

Tossups

1. **This book argues that because we exist as part of the past without being able to live in the past, Descartes' cogito should be re-worded as "I think, therefore I was." This book gives the example of confusing a mannequin for a real person as an example of a phenomenon that it argues is the origin of sexual desire. This book argues that emotional alienation results when one avoids experiencing one's own subjectivity by identifying with (*) "the look" of the other and introduces a term for adopting false values and disowning one's own authenticity. A consciousness conceived as a lack of being is described in this book as being-for-itself, which is contrasted with being-in-itself. For 10 points, name this book that introduced the concept of "bad faith," an existentialist tome by Jean-Paul Sartre.**

ANSWER: *Being and Nothingness: An Essay on Phenomenological Ontology* [or *L'Être et le néant: Essai d'ontologie phénoménologique*] <WA>

2. **During this event, Arlen Specter called the central figure biased for saying that not all constitutional concepts could evolve. The person at the centre of this event fumbled a question on his motivations by saying, "it would be an intellectual feast." *The Antitrust Paradox* was written by this event's central figure, who later wrote *Slouching Towards Gomorrah* and *The (*) Tempting of America*, the latter of which attacked Joe Biden's misrepresentations. The central figure of this event was criticized for firing Archibald Cox in the Saturday Night Massacre. Ted Kennedy said that "blacks would sit at segregated lunch counters" and "women would be forced into back-alley abortions" in this event's subject's America. For 10 points, name this series of 1987 Senate hearings that rejected a Reagan candidate for the Supreme Court.**

ANSWER: Robert Heron Bork confirmation hearings [or Bork confirmation; or Bork is borked; or the original borking; prompt on "borking"] <PL>

3. **This character accuses another of "conjuring the moon / to stand auspicious mistress" and wounds himself after hastily faking a duel. A character *based on this man* fled to Vancouver to avoid the Vietnam War; that character's return to Zebulon County is the cause for a pig roast at the beginning of a 1991 novel. This basis for Jess Clark in *A Thousand Acres* gives a letter revealing his father's knowledge of an imminent French invasion to the Duke of (*) Cornwall. The line "Thou, Nature, art my goddess" opens this character's most famous speech, which mocks the "Fine word- 'legitimate!'" and includes the questions "Wherefore base?" and "Why bastard?" In a fifth-act speech, he debates whether to ally himself with Regan or Goneril. For 10 points, name this illegitimate son of the Duke of Gloucester, who attempts to usurp the position of his brother Edgar in *King Lear*.**

ANSWER: Edmund <RC>

4. **One type of these cells form cobblestone areas when plated on a feeder layer, while another type can be sorted using the marker STRO-1 and is isolated from the stromal vascular fraction. Reynolds and Weiss isolated another population of these cells from the subventricular zone, which form a characteristic spherical shape in vitro. John Dick proposed a subpopulation of these cells that exist within tumors, which, if not killed, will lead to (*) recurrence of the tumor. One variety of these cells, whose subtypes include mesenchymal and hematopoietic, can be artificially created by transfecting Klf4 and Sox2. Another type can be isolated from the inner cell mass of a blastocyst. For 10 points, name this general category of undifferentiated cells, whose embryonic variety can be induced to differentiate into any cell type.**

ANSWER: stem cells [accept more specific answers such as "embryonic stem cells" as "ES" or "induced pluripotent stem cells" as "iPS cells"]

5. **According to Vasari, a depiction of this scene was deemed "most dishonest" because it had "so many nude figures dishonestly showing their shame" by Biagio da Cesena. Fra Angelico's depiction of this scene shows two blue-clad angels pointing down towards a white walkway where the lid of an open sarcophagus is broken. Daniele da Volterra was commissioned to paint *braghe* over (*) genitals in a different version of this scene, in which a depiction of St. Bartholomew holding a knife and his own flayed skin is believed to be a self-portrait. In that depiction of this scene, a pink-clad Madonna looks away from Christ, who raises his hand against men to his right who beg for mercy. For 10 points, name this scene depicted by Michelangelo on the altar wall of the Sistine Chapel, which shows the souls of humans being sent to their fates.**

ANSWER: *The* Last Judgment <WA>

6. A model of this quantity relies on setting up a correspondence between a “plus-type” and “minus-type” harmonic oscillator and calculating the eigenket. Chew and Frautschi showed that this quantity is equal to a constant times the squared-mass, with the constant identical between Regge trajectories. For a high-symmetry crystal, this quantity is decreased by the loss of symmetry in a given atom’s potential well in a process called quenching. The subscript of a term symbol is equal to this quantity for a given energy level. The three operators for this quantity cyclically anticommute, and its operator is equal to (*) negative $i\hbar$ times $\mathbf{r} \times \nabla$. Noether’s theorem states that the rotational symmetry of a system leads to the conservation of this quantity; that conservation explains why a skater spins faster when pulling their arms in. For 10 points, name this quantity, which in classical mechanics is equal to the product of angular velocity and the moment of inertia.

ANSWER: angular momentum [prompt on L; prompt on J; do not accept or prompt on just “momentum”]

7. This phenomenon titles a religious poem in trochaic meter traditionally attributed to the Franciscan, Thomas of Celano. The Parson from the Canterbury tales quotes “the Philosophre” to provide a definition of this sin. Phlegyas ferries two characters across a swampy Styx in which people guilty of this sin are being punished. The lines “full tears shall be the day/On which from ashes shall arise” are from the (*) *Lacrimosa* section of a hymn about this phenomenon. People guilty of this sin are punished along with the sullen in the fifth circle of hell in Dante’s *Inferno*. A hymn about the day of judgment titled for this phenomenon is set to music in Mozart’s *Requiem* mass. For 10 points, name this phenomenon after which the *Dies Irae* hymn is titled, the most violent of the seven deadly sins.

ANSWER: wrath [or obvious equivalents, such as anger or rage; or Ira until “Dies Irae” is read] <WA>

8. A group of people employed in this industry carried out the Awa’up Massacre. The yasak tax was largely paid using the fruits of this trade. Lodges called *zimovya* were built as centres of this trade that employed men called *Promyshlenniki*. The goods produced by this industry were often called “soft gold”. This non-salt industry increased the wealth of the Stroganov family when they used its economic potential to justify Yermak’s expedition. The maritime trade in this good frequently employed (*) Aleuts. Its supremacy in the world market was not challenged until the rise of North American corporations like the Northwest Company and the Hudson’s Bay Company. For 10 points, name this trade in which Alaskan and Siberian animals such as squirrels, sables, and sea otters were hunted for their pelts.

ANSWER: the fur trade in the Russian Empire [or Siberian/Russian Alaska/Maritime/North American fur trade] <PL>

9. A character in this story carries a leather folder containing pages covered in dense unreadable script that only he can touch. That character in this story complains of having lost access to a cash box after being forced to use a chain to replace a broken piece of leather. During a visit to a tea house in this story, a table is pushed aside to reveal a gravestone whose inscription prophesies the reconquest of the colony by the old (*) Commandant. The special cotton wool used to make a vibrating bed and a harrow-like arrangement of needles are described by the Officer in this story, who replaces the Condemned and dies as that machine creates the phrase “Be Just”. For 10 points, identify this story about a machine that carves sentences into condemned criminals, a work of Franz Kafka.

ANSWER: “In the Penal Colony” [or “In the Penal Settlement”; or “In der Strafkolonie”] <RC>

10. This composer quoted a “frenetic Balkan dance” called the “Siri Kolo” in the Rondo all’Ungherese movement of his eleventh keyboard concerto, in D major. A set of variations is introduced by solo cello and oboe an octave apart in the *Largo* second movement of one of this composer’s symphonies, which allegedly caused Brahms to exclaim “I want my Ninth Symphony to sound like this!” This composer’s librettist adapted a James Thomson collection for his oratorio *Die Jahreszeiten* (YAHR-eh-zeit-in), or *The Seasons*. Anthony van (*) Hoboken catalogued this composer’s works. A hint of the *Dies Irae* follows an unprecedented opening of an extended timpani roll in his penultimate symphony. The second movement of his most famous symphony lets its set of variations die to near silence before a sudden fortissimo chord is struck. For 10 points, name this German composer of the London symphonies, which include the *Surprise*.

ANSWER: Joseph Haydn [or Franz Joseph Haydn] <CV>

11. During their initiation to become *sangomas*, Zulu *twasas* must find a whole example these objects, which they keep in collections called *dingaka*. In a Biblical passage in which a lot of these objects are seen, a man is commanded to write “For Judah and his companions” on a stick. They’re not pottery, but these objects are frequently found at the bottom of *cenotes* believed to have been used for religious purposes. When not shown as a dog, the (*) Aztec god Xolotl was typically depicted as consisting entirely of these objects, which were burned in order to reveal cracks for divination purposes in Shang-era China. A popular spiritual exclaiming “gonna walk around” was inspired by the discovery of a number of dry examples of these objects in a valley by Ezekiel. For 10 points, name these objects frequently found in catacombs and reliquaries.

ANSWER: bones [accept skeletons after “Biblical”] <WA>

12. An ensemble learning approach to finding these things relies on running the LOF algorithm repeatedly and is a form of “feature bagging”. The RANSAC method can be used in the presence of large numbers of these things. Grubbs method for finding them relies on a test statistic consisting of the max residual over the standard deviation. Winsorization is one method of dealing with these values, which are also the motivation behind the development of so-called (*) “robust” methods. The existence of a large number of these entities assuming a normal prior may indicate a high kurtosis in the underlying distribution. These things are generally plotted above or below the “whiskers” in a box-and-whisker plot and are usually one point five times the interquartile range beyond the upper or lower quartile. For 10 points, name these points in a data set which do not fit within the presumed distribution.

ANSWER: outliers

13. The “primary cardinal” and “secondary cardinal” types of these things are delineated in an introductory textbook by UCLA professor Peter Ladefoged. Some of these things display the phenomenon of *pluti* in late Vedic Sanskrit. Using a program such as Praat, these things can almost always be uniquely identified by measurements of their F1 and F2 formants. These things make up the nucleus in the vast majority of onset-nucleus-(*) coda triads. Korean classifies these entities as positive, negative, and neutral, which is relevant to how these things assimilate in a namesake “harmony” in that language. English allows words to end with tense, but not lax, sounds of this type, and in general their features include backness, roundness, and height. For 10 points, name these sonorant language sounds usually contrasted with consonants.

ANSWER: vowels <SJ/MJ>

14. Before the Late Republic, a position with this name physically distributed soldiers’ pay and if negligent, was the target of *pignoris captio* lawsuits. An unknown commander holding a position with this name redeployed troops to prevent a rout at Cynoscephalae. In 57 BCE, one holder of this office used his influence to recall Cicero from exile; that holder of this office was Titus Annius Milo. During the Conflict of the (*) Orders, an office of this name “with consular power” was created. The holders of this office were sacrosanct and its namesake *potestas* to use the *intercessio* was granted to Augustus, and all subsequent emperors. The populist reforms of Saturninus, Publius Clodius Pulcher, and the Gracchi were made from this office. For 10 points, name this Roman office with veto power that represented plebs.

ANSWER: Tribune of the Plebs/People/Plebeians [or Tribunus plebis; or Tribunes of the Treasure; or Military Tribunes; or Tribuni Aerarii; or Tribuni Militum] <PL>

15. Faulty examination responses regarding a play by this author inspired an essay on misunderstanding that play by E.R. Dodds. In one of this author’s plays, a messenger reveals the motivations behind another character’s assault on Oechalia, contradicting the report of the herald Lichas. At the end of that play by this man, Hyllas is ordered to marry Iole at the end of that play by a dying Heracles, who was accidentally poisoned by Deianeira. This author of (*) *Women of Trachis* wrote a play that opens with the return of an embassy to the Oracle of Delphi regarding a plague. That play’s protagonist berates Tiresias for refusing to speak, and later learns that he was abandoned on Mount Cithaeron, prompting him to blind himself on learning of his true relation to Laius and Jocasta. For 10 points, name this Greek tragedian whose three “Theban plays” include *Antigone* and *Oedipus Rex*.

ANSWER: Sophocles <RC>

16. A song written by this man had lyrics like “Haven’t got the heart to stand those memories” and “Let the angels sing / for your returning” added to it by Bernie Hanighen. An album recorded by a group led by this man features a memorable Johnny Griffin improvisation on the track “In Walked Bud”. He played celesta on a song named for the Baroness Pannonica de Koenigswarter that appears on the same album as a song he co-wrote with Denzil Best called (*) “Bemsha Swing”. Groups led by this man recorded the albums *Misterioso* and *Brilliant Corners*, while his *Genius of Modern Music* series included recordings of “Epistrophy” and “Well, You Needn’t”. His highly percussive playing style was mocked by Philip Larkin, who called him an “elephant on the keyboard”. For 10 points, name this jazz pianist of “Straight No Chaser” and the most recorded jazz standard ever, “Round Midnight.”

ANSWER: Thelonious Sphere Monk <RC>

17. This poet asserted that “Truth, crushed to earth, shall rise again” in his poem “The Battle-field”. He is referred to as a “smooth, silent iceberg” who “stands in supreme ice-olation” in Lowell’s *A Fable for Critics*. This author expressed a wish that “Hope, blossoming within my heart, may look to heaven as I depart” in a poem addressed to a “blossom bright with autumn dew”. He tells the addressee of another poem “Thou’rt gone, the abyss of heaven / Hath swallowed up thy form” and asks that figure “dost thou pursue / Thy (*) solitary way?” This author of “To the Fringed Gentian” is most famous for a poem that describes “hills / Rock-ribbed and ancient as the sun” and advises the reader to “go not like the quarry-slave at night” when it comes time to join the “innumerable caravan” and “mix forever with the elements”. For 10 points, name this American poet of “To a Waterfowl” and “Thanatopsis”.

ANSWER: William Cullen Bryant <RC>

18. Two equivalents of sodium chloride is added to one equivalent of this substance in the Mannheim process. The analyte is reacted with this substance in the first step of a method used to determine the amount of nitrogen in a substance; that is the Kjeldahl method. This substance is about 18 molar at 98% purity, and the 100% pure form of this substance has a Hammett function of negative 12. Vanadium oxide pellets are used as a (*) catalyst for the production of this substance in the contact process, and it’s not nitric acid but this substance is used as a proton donor in the first step of arene nitration. The fuming form of this substance is commonly referred to as oleum. For 10 points, name this strong acid commonly found in lead-based batteries, with formula H₂SO₄.

ANSWER: sulfuric acid [or oil of vitriol]

19. This deity took a long rope, dipped it in mud, and flung the mud in all directions to speed up the completion of one task. As part of another task, this deity took several rocks of different colors from a river and reshaped them. This goddess is frequently depicted entwined with her consort, who is credited with inventing fishing and trapping. After a water god angrily smashed his head against a mountain, this goddess cut off the legs of a giant tortoise to use as a new pillar to hold up the (*) wall of heaven before using her serpentine body to block the resulting flood. When this wife of the first of the Three Sovereigns was lonely, she created animals for six days before using yellow clay to craft humanity on the seventh. This daughter of the Jade Emperor is married to her brother, Fu Xi. For 10 points, name this Chinese creator goddess.

ANSWER: Nuwa [or Nu Gua; or Nyuwa; or similar Chinese variants] <WA>

20. The four special electorates temporarily awarded to people of this ethnic group in 1867 were indefinitely extended in 1876, and were increased in 1996 after the report of the Royal Commission on the Electoral System that established MMP. These people’s traditional meetinghouses are called wharenuī, and they treasure pounamu greenstones. These people launched a namesake “king movement” in (*) Waikato and are recognized as Tangata whenua. They are the second largest ethnic group in their country after the Pakeha. Captain Hobson got many chiefs of this ethnicity to sign a treaty that reaffirmed their territorial rights in exchange for acknowledging British overlordship; that treaty was the 1840 Treaty of Waitangi. For 10 points, name this indigenous ethnic group of New Zealand.

ANSWER: Māori [or Tangata whenua before it is read] <PL>

Bonuses

1. The earliest known marketing pun was found in a wine advertisement discovered in this city. For ten points each:

[10] Name this city, home to the Villa of the Mysteries, which was uncovered by Rocque Joaquin de Alcubierre. It, along with Herculaneum, suffered from a rather unfortunate natural disaster on August 24th.

ANSWER: Pompeii

[10] This was the largest and richest house in Pompeii, probably owned by the rich Satria family. It is named for the statue standing in its rainwater basin, and it features the Alexander Mosaic, depicting the Battle of Issus.

ANSWER: House of the Faun

[10] The House of the Faun featured two of these rooms, one decorated with a mosaic of a boy riding a panther and the other with an aquatic theme. These rooms were Roman dining rooms named after the arrangement of their couches.

ANSWER: triclinium [or triclinia; do not accept “triclinius”] <JC>

2. The title character of this poem barely escapes over the River Doon as his pursuers, who he'd angered by shouting “Weel done, cutty-sark!”, pull off his horse Meg’s tail. For 10 points each:

[10] Identify this poem about a man who gets drunk and interrupts a witches’ sabbath at Alloway kirk. It also lends its name to a type of round cap.

ANSWER: “Tam o’ Shanter”

[10] “Tam o’ Shanter” was written by this poet of “A Red, Red Rose” and “Auld Lang Syne”, the national poet of Scotland.

ANSWER: Robert Burns [or Rabbie Burns; or Robden of Solway Firth]

[10] Burns laments “Oh, would some Power the giftie gie us, to see ourselves as others see us” in this poem, which describes a “crowlin ferlie” the speaker sees in a lady’s bonnet.

ANSWER: “To a Louse” [do not accept “To a Mouse”] <RC>

3. These people believe in a kind “Black God” and a vengeful “Red God”, who are two aspects of the same figure, and their priests are called laibon. For 10 points each:

[10] Name this Nilotic ethnic group which lives in southern Kenya and northern Tanzania. Young male warriors among this ethnic group undergo a painful circumcision ceremony as a right of passage.

ANSWER: Maasai

[10] The Maasai herd and consume this animal, which were often killed by rinderpest. Marvin Harris titled a work after this animal, pigs, witches, and wars, and they are often held sacred in India and allowed to roam freely.

ANSWER: cow [or bull or ox]

[10] This sociologist wrote about the “cattle complex” in East Africa in one series of articles. He also wrote about how slaves did not completely lose their African culture in his “The Myth of the Negro Past”.

ANSWER: Melville Jean Herskovits

Note to moderator: do not read the alternate answers to the first part.

4. This king regained the Isle of Man and the Hebrides from Norway after winning the Battle of Largs. For 10 points each:

[10] Name this king who died in 1286 when he rode his horse off a cliff while traveling at night for the birthday of his second wife, Yolande de Dreux. His only surviving heir was Margaret, Maid of Norway.

ANSWER: Alexander III [or Alexander III of Scotland; prompt on “Alexander”]

[10] Margaret’s death in 1290 plunged this kingdom into an interregnum. Alexander III’s death ended this kingdom’s ruling House of Dunkeld that included rulers such as Duncan, Malcolm III, and Macbeth.

ANSWER: Kingdom of Scotland [or Alba]

[10] At the 1290 Great Cause, Edward I passed over Robert Bruce to give Scotland to this ruler known as Toom Tabard after his loss at Dunbar. His son Edward was briefly restored after the battle of Halidon Hill.

ANSWER: John Balliol [prompt on “John”] <PL>

5. This pathway has been adapted for gene editing by adding Cas9 and a guide RNA targeting a particular locus. For 10 points each:

[10] Name this pathway that uses trans-activating crRNA to fight off foreign bacteriophages. It constitutes a form of adaptive immunity in bacteria.

ANSWER: **CRISPR** [or **clustered regularly interspaced short palindromic repeats**]

[10] CRISPR is analogous to this pathway in eukaryotic cells, which uses siRNA or microRNA to knock down gene expression. This pathway uses the DICER nuclease to create small RNAs, which are loaded into the RISC complex.

ANSWER: **RNA interference** [or **RNAi**]

[10] RNA interference occurs after this process, in which DNA is read by RNA polymerase to create mRNA. Promoters are responsible for activating this process, which can be modulated by enhancers.

ANSWER: **transcription**

6. This word is believed to have originated with Tungusic peoples, though other theories connect it with an older Sanskrit term. For 10 points each:

[10] Give this term for holy men who are regarded as having the ability to access and transcend the spirit world through altered states of consciousness.

ANSWER: **shamans**

[10] In this shamanistic rite of passage common among the Sioux tribes, a person spends several days isolated in the wilderness in an attempt to achieve a deeper connection with the world. It is often paired with fasting.

ANSWER: **vision quest** [accept **Hemleciya** or its translation close to “**Crying for a Dream**”]

[10] Before going on a vision quest, a youth among the Lakota spends time in one of these buildings to be purified. After the Reformation, a Finnish building of this kind began to become popular in mainland Europe.

ANSWER: **sauna** [or **sweat lodge**; or **vapor bath**; or **sweat bath**; or obvious equivalents that mention **sweating**] <WA>

7. The Maxwell-Wagner-Sillars version of this quantity arises due to charge buildup on interfaces. For 10 points each:

[10] Name this property of a bulk material, the separation of positive and negative charges. This term also refers to the direction of the electric field of propagating light wave, which can take linear, circular, or elliptical orientations.

ANSWER: **polarization** [or word forms]

[10] The negative divergence of the polarization vector is equal to the density of this kind of charge. The density of this kind of charge can be found by subtracting the free charge from the total charge.

ANSWER: **bound** charge density [do NOT accept other answers]

[10] These materials have a spontaneous electric polarization in the absence of an external field. Applying an electric field to these materials creates a hysteresis loop.

ANSWER: **ferroelectric** materials

8. This character, who claims to embody a so-called “Demon of Experiment”, is accused of offering a hundred lire in a “pale blue envelope” to a child of his wife and his clerk. For 10 points each:

[10] Identify this character, who hangs up hats and cloaks in order to summon Madame Pace and is accused by the Stepdaughter of trying to sleep with her, in a 1921 play.

ANSWER: the **Father**

[10] The Father leads a group who interrupt a rehearsal of *Mixing it Up* and request that their story be told in *Six Characters in Search of an Author*, a play by this Italian absurdist.

ANSWER: Luigi **Pirandello**

[10] *Six Characters*, *Each in His Own Way*, and this other play make up Pirandello’s trilogy of metatheater. In this play, a group of actors directed by Doctor Hinkfuss attempt to put on a production of Pirandello’s *Leonora, Addio!*

ANSWER: **Tonight We Improvise** [or **Questa sera si recita a soggetto**] <RC>

9. The first entry in a series depicting this road shows the Nihonbashi, or “Bridge of Japan.” For 10 points each:

[10] Name this road, whose numerous stations were depicted in a series by Ando Hiroshige that shows scenes from travelling to the imperial capital.

ANSWER: **Tokaido** road [or *Fifty Three Stations of the Tokaido Road*; or **Tokaido Gojusan-tsugi**]

[10] This iconic Japanese mountain was shown in a series of thirty-six views of it by Katsushika Hokusai which includes a depiction of a massive wave off Kanagawa.

ANSWER: Mount **Fuji** [or **Fuji-san**]

[10] Japanese *ukiyo-e* painting partly inspired this John Whistler painting, which hangs above the fireplace in the Peacock Room in the Freer Gallery at the Smithsonian. It shows a Western woman in a kimono holding a white fan.

ANSWER: *Rose and Silver: The Princess from the Land of Porcelain* [or *La princesse du pays de la porcelaine*] <WA>

Note to moderator: do not read the alternate answers to the first part.

10. This title was officially recognized in 1867 when Ismail Pasha held it during the reign of Abdulaziz. For 10 points each:
[10] Name this hereditary viceroy position in the Ottoman Empire that had earlier been unofficially used by the instigator of the 1840 Oriental Crisis.

ANSWER: Khedive [or Hidiv; or Khedive of Egypt and Sudan]

[10] This ruler sought hereditary title of khedive by invading Syria. This Albanian mercenary and Ottoman vassal had earlier consolidated his rule by massacring the Mamelukes in the Citadel.

ANSWER: Muhammad Ali Pasha [or Mehmet Ali Pasha]

[10] Muhammad Ali seized control of this country from the Mameluke ruling class. The Mamelukes used to rule a sultanate here and had been defeated by Napoleon at the Battle of the Pyramids.

ANSWER: Egypt <PL>

11. One of these animals is thought to be constantly making *mochi* while it lives on the moon. For 10 points each:

[10] Name these animals, one of which was from Inaba was aided by Ōkuninushi.

ANSWER: rabbits [or hares; or wabbits; or bunnies; or lagomorphs]

[10] Ōkuninushi ruled this region until he was replaced by Ninigi, after which he was made the ruler of the unseen world. This region contains the entrance to Yomi, which Izanagi sealed with a boulder.

ANSWER: Izumo Province [or Izumo no kuni; or Unshū]

[10] Izumo also contains the Awa no Iwato, the heavenly cave in which this sun deity hid from her brother Susano'o until she saw her own beautiful reflection in a mirror placed on a tree.

ANSWER: Amaterasu ōmikami [or Ōhirume no muchi no kami; if someone wants to give a translation, her name means Great August Kami who Shines in Heaven or something along those lines] <WA>

12. One country's failed attempt to act as a mediator in this was the Buol Note. For 10 points each:

[10] Name this war in which Austrian neutrality fulfilled an early promise to "shock the world by the depth of its ingratitude." It was ended during the Congress of Paris three years after a Catholic-Orthodox monk's quarrel in the Holy War ignited it.

ANSWER: Crimean War

[10] This was the statesman who said that Austria would be ungrateful to her Russian ally. He was known as the "Austrian Bismarck" and succeeded Metternich as Foreign Minister and Minister-President.

ANSWER: Prince Felix of Schwarzenberg [or Felix, Prinz zu Schwarzenberg]

[10] Schwarzenberg correctly predicted that Austria would be ungrateful to Russia for Tsar Nicholas I's aid in putting down Lajos Kossuth's Hungarian rebels in this year, which saw nationalist uprisings across Europe.

ANSWER: 1848 [prompt on "Spring of Nations", "Year of Revolution", "Springtime of the Peoples", etc.] <PL>

13. The formation of these weather systems is heavily influenced by the Madden-Julian oscillation. For 10 points each:

[10] Name these weather systems singularly associated with lightning and cumulonimbus clouds.

ANSWER: thunderstorms [or electrical storm; or thundershower; prompt on storms]

[10] This thunderstorm formation generally forms along a cold front because the cold front lifts air ahead of it, which rises unaided to the point where condensation occurs. These mesoscale formations can produce downdrafts more than 4 kilometers in extent.

ANSWER: squall line [or multicell line storm; prompt on multicell storm, mesoscale convective system, or MSC]

[10] Squall lines can also form along this type of boundary, which separates air masses with a significant difference in moisture. A sharp change in dew point temperature occurs across it, and one example occurs just east of the Rockies.

ANSWER: dry lines [prompt on dew point line, dew point front, or Marfa front]

14. The first of these people, Alfred Birnbaum, initially created teaching editions for Kodansha, while another of them, Jay Rubin, wrote a 2002 book on a certain author "and the Music of Words". For 10 points each:

[10] Identify this group of people whose common task was most recently carried out by Philip Gabriel, resulting in the 2014 Knopf publication of *Colorless Tsukuru Tazaki and His Years of Pilgrimage*.

ANSWER: English translators of Haruki Murakami [or obvious equivalents]

[10] Gabriel won the 2006 PEN Translation Prize for his English edition of this Murakami novel, whose chapters alternate between the perspectives of the lost cat-hunter Nakata and the title character, a 15-year-old runaway.

ANSWER: Kafka on the Shore [or Umibe no Kafuka]

[10] Gabriel also translated *Somersault*, a novel by this second-ever Japanese lit Nobel laureate. Many of his novels, including *A Personal Matter* and *The Silent Cry*, include fictional portrayals of his own handicapped son Hikari.

ANSWER: Kenzaburo Oe [accept names in either order] <RC>

15. Alvin Plantinga argued that this idea was absurd, since it is always possible to imagine the existence of one more righteous person. For 10 points each:

[10] Describe this philosophical idea about the way in which God chose to make the cosmos. Originally formulated as part of a solution to the problem of evil, it relies on the principle of sufficient reason.

ANSWER: we live in the **best of all possible worlds** [or obvious equivalents containing the phrase **best of all possible worlds**; or we live in the **optimal** possible world; or **optimism**]

[10] This optimistic philosopher proposed that we live in the “best of all possible worlds” in his *Théodicée*, which coined the term *theodicy* for attempts to answer the problem of evil.

ANSWER: Gottfried Wilhelm **Leibniz**

[10] Leibniz’ theodicy, which states that God created an imperfect world because it allows humans to improve through comparison with true good, is often categorized as a type of theodicy named for this saint. This early Christian philosopher attacked Gnosticism in *Against Heresies*.

ANSWER: Saint **Irenaeus** <WA>

16. According to the frame story of the novel, this character is married to a woman named Genevieve Whitney, suggesting a final abandonment of his on-and-off love for Lena Lingard. For 10 points each:

[10] Name this character who studies under Gaston Cleric at Harvard after growing up with his grandparents in Black Hawk, Nebraska.

ANSWER: **Jim** Burden [or Jim **Burden**; or **James** Quayle Burden; or James Quayle **Burden**]

[10] Jim Burden is the narrator of *My Ántonia*, a novel by this author of *The Song of the Lark* and *O Pioneers!*

ANSWER: Willa Sibert **Cather**

[10] Like Lena, this character is one of the hired girls who eventually succeeds in defying traditional gender roles. This character works at the Boys’ Home Hotel, then makes a fortune in the Yukon gold rush.

ANSWER: **Tiny** Soderball [or Tiny **Soderball**] <RC>

17. Most of the instruments in this ensemble, such as the *gendèr* (pronounce with a hard g) and the metallophone-like *saron*, are tuned in either the 5-note *slendro* scale or the 7-note *pelog* scale and hit with mallets. For 10 points each:

[10] Name this type of percussion ensemble from Java and Bali, which ethnomusicologists everywhere utterly adore. It often accompanies traditional puppet theater.

ANSWER: **gamelan**

[10] An large bronze one of these Asian percussion instruments is hit at the end of a gamelan music section. The tam-tam is a Western variant of this instrument which, unlike a cymbal, is hung from its edge to resound more.

ANSWER: **gongs** [or **gong** ageng]

[10] Steve Reich’s time studying gamelan in Seattle helped inspire this piece, whose title ensemble plays a cycle of 11 chords over and over, sometimes on instruments with gamelan analogues such as the metallophone and marimba.

ANSWER: **Music for 18 Musicians** <MJ>

18. This term titles a play in which David Quixano falls for Vera even though Vera’s dad ordered a pogrom killing David’s family back over in Russia, by Israel Zangwill. For 10 points each:

[10] Name this two-word term, described in that play as the tool God uses to make Americans out of the immigrant races of Europe. Since then, this metaphor has been described as less apt than a “cultural mosaic” or “salad bowl.”

ANSWER: **melting pot** [or *The Melting-Pot*]

[10] This approach, in which immigrant traditions are welcomed as additions to a diverse society that need not assimilate, opposes the melting pot metaphor. In the early 2010s, Angela Merkel and David Cameron each deemed this policy a “failed” one.

ANSWER: **multiculturalism** [or **multi-culti**; prompt on “pluralism,” “diversity,” etc. since both Merkel and Cameron used this specific term]

[10] This section of the 1982 Constitution Act officially enshrines protection of Canada’s “multicultural heritage” as state policy in Section 27.

ANSWER: Canadian **Charter of Rights and Freedoms** [prompt on “Charter”] <PL>

19. This value is proportional to an exponential of the transition state according to the Arrhenius equation. For 10 points each:

[10] Name this constant for a reaction, symbolized with a lowercase k, which is multiplied by some polynomial of the reactant concentrations to give the speed of a reaction.

ANSWER: rate constant

[10] In the Arrhenius equation, this value is usually symbolized A. This value is equal to the steric factor times the collision frequency in one formulation.

ANSWER: pre-exponential factor

[10] Rate constants for processes like protein folding can be measured using this apparatus, in which two syringes inject reactants into a mixing chamber before being stopped by a piston. They have a dead time of less than two milliseconds.

ANSWER: stopped-flow apparatus [or quenched flow apparatus]

20. A pre-Columbian culture named for this river traded its distinctive shell-tempered pottery as far away from it as Etowah, Georgia, and built the Monks' Mound earthwork at the Cahokia site around 1000 CE. For 10 points each:

[10] Identify this river, which was the US's western border prior to the Louisiana Purchase and then became the eastern border of the Louisiana Purchase.

ANSWER: Mississippi River [or Mississippian culture]

[10] This Spanish explorer, the first European to cross the Mississippi river, saw living descendants of the Mississippian culture as he met the Natchez tribes in what's now the Deep South of the US.

ANSWER: Hernando de Soto

[10] The Mississippian culture grew a triad of crops that were dubbed the "Three Sisters" or "Holy Trinity" of Indian agriculture because they helped each other grow and provided all twenty standard amino acids. Name all three.

ANSWER: corn, beans, and squash [accept in any order] <MJ>