

1. The most common type of these show a "root three by root three R 30 degrees" structure with a tilt angle of twenty eight degrees. A recent AFM study showed the possibility of a Langmuir-like film at the substrate-solution interface in these systems. They are not surfactants, but these entities can be used to control wetting properties as they allow for contact angle variance with respect to concentration. One example of these systems is porphyrin on highly oriented pyrolitic graphite. The most popular system of this type consists of n-alkanethiols adsorbed to Gold 1-1-1. For 10 points, name these ordered molecular assemblies on the surface of a solid that are able to spontaneously form into superstructures.
ANSWER: self-assembled monolayer [or SAM; accept word-forms for "assembled"]
2. A group by this name poured blood on documents at a General Motors weapon plant in King of Prussia, Pennsylvania. That group was founded by one of the Catonsville Nine, Daniel Berrigan, and is a Catholic anti-war "Movement." An operation by this name included an attempt to free natural gas in New Mexico, the Gasbuggy test, and an unrealized plan to create an artificial harbor in Alaska, Project Chariot. In addition to naming an operation that sought to use nuclear bombs for construction projects, these objects are referenced in Dwight Eisenhower's farewell address, which claimed that "American makers of" these objects could once transform them "with time and as required." For 10 points, name these farm tools often used as a metaphor for peaceful use of weapons thanks to a Biblical pairing with "swords." ANSWER: Plowshares [prompt on plows]
3. One reaction of this type uses either samarium iodide or a sodium amalgam to achieve its final reduction step. Keck et. al demonstrated that when that reaction is run in MeOD, only the sodium amalgam could incorporate deuterium into the product. Its not methylenation, but one compound used in this type of reaction can be formed by reacting trimethyl aluminum with titanocene dichloride. A different reaction of this type has a beta-hydroxy silane intermediate. Bulky silyl groups favour the erythro isomer in that reaction which is named for Peterson. The most famous reaction of this type reacts an aldehyde with a sulfone under basic conditions to generate the desired product. For 10 points, name this type of reaction that forms an alkene, an example of which is named for Julia.
ANSWER: olefination [accept Julia olefination; accept Peterson olefination; do not accept "olefin metathesis"]
4. On the sixth track on this album, a duet with Ruby Amanfu, one person says that the title action "rolls you over" and begins with the line "you drink water, I drink gasoline." In the best song on this album, the singer says that he is "becoming a ghost so that nobody can know me". That song is called "Alone in my Home." The liner notes to this album thank Miguel Cabrera and Max Scherzer, and the title track on this album the signer notes that he is "so Detroit I make it rise from the ashes." The "ultra" version of this recent album sold 40,000 vinyl copies in its debut week, making it the highest selling vinyl album since at least 1991. This album is a follow-up to 2012's Blunderbuss, and it's latest album from a guy who used to be in a band with his wife Meg. For ten points, name this latest release of former White Stripes member Jack White.
ANSWER: Lazaretto
5. This book criticizes the Peripatetic school for "affected obscurity" in muddying the ordinary meanings of words in its chapter "On the Abuse of Words." This book discusses a problem posed by William Molyneux about whether a blind man given the ability to see could distinguish objects on sight. It contends that species and genus terms refer to nominal rather than real essences. It uses the story of "The Prince and the Cobbler" to illustrate a view of personal identity as unity of consciousness. This book argues that complex ideas, like modes and relations, are built out of simple ideas, and it uses light falling on porphyry to illustrate the distinction between primary and secondary qualities. A chapter-by-chapter refutation of it by Gottfried Leibniz represents this work's author as Theophilus. For 10 points, name this 1689 work by John Locke which rejects innate ideas and posits that the human mind at birth is a tabula rasa.
ANSWER: An Essay Concerning Human Understanding
6. This author wrote about both Therese of Lisieux and Teresa of Avila in the double biography The Eagle and the Dove. Her most popular biography was of her grandmother, a Spanish-born dancer, and was entitled Pepita. This author wrote a novel in which an attempt to have an affair with Teresa Spedding fails after the explorer Leonard Anqetil tries to convince the paramour of Sylvia Roehampton to renounce the estate of Chevron. The elderly Lady Slane attempts to take advantage of the death of her husband in another novel by this author, which is titled for the last words of Samson Agonistes. This author's long pursuit by Violet Trefusis and open marriage to Harold Nicolson were well-known after her son's biography of her, Portrait of a Marriage. For 10 points, name this author of The Edwardians and All Passion Spent, whose lesbian adventures inspired her lover Virginia Woolf to create the character of Orlando.
ANSWER: Vita Sackville-West
7. Officials in this city lit a fuse connected to a box to determine the "fuse cord price" of goods. An early form of futures trading was developed in this city for its main crop and the Shinmachi district was known as this city's pleasure quarter for its large quantities of prostitutes. The location of the Dojima Exchange, the Genna Armistice was declared after one campaign fought in this city. The Battle of Tennoji was fought during that campaign, in which legendary warrior Sanada Yukimura was killed. During that campaign, Toyotomi Hideyori was defeated and committed sepuku to end opposition to the Tokugawa Shogunate. For ten points, name this city, whose namesake castle was sieged and destroyed by Tokugawa Ieyasu, a large city in Japan.
ANSWER: Osaka, Japan
8. The oboe excerpts the song "Schlaf, Kindlein, Schlaf" in a piece named for this man. A motif consisting of successive descending fourths represents this character's joy of life. After tasting dragon's blood, he gains the ability to understand birds. That blood came from Fafner, whom this character drew out of his cave with a horn call. After Mime realizes that this character knows no fear, this character sings "Nothung! Nothung! Niedliches Schwert!" while forging the broken pieces of Nothung, which he uses to break Wotan's spear. He is the namesake of an idyll the composer wrote for his wife Cosima. This character uses the Tarnhelm to disguise himself as Gunther and win Brünnhilde as Gunther's wife, after having earlier crossed Loge's magic fire to win Brünnhilde's love. For 10 points, name this son of Sieglinde and Siegmund, the namesake of the third opera in Wagner's Ring Cycle.
ANSWER: Siegfried
237-14-67-08108
9. This novel includes a dog who has to fight other dogs because he can't wave his tail. In this novel, some servants learn to imitate the calls of "birds of the British empire" that their boss practices. After asking "what kind of man would turn his daughter into an outboard motor," a painter in this novel claims that he depicts "unwavering bands of light" in his art. This novel often mentions the lengths and widths of its male characters' penises. The author of this novel appears as a man wearing sunglasses in a cocktail lounge who escapes a Doberman and frees one of his characters in its epilogue. The main character of this novel attacks his piano-playing, gay son after speed-reading a book which claims that everyone but him are robots. For 10 points, name this Kurt Vonnegut novel set in Midland city that features Kilgore Trout and car salesman Dwayne Hoover.
ANSWER: Breakfast of Champions, or Goodbye Blue Monday
252-14-67-08109
10. After serving a prison term for bank robbery, this man wrote the poem "I Never Saw [My Nation's Capital] When Miniskirts Were In Fashion". This politician, who may have sexually abused his stepdaughter Zoilamerica Narvaez, granted extensive land rights to a Chinese businessman named Wang Jing for a project denounced by his one-time vice president, Sergio Ramirez. He lost a 1996 election to Arnoldo Aleman. A massive land redistribution plan passed in the final days of his first term in office, dubbed la pinata, left his successor, Violeta Chamorro, with just $\$ 3.2$ million left in the treasury. This canal-building advocate first took office in 1985 and faced off against forces funded in violation of the Boland Amendment by Oliver North. For 10 points, name this former Sandinista and current President of Nicaragua.
ANSWER: Daniel Ortega [or José Daniel Ortega Saavedra]
11. In this play, a girl takes an offhand comment about taking a trip to Paris seriously and begins to study French. A character in this play claims to have never encountered immorality in his artistic circles and remembers being given a pipe and told to "Smoke away, boy!" At the end of this play, the main character tonelessly repeats "The sun. The sun." A plan to build a Sailor's Home is discussed in this play, in which a character argues against buying insurance because of "Higher Providence." In this play, a used candle wick is thrown in some wood shavings, causing a fire that burns down a newly-constructed orphanage. This play's characters include Pastor Manders and a girl who believes Jacob Engstrand is her father, Regina. For 10 points, name this Henrik Ibsen play in which Oswald Alving inherits syphilis from his father. ANSWER: Ghosts [or Gengangere]
12. A character in this play expresses her frustrations with her son by exclaiming, "Men! Men! Men!" Clara makes cutting remarks in this play after reading social criticism by H.G. Wells. In the second act of this play, Alfred is prevented from striking his daughter by a concerned nobleman; later, Alfred inherits four thousand pounds after a satirical letter sent to Ezra D. Wannafeller is taken seriously. The central plot of this play is resolved by the testimony of the Hungarian nobleman Nepommuck, and the main female character later marries Freddy Eynsford Hill. Colonel Pickering offers the central wager of this play, which originates when the speech of a flower-girl is transcribed. For 10 points, name this play in which Henry Higgins trains Eliza Doolittle to speak like an upper-class lady, written by George Bernard Shaw. ANSWER: Pygmalion
13. The nilpotence of one of these structures is related to the nilpotence of other operators on a vector space by Engel's theorem. Assigning one of these to a Lie group defines a functor. One of these is solvable if its Killing form vanishes on its derived form by Cartan's first criteria. The exponential function can be used to generate a Lie group from one of these. These entities can be studied using Dynkin diagrams. These structures are skewsymmetric, bilinear and satisfy the Jacobi identity. A special class of these is named for Kac and Moody. For 10 points, name this type of vector space, named for a Norwegian.
ANSWER: Lie algebra
14. In Happy City, Charles Montgomery recounted a visit to Disneyland with the economist Paul Zak where he conducted a variation of this experiment that always ended in success. Bushman and Bonacci conducted an electronic variant of this experiment involving scholarships given to people of either European of Arabic descent. One variant of this experiment was used to predict whether LBJ would defeat Barry Goldwater. This experiment was more successful in neighborhoods with higher social but not necessarily economic capital, and it was first tested in New Haven, Connecticut. This experiment was less successful when it involved organizations like Friends of the Nazi Party. For 10 points, name this sociological experiment where stamped envelopes were left around town by Stanley Milgram.
ANSWER: Lost Letter experiment [or Lost-Letter technique]
094-14-67-08114
15. Le Douarin and Ordahl's fate mapping experiment in quail-chick chimeras studied the behaviour and location of these structures. During their formation, some of these structures undergo a fusion process known as metameric shifting. That process, which requires fibroblast growth factor, can be modeled with the "clock and wave" mechanism. Neural crest cells migrate between these structures and the ectoderm. They are derived from paraxial mesoderm and their differentiation is guided by Hox genes. Dividing into the dermatome, sclerotome and myotome, these structures give rise to cartilage, tendons and the vast majority of the axial skeleton. Found on both sides of the neural plate, for 10 points, name these paired round balls of the developing embryo that are responsible for the formation of skin and muscle.
ANSWER: somites
16. Supporters of this movement hijacked and crashed a Daily Herald van in the same year that a woman who cross-dressed as "Colonel Barker" joined it. Leaders of this movement included the alcoholic Rotha Lintorn-Orman and the author of My Irrelevant Defense, Arnold Leese. Members of this movement conspired with American diplomat Tyler Kent to steal confidential documents. This movement was opposed by the 43 Group, and its best known symbol was the Flash and Circle. A leader of this movement organized the Olympia meeting and clashed with East End protesters in the Battle of Cable Street. After fleeing the country, a member of this movement named William Joyce began broadcasting as "Lord Haw-Haw." For 10 points, name this movement led by Oswald Mosley and other insane Hitler fans. ANSWER: British fascism [or British Union of Fascists; or Fascisti]
17. ?This god had a daughter who was changed into a linden tree following the birth of Chiron. This god married a goddess who was once the nurse of Hera during the Titanomachy, and a prohibition on touching this deity is why Callisto never sets. This deity announces that "new also is the ruler among gods" and that "it is most advantageous, when truly wise, to be deemed a fool" when he visits Prometheus in Prometheus Bound. This was the only Titan who did not participate in the castration of Uranus. This husband of Tethys was the father of Periboea, Ceto, Callirrhoe, Amphitrite, and many other daughters. For 10 points, name this Greek god who personified the river encircling the world.
ANSWER: Oceanus
019-14-67-08117
18. An alternate account of this event is presented in The Life of St. Vedast, where it is caused by the curing of a blind man. After this event, a man bribed some vassals with gilded copper belts and axe-murdered a former ally, Ragnachar. This event was delayed by the sudden death of an infant named Ingomar. According to legend, a dove appeared carrying the Holy Ampulla during this event. This event occurred after a victory over the Alemanni at the Battle of Tolbiac, and one of its participants had earlier requested the return of the Vase of Soissons. This event was encouraged by Clotilde and carried out by St. Remigius in Reims. For 10 points, name this event in which a Merovingian Frank abandoned paganism. ANSWER: the conversion of Clovis [or the baptism of Clovis]
19. Johann Michael Rottmayr and Martino Altomonte decorated the walls of the staterooms in the Salzburg Residenz with scenes from the life of this man. Veronese painted a scene of a family of this man's rival accidentally begging charity from the servant who stands next to him. The Farnese Hercules can be seen in the background of a Tiepolo painting where an African man stares at the artist painting his mistress' portrait. William IV of Bavaria commissioned a painting celebrating this man after the 1529 Siege of Vienna. He is frequently depicted in scenes of Apelles Painting Campaspe. In one painting, a tablet floating in the sky describes his victory over a force represented by a crescent moon in the top left. For 10 points, name this general, victorious in Albrecht Altdorfer's The Battle of Issus.
ANSWER: Alexander the Great [or Alexander III]
20. The text to one of this man's songs addresses the title character, "You pale comrade! Why do you ape the pain of my love?" Another has a 32nd note moto perpetuo in the right-hand piano, and depicts a man who asks a stream to give his greetings to his lover. In another of his songs, a 16th note ostinato halts at the words "und ach, sein Kuss!" Max Friedländer edited seven volumes of this composer's songs, and Gerald Moore and Dietrich Fischer-Dieskau recorded all for the male voice. Another song begins with triplet octave Gs in the left hand to depict a horse on which a father and son flee. Songs like "Der Doppelgänger" and "Ständchen" are in his Schwanengesang, and he adapted poems by Wilhelm Müller in the first ever song cycle, Die Schöne Müllerin. For 10 points, name this composer of lieder like "Gretchen am Spinnrade," Winterreise, and "Der Erlkönig."
ANSWER: Franz Peter Schubert
21. This character was the subject of the lost third poem of Robert de Boron. This hero was raised in an isolated forest until age fifteen by his mother Dindrane. This character is chastised for remaining silent during a meal by the loathly lady, shortly after he proposes marriage to Blanchefleur. This character fails to ask why the lance bled, the healing question to the Fisher King, after spotting a grail. This hero is the father of a man who travels in a boat pulled by a swan and warns Elsa never to ask him his name, Lohengrin. For 10 points, name this Arthurian knight and subject of a Wolfram van Eschenbach epic,
ANSWER: Perceval [or Parsifal, etc.]

22. Bruno Bauer accused this man's dialectic of being drawn from Friedrich Schleiermacher, not Hegel, leading this philosopher to establish a difference between Right Hegelians and Left Hegelians. For 10 points each:
[10] Name this German materialist theologian who interpreted New Testament stories as mythical in The Life of Jesus. His On Christian Doctrine interpreted Christianity as deteriorating.

## ANSWER: David Friedrich Strauss

[10] This philosopher attacked the materialist "New Faith" of Strauss in his Untimely Meditations, which also describe Richard Wagner in more critical terms than in this man's earlier The Birth of Tragedy.
ANSWER: Friedrich Wilhelm Nietzsche
[10] Strauss published a series of lectures on this philosopher, whose Treatise on Tolerance expresses outrage over the death of Jean Calas, a Calvinist. He skewered the French government in his Letters on the English.
ANSWER: Voltaire [or François-Marie Arouet]
237-14-67-08201
2. In the second title concept of this book, feelings of unity are based only on common traits and activities rather than subjective, shared feeling. For 10 points each:
[10] Name this book concerning two kinds of social groupings: More traditional ones governed by the natural will, and modern institutional ones governed by the arbitrary will.
ANSWER: Gemeinschaft und Gesellschaft [or Gemeinschaft and Gesellschaft; or Community and Society]
[10] This sociologist responded to Friedrich Tönnies's Gemeinschaft und Gesellschaft in Economy and Society, where he expanded on the notion of charisma developed in works like Sociology of Religion, which linked modernism to disenchantment.
ANSWER: Karl Emil Maximilian Weber
[10] Friedrich Tönnies also wrote about rates of this behavior in Schleswig-Holstein. Another sociologist distinguished between its anomic, altruistic, egoistic, and fatalistic kinds, and found that it was more frequent among men and Protestants.
ANSWER: suicide
3. This poet described a shock that "makes the TV pictures snowy" and "settles in cold drops on the telephone wires" in "After a Death." For 10 points each:
[10] Name this poet of Baltics whose poems were translated by Robert Bly in The Half-finished Heaven. ANSWER: Tomas Gosta Transtromer
[10] Transtromer is from this country, also home to fellow Nobel laureates like Par Lagerkvist and Selma Lagerlof.
ANSWER: Sweden
[10] In a poem titled for this person, Transtromer describes a desk "at which the wonderful centipedes of music were set in motion" and claims "I know, also--statistics aside--that right now" this composer "is being played."
ANSWER: Franz Schubert [or "Schubertiana"]
4. This work was compiled in part using a 1,847 questionnaire that asked respondents, "If somebody always eats a considerable amount of food, you say he's a [blank]". For 10 points each:
[10] Identify this work, whose fifth volume covering Sl through Z was published in 2012. Frederic G. Cassidy edited its first volume, which was published in 1985.
ANSWER: Dictionary of American Regional English [or DARE]
[10] This other dictionary was once edited by James Murray of the Philological Society. William Chester Minor made large contributions to the first edition of this dictionary from within a lunatic asylum.
ANSWER: Oxford English Dictionary
[10] After this publisher won a case allowing it to publish a dirty version of Lady Chatterley's Lover, it then published one of the first dictionaries in Great Britain to include obscenities.
ANSWER: Penguin Books
094-14-67-08204
5. One of these deities gives the prologue in Plautus' play Aulularia. For 10 points each:
[10] Identify these Roman deities, whose familiaris variety protected the household. Each city had a praestites version of these deities.
ANSWER: Lares [accept Lar familiaris]
[10] Outside of cities, the Lares were typically honored at these places. The Compitalia was a festival devoted to the gods of these places, where criminals and suicide victims were often buried in Christian Europe.
ANSWER: crossroads [or cross-ways]
[10] These deities, particularly worshipped at the marriage bed, guarded over a man's life and were analogous to Juno for women. They could personify man's creative power and were proclaimed sanctus et sanctissimus deus on a man's birthday.
ANSWER: Genius [or Genii]
6. Jupiter, in the form of an eagle, licks the arm of Ganymede as he carries him off in this artist's The Abduction of Ganymede. For 10 points each:
[10] Identify this artist from Parma fond of dome painting. Another of his Jupiter paintings shows that God, in the form of a cloud, copulating with Io.
ANSWER: Correggio [or Antonio Allegri]
[10] Correggio helped complete the family chapel of this artist in Mantua. This artist depicted putto sitting on the painted ceiling of his marvelous Camera degli Sposi and showed a supine Jesus in Dead Christ. ANSWER: Andrea Mantegna
[10] This later painter from Parma was heavily influenced by Correggio's dome paintings for his own Baroque dome paintings, like the one he executed for the San Andrea della Valle in Rome. This rival of Domenichino and member of the Bolognese school made The Gods of Olympus for the Villa Borghese. ANSWER: Giovanni Lanfranco [or Giovanni di Steffano or Il Cavaliere Giovanni Lanfranchi]
7. Wolfgang Amadeus Mozart's quintet for this instrument and strings was originally written for this instrument's "basset" variant. For 10 points each:
[10] Name this instrument played by Anton Stadler, the dedicatee of Mozart's cadenza-less concerto in A major for it. The Boehm and Öhler systems are two keying systems for this instrument.
ANSWER: clarinet
[10] Mozart's Kegelstatt Trio was written for clarinet and these two instruments. Robert Schumann wrote Märchenerzählungen for clarinet and these two instruments.
ANSWER: viola and pianoforte
[10] This composer wrote a set of eight pieces for clarinet, viola, and piano and a Concerto for Clarinet, Viola, and Orchestra. He also wrote Kol Nidrei for cello and orchestra.
ANSWER: Max Christian Friedrich Bruch [or Max Karl August Bruch]
237-14-67-08207
8. The interaction between the oscillating liquid and a pressure gradient creates the Bjerknes forces that contribute to this effect. For 10 points each:
[10] Name this phenomenon in which the collapse of a cavitation bubble causes the conversion of sound waves into light.
ANSWER: sonoluminescence
[10] Sonoluminesence can be modeled by this equation which relates the pressures both within and outside the bubble to its radius over time.
ANSWER: Rayleigh-Plesset equation
[10] This American scientist believes that the Casimir effect is directly responsible for sonoluminesence. With Feynman and Tomonaga, this scientist won the Nobel Prize in Physics for his work on QED.
ANSWER: Julian Schwinger
245-14-67-08208
9. The conversion of this pigment's chromophore from an 11-cis to all-trans form upon light exposure causes its activation. For 10 points each:
[10] Name this pigment found in the rods of the retina. Binding of retinal to its identically named G protein coupled receptor is responsible for the perception of light.
ANSWER: rhodopsin [or visual purple; accept specific forms like bacteriorhodopsin]
[10] When activated, rhodopsin binds to this heterotrimeric G-protein, which continues the single cascade by phosphorylating GDP.
ANSWER: transducin
[10] Transducin activates this molecule's phosphodiesterase, thereby cleaving and thus activating this secondary messenger. Levels of this compound are also increased by the activity of Viagra.
ANSWER: cyclic GMP [or cyclic guanosine monophosphate; do not accept or prompt on "GMP"]
10. When this operation is done on two compact spaces, the result is also compact by Tychonoff's theorem.

For 10 points each:
[10] Name this operation which, for a set $\langle X, Y\rangle$, returns all ordered pairs $(a, b)$ such that $a$ is in $x$ and $b$ is in $y$.
ANSWER: Cartesian product [prompt on "product"]
[10] Zorn's lemma implies this theorem, which states that the Cartesian product of a collection of non-empty sets is non-empty.
ANSWER: axiom of choice
[10] This geometric figure is the Cartesian product of two circles. Colouring one of these objects requires seven colours by the Heawood conjecture.
ANSWER: torus
245-14-67-08210
11. The woman spent almost 60 years secluded in Bouchout Castle while suffering from crippling depression. For 10 points each:
[10] Identify this daughter of Leopold I of Belgium who fled Lombardy-Venetia with her husband in 1859. ANSWER: Empress Carlota [or Marie-Charlotte-Amélie-Augustine-Victoire-Clémentine-Léopoldine]
[10] Carlota was the wife of this Emperor of Mexico, who was executed in June 1867.
ANSWER: Emperor Maximilian I [or Ferdinand Maximilian Joseph]
[10] After fleeing Italy, Maximilian sailed to Brazil, but an ill Carlota was stuck in this place. Carlota would later write a memoir of "A Winter in [This Place]", which was an early sugar producer for Europe and whose wine industry was founded by discoverer João Gonçalves Zarco.
ANSWER: the Madeira Islands [or Funchal Islands or Arquipélago da Madeira]
094-14-67-08211
12. MODERATOR NOTE: DO NOT READ THE ALTERNATE ANSWER TO THE FIRST PART

These people were known for their handling of the barong and kris, knife-like objects, and liked to raid with vehicles called Proas. For 10 points each:
[10] Name this group that preyed on Spanish colonies like Cebu and burned down Balayan in 1764.
ANSWER: Moro Pirates [accept Sulu Pirates]
[10] The Moro Pirates typically acted as raiders for this sultanate based in a namesake sea. This Islamic dynasty battled the Spanish and US for many years before signing the Carpenter Agreement.
ANSWER: Sultanate of Sulu
[10] The Moro Pirates were predominately from this island. This island is the southernmost island of the Philippines and the MILF and MNLF separatist groups are currently based on this heavily Islamic island. ANSWER: Mindanao
13. Lorraine hides inside a mummy exhibit sent by the Khedive of Egypt as the action of this play grows increasingly farcical, following the title character's expensive phone calls to Arturo Toscanini and Walt Disney. For 10 points each:
[10] Name this play in which critic Sheridan Whiteside must be put up at the Whiteside residence in Mesalia, Ohio after slipping on a patch of ice.
ANSWER: The Man Who Came to Dinner
[10] The Man Who Came to Dinner is a play by this duo, who also collaborated on You Can't Take It With You and Merrily We Roll Along.
ANSWER: George Kaufman and Moss Hart
[10] Another play-writing team, Jerome Lawrence and Robert Lee, wrote this 1960 play which fictionalizes the confrontation of Clarence Darrow and William Jennings Bryan at the Scopes trial.
ANSWER: Inherit the Wind
019-14-67-08213
14. This song was produced by Diplo and features string arrangments by Nico Muhly which come to the fore when the singer asks "Why do I care at all?" For 10 points each:
[10] Name this 2012 quiet storm song about two people who "don't wanna give in / So we just give up" after reaching the title state, where they are "going nowhere fast."
ANSWER: "Climax"
[10] "Climax" is from the album Looking 4 Myself by this R\&B artist whose songs include "Confessions Part II" and "Yeah!," which features Lil Jon and Ludacris.
ANSWER: Usher Raymond IV [accept either underlined portion]
[10] This indie rock group covered "Climax" on the Triple J program "Like a Version." They are perhaps more famous for songs like "Stillness is the Move" and albums like Mount Wittenberg Orca, a collaboration with Björk.
ANSWER: Dirty Projectors
237-14-67-08214
15. In 2012, every business in this town was named as a defendant in the case of Oglala Sioux Tribe $v$. Jason Schwarting. For 10 points each:
[10] Name this tiny hamlet which, as of 2012, sold 4.6 million cans of beer per year despite having a population of 12 people, due to its proximity to a dry Sioux reservation.
ANSWER: Whiteclay
[10] Whiteclay is adjacent to this reservation, within which Wounded Knee is found. Leonard Peltier was convicted of murder after a shootout with the FBI here.
ANSWER: Pine Ridge
[10] While Pine Ridge is within South Dakota, Whiteclay is found over the border in this state, which is also where the North and South Platte Rivers meet.
ANSWER: Nebraska
16. Reacting a cyclic one of these compounds with a concentrated, strong acid can be used to synthesize lactams in the Beckmann rearrangement. For 10 points each:
[10] Name these compounds that consist of a nitrogen double bonded to a carbon and singly bonded to a hydroyxl group.
ANSWER: oxime
[10] Another method of synthesizing oximes is by performing a Suzuki coupling on an N -alkoxyimidoyl iodide. The product can be either of two isomers, depending on which side of the double bond the aromatic ring is on. Give the letters used to denote those isomers.
ANSWER: $\underline{\mathbf{E}}$ and $\underline{\mathbf{Z}}$
[10] Aromatic varieties of these other compounds can be produced via the dehydration of an oxime. These triple-bonded compounds can also be produced from aromatic carboxylic acids in the Letts synthesis. ANSWER: nitriles
17. In this opera, Arline, kidnapped sweetheart of the Polish noble Thaddeus, dreams "that you loved me still the same" while reminiscing about her childhood in the court of her father, Count Arnhelm. For 10 points each:
[10] Name this opera by Michael William Balfe most famous for its aria "I Dreamt I Dwelt in Marble Halls."
ANSWER: The Bohemian Girl
[10] Balfe was from this island, the home of John Field, who wrote the first nocturnes. Victor Herbert was born on this island, which is also home to flautist James Galway.
ANSWER: Ireland
[10] Four of Balfe's friends, including Luigi Lablache, premiered this Vincenzo Bellini opera, whose "Credeasi, misera" contains an absurd high F as Arturo, a Cavalier, pleads to be with Elvira.
ANSWER: I Puritani [or The Puritans]
18. In the first story of this book, the narrator imagines his fox-like uncle devouring live chickens and piglets. For 10 points each:
[10] Identify this collection of autobiographical stories that includes "Peaches." It was written by Dylan Thomas and has a Joyce-inspired title.
ANSWER: Portrait of the Artist as a Young Dog
[10] Dylan Thomas also wrote this poem in which the speaker urges his father to "Rage, rage against the dying of the light" and argues that "Old age should burn and rave at close of day."
ANSWER: "Do not go gentle into that good night"
[10] Thomas urges "Oh, keep his bones away from that common cart" in a poem describing the death of "a man aged a hundred" in one of these events.
ANSWER: a dawn raid [or air raid; or bombing; or obvious equivalents]
19. This author's most recent novel contained a dedication to SelfControl and Freedom, two programs for blocking the Internet. For 10 points each:
[10] Identify this author, who opened one story by asking, "Who would expect the Embassy of Cambodia? Nobody." She also wrote about the friends Keisha and Leah in her novel $N W$.
ANSWER: Zadie Smith
[10] Smith's hit-or-miss third novel On Beauty is in some ways a modern version of this E. M. Forster novel. At the end of this novel, Charles Wilcox is convicted for manslaughter after beating up Leonard Bast, who also has a bookcase fall on him.
ANSWER: Howards End
[10] A chapter in White Teeth describes the "Root Canal" of this historical figure and ancestor of Samad Iqbal. "Half drunk with bhang, and wholly drunk with religious fanaticism" this man assaulted an officer before killing himself.
ANSWER: Mangal Pande [or Mangal Pandey]
094-14-67-08219
20. This deity is also known as the Gitche Manitou or Wakan Tanka. For 10 points each:
[10] Give this common English term for the supreme deity or mysterious essence of the world in American Indian mythologies.
ANSWER: the Great Spirit
This creator of the world in Southwestern Indian mythologies placed dew into a web and threw it into the sky to make the stars.
ANSWER: Spider Grandmother
[10] Spider Grandmother's provision of a reed passage to the Fourth World is the origin myth of these people, who are the source of most myths about Kokopelli.
ANSWER: Hopi
21. This man once said, "If one morning I walked on top of the water across the Potomac River, the headline that afternoon would read 'President Can't Swim'". For 10 points each:
[10] Identify this president who had earlier earned the sarcastic nickname "landslide" following his extremely close victory over Coke Stevenson to be elected Senator from Texas for the first time.
ANSWER: Lyndon Baines Johnson [or LBJ]
[10] Johnson is the subject of a multi-volume biography by this man, who also chronicled the life of New York City's master builder Robert Moses in The Power Broker.
ANSWER: Robert Caro
[10] Johnson's only electoral defeat came against this one-time radio personality and state governor who wrote songs with a group originally called the Light Crust Doughboys.
ANSWER: Wilbert Lee "Pappy" O'Daniel

