. Some moved to Louisiana, where they became known as Cajuns.

ANSWER: **Acadians**

17. The title character of one of this woman’s works grows up with a boy nicknamed “Baasie,” who later becomes angry with her for never learning his real name. For 10 points each:

[10] Name this author who wrote about Rosa and her Communist parents in *Burger’s Daughter*. The Smales are forced to take shelter in their servant’s village in her book *July’s People*.

ANSWER: Nadine **Gordimer**

[10] Gordimer wrote extensively about the effects of apartheid in this native country of hers.

ANSWER: Republic of **South Africa**

[10] André Brink and Breyten Breytenbach led this group of Afrikaans-speaking anti-apartheid writers. Their name comes from the Afrikaans for “Sixties,” the decade in which they were most active.

ANSWER: **Sestigers**

18. The constant-volume type of this device is also known as the “bomb” type. For 10 points each:

[10] Name these devices that measure the heat produced by chemical reactions. When using these devices, you typically take the temperature change and multiply by the specific heat and mass.

ANSWER: **calorimeters** (accept word forms)

[10] Isothermal titration calorimetry can be used in this branch of chemistry to determine the needed amounts of starting reagent to reach the midpoint. In general, this branch of chemistry uses chemical equations to find the proper ratios of start reactants to achieve desired product.

ANSWER: **stoichiometry** (accept word forms)

[10] In this variant of calorimetry, the heat capacity of a sample is measured as a function of temperature. The thermal transitions of a polymer can be determined using this technique.

ANSWER: **differential scanning** calorimetry (prompt on **DSC**)

19. A famous example of these infrastructure projects was swiftly replaced after its creator’s death by Antoninus Pius, who built a more northerly version. For 10 points each:

[10] Name these common fortifications. One of these was built in Britain to keep out barbarians such as the Picts and was named for Hadrian.

ANSWER: **walls** (or **vallum**)

[10] The Antonine Wall is sometimes misattributed to Septimius Severus, who won a power struggle in 193 called the “Year of [this many] Emperors.” Marcus Aurelius was the last of this many “Good” Roman emperors.

ANSWER: **five**

[10] Several centuries after Hadrian, this powerful Mercian king continued the fine tradition of English wall-building by constructing his namesake dyke near the present English-Welsh border.

ANSWER: **Offa** of Mercia

20. The title character of this novel is amazed by a skywriting plane before entering a flower shop, where she gets the bejeezus scared out of her by the sound of a backfiring car. For 10 points each:

[10] Name this novel, whose protagonist hosts a party at which she learns of the suicide of Septimus Smith. The first name of this book's title character is Clarissa.

ANSWER: Mrs. Dalloway

[10] *Mrs. Dalloway* is a work by this female British author of the feminist essay "A Room of One's Own." She also wrote the stream-of-consciousness heavy *To the Lighthouse*.

ANSWER: (Adeline) Virginia Woolf

[10] The gender-shifting protagonist of Woolf's novel *Orlando* was inspired by this friend and sometimes lover of hers, whose own literary feats include *The Edwardians* and *All Passion Spent*.

ANSWER: Vita Sackville-West (or Victoria Mary Sackville-West; or the Lady Nicholson)

21. All your wildest dreams have come true--you are now Hulagu Khan. Answer some questions about your exploits for 10 points each:

[10] In 1256, you conquer Alamut, a stronghold of this sect of hashish-using warriors who give their name to the modern word for politically motivated murders.

ANSWER: Assassins (prompt on Nizaris; prompt on Isma'ilis)

[10] You then go on to sack this city in 1258, an important center of Abbasid learning. Your destruction of the House of Wisdom in this city is said to have caused rivers to run black with ink.

ANSWER: Baghdad

[10] Unfortunately, you miss this 1260 battle because the death of your brother Mongke forces you to return to Mongolia. Your general Kitbuga gets crushed by Mamluks under Baibars here, halting Mongol expansion into Palestine.

ANSWER: Battle of Ain Jalut