The author's annotations to this poem indicate that two of its lines are references to Dryden's translation of the *Metamorphoses*. The speaker of this poem asks, "What idle progeny succeed to chase the rolling (*) circle's speed, or urge the flying ball?" Four stanzas of this poem consist of a litany of ills, culminating in "the painful family of Death," including Poverty, which "numbs the soul with icy hand." Those ills are contrasted with the speaker's "careless childhood," which he is reminded of by gales which are "redolent of joy and youth." This poem opens with a description of "distant spires" and "antique towers." This poem concludes that "where ignorance is bliss, 'tis folly to be wise." For 10 points, name this poem by Thomas Gray which reflects on his school days.

ANSWER: "Ode on a Distant Prospect of Eton College"

A pair of Chan-Paton indices refers to a pair of these objects. The ekpyrotic model hypothesizes the collision of two of these objects. One cosmological theory claims that the universe is one of these objects inside a space called the (*) bulk. Some examples of these objects restrict the motion of the endpoints of other objects which are subject to Dirichlet boundary conditions; those examples of these objects are prefixed with the letter D. These objects sweep out world volumes as they pass through spacetime. A string is equivalent to a one-dimensional object of this type. For 10 points, name these multidimensional objects in M-theory and string theory.

ANSWER: membranes [or p-branes]

In the bottom right of one painting by this artist, an enhaloed St. Francis lurks in front of a blue background. That painting depicts the Madonna and child surrounded by four angels, all with yellow haloes. This artist's last work was a mosaic of St. (*) John the Evangelist for the Duomo of Pisa, while his earliest work was a crucifix for the church of San Domenico in Arezzo. Giorgio Vasari mistakenly attributed the Rucellai Madonna to this artist, though it was actually painted by Duccio, who, like this artist, painted a famous $Maest\tilde{A}$. A pupil of this artist painted the Ognissanti Madonna and decorated the Arena Chapel. For 10 points, name this Florentine painter who taught Giotto.

ANSWER: Cimabue [or Bencivieni di Pepo]

A recent book by this philosopher strengthens a claim he made in an earlier book by arguing that even a concept as complex as GREEN OR TRIANGULAR is unlearnable. This philosopher refers to the position that objects cause thoughts as the "crude (*) causal theory." With Massimo Piattelli-Palmarini, he claimed that the theory of natural selection suffers from the problem of "selection-for" in the book What Darwin Got Wrong. He used properties such as domain specificity and informational encapsulation to characterize the central concept of his most famous book, though he may be more famous for putting forth the idea of a language of thought. For 10 points, name this Rutgers philosopher of mind who wrote Modularity of Mind. ANSWER: Jerry Fodor

The activity of these enzymes can be performed by the circadian rhythm regulator CLOCK in concert with BMAL1. Examples of these enzymes which can act on substrates other than their normal targets include PCAF and members of the p300/CBP family, which can both act on HMG proteins. These enzymes are classified into families such as the (*) MYST family and the GNAT family. These enzymes add a certain functional group to a lysine to create residues which can be recognized by bromodomains, thus allowing for chromatin remodeling. Their action is the opposite of that of HDACs. For 10 points, name these enzymes which transfer acetyl groups on histones, whose three-letter abbreviation is also a type of headwear.

ANSWER: <u>histone acetyltransferase</u>s [or <u>HAT</u>s]

One example of these entities is the Kontsevich integral, the coefficients of which all belong to a class of them named for Vassiliev. Other examples of these entities are the Heegaard Floer homology and the (*) Khovanov homology, which are categorifications of two of these entities which are generalized by the HOMFLY polynomial. Chern-Simons theory can be used to calculate them. Examples of these include ones named for Arf and Milnor, as well as the Alexander polynomial and the Jones polynomial. They can be defined as properties which do not change when any of the Reidemeister moves are applied. For 10 points, name these properties of knots which do not change when the knot is changed up to isotopy.

ANSWER: knot <u>invariant</u>s [prompt on <u>polynomial</u>s before mentioned because some of them are also polynomials]

A pretext for this conflict was a border dispute over the meadow of Bregovo on the right bank of the Timok River. Russia withdrew its support of one side in this conflict before the decisive battle because of their dissatisfaction with its prince, leaving that side completely bereft of (*) high-ranking officers. Nonetheless, that

side managed to win the Battle of Slivnitsa against the king who declared war at the beginning of this conflict, Milan Obrenović. It was concluded by a peace signed in Bucharest which resulted in recognition of the unification of the victorious principality and the province of Eastern Rumelia. For 10 points, name this brief 1885 war between two Eastern European states, perhaps best known for being the backdrop to George Bernard Shaw's *Arms and the Man*.

ANSWER: Serbo-Bulgarian War

In this episode, the challenge "Let's see you try to talk your way out of this one...if you can" is followed by the challenged party laughing maniacally while his eyes glow red. Later, that protagonist reaches for his watch and gets shot, (*) then calls his dead father a fool before getting shot some more. Another guy in this episode notes that the line "Looks like I win" is all the confession they need, and that Mikami referred to the series protagonist as "God." This episode ends with a monologue whose speaker remarks "It was good while it lasted; we eased each others' boredom for quite a while," and reminds the series protagonist of an agreement that one day he'd be writing that protagonist's name. That speech is given by Ryuk the Shinigami before he kills the protagonist. For 10 points, name this last episode of the anime series in which Light Yagami kills bad people by writing their names in the title book.

ANSWER: series finale of Death Note (the anime) [accept anything indicating the last episode of Death Note; accept "New World" or "Shinsekai"; accept Death Note Season 2 finale]

The second section of this document claims that "those that are descended from the Gauls and the Romans are at least worthy as those that come from the Sicambres, the Welches, and other savages." The first section of this document divides "particular labors" (*) into four classes, and ascribes the interdiction "Whatever your services, whatever your talents, you shall go just so far" to the four "recognized dominions": the Sword, the Robe, the Church, and the Administration. The final section of this document says that votes must be taken "by heads and not by order" when the Estates-General is convened. It gives the answer "To become something" to the question "What does it demand?" For 10 points, name this pamphlet by Joseph SieyÃ"s that answers its title question with "Everything."

ANSWER: "What Is the Third Estate?" [or "Qu'est-ce que le tiers-état?"]

These animals were formerly thought to be related to cephalaspids. Sten Grillner's research group uses these animals as a model organism to study motor control. In German, they are known by a name which means "nine (*) eyes" because they have seven gill slits, one nostril and one eye on each side. They possess an alternative adaptive immune system which makes use of variable lymphocyte receptors. These animals, which belong to the order Petromyzontiformes, have larvae known as

ammocetes. Henry I was said to have died from eating too many of them. They comprise the superclass Agnatha along with the hagfish. For 10 points, name these eel-like jawless fish.

ANSWER: <u>lamprey</u>s [accept <u>Petromyzontiformes</u> early]

One work by this author begins with a fable about a cock who urges some horses to stand still so they don't trample him. He criticized the use of contraception in an essay renamed "A Treatise Concerning the Use and Abuse of the (*) Marriage Bed," though he originally gave it the much better title "Conjugal Lewdness, or Matrimonial Whoredom." He was arrested for seditious libel after the publication of his satirical pamphlet *The Shortest Way with the Dissenters*. He published a novelistic account of the year 1665 under the initials H.F. This author of *A Journal of the Plague Year* wrote about a woman born in Newgate Prison in *Moll Flanders*. For 10 points, name this author of *Robinson Crusoe*.

ANSWER: Daniel **Defoe**

In one work by this composer, strings drone over a baritone who sings "Come sweet death! Be persuaded oh beautiful death!" and that piece was composed four years before another that includes movements like "Aria with walking bass" (*) and "Mongrel Airs." The movement "Sri Moonshine" serves as an homage to Terry Riley in another piece by this composer scored for orchestra and an electric violin with additional low E and F strings; that piece is titled after a piece of coastal precipice. Besides The Wound Dresser and Dharma at Big Sur, this man created a "memory space" that opens with the word "missing," as well as an opera with libretto by Peter Sellars that includes texts from the Bhagavad Gita. For 10 points, name this American minimalist composer of On the Transmigration of Souls and Dr. Atomic. ANSWER: John Adams

J.J. Hartmann and A.D. Fitton Brown have both argued that this event never actually took place. In one poem about this event, the author compares himself to Actaeon unwittingly seeing Diana naked. That poem quotes four lines from a previous poem by the same author, replacing the phrase (*) "safe love" with "what is lawful." Much speculation about the cause of this event derives from the use of the phrase carmen et error, or "a poem and an error." The "error" leading to this event may have involved the discovery of Julia's adultery. This event's central figure complained about it in works like Epistulae ex Ponto and Tristia. For 10 points, name this event in which Augustus banished the author of the Metamorphoses to Tomis.

ANSWER: **Ovid**'s **exile** [or equivalents]

The parasite in Shane Carruth's *Upstream Color* turns orchids this color. Derek Jarman's final film consists of narration over a single shot of this color. This is the hair color of an art student named Emma in a film based on a graphic novel by Julie (*) Maroh. In a film with this color in the title, the composer Patrice de Courcy dies in a car accident, making a widow out of Julie, played by Juliette Binoche. This color also appears in the title of the second film about Lena Nyman, a Swedish film famous for its sexual explicitness. The title of an Abdellatif Kechiche film which won the 2013 Palme d'Or calls this the warmest color. For 10 points, name this color which is paired with yellow in the *I Am Curious* series and with red and white in Kieslowski's *Three Colors* trilogy.

ANSWER: blue

According to this person's Twitter profile, he has a book coming out soon called As Bad As It Gets. Ben Forster's only two forum posts were in the thread for a tournament announced by this person. This man, who played Quizbowl in high school for (*) six years, also hosts trivia nights at Squirrel Tooth Alice's. He admitted to "dropp[ing] the ball completely" in a forum post entitled "Mea maxima culpa." In 2010, this founder of Brock's Quizbowl team announced a summer tournament, but promptly disappeared off the face of the earth, leaving people like Ben Smith and Kurtis Droge to pick up the slack and edit the tournament. He reportedly went lawn bowling the day that tournament, ANGST, was played. For 10 points, name this Canadian Quizbowler.

ANSWER: **Andy Saunders** [accept either name]

This man's doctoral thesis was on the form of the teeth of wheels in spur gearing. This scientist gives his name to an algorithm which generates a maximum entropy probability (*) distribution. He applied Maxwell's equations to various optical phenomena, including birefringence. This man's lectures were compiled into the textbook *Vector Analysis*. His namesake phenomenon concerns the behavior of Fourier series at jump discontinuities. He names a paradox concerning the entropy of mixing, as well as the statement that F = C - P + 2, his namesake phase rule. For 10 points, name this first American to receive a doctorate in engineering, who names a type of free energy. ANSWER: Josiah Willard <u>Gibbs</u>

Several songs on this album feature lead vocals by LD Beghtol, who wrote a "field guide" to this album as part of the 33 1/3 series of books. One song on this album

compares love to "Strange Fruit' with and without wind chimes." Another song on this album opens with the line "I should have (*) forgotten you long ago but you're in every song I know" and ends by asking "Do you think it's dangerous to have Busby Berkeley dreams?" The title object of one of this album's songs is "long and boring" and "no one can lift the damn thing." That song, whose singer declares "you ought to give me wedding rings," is "The Book of Love." For 10 points, name this album by The Magnetic Fields whose three volumes each have 23 tracks.

ANSWER: 69 Love Songs

One account of this battle, written 33 years after the fact but nonetheless subtitled "A Diary," was written by Lady Julia Inglis with assistance from a friend of her husband who was an aide-de-camp at this battle, F.W. Birch. Both attempts to relieve the defenders at this battle departed from the town of Cawnpore. (*) The first of those relief attempts sent to this battle was commanded by James Outram and Henry Havelock. The second and more successful of those relief attempts at this battle included an assault by the 93rd Highlanders on a building called the Secundrabagh, or Alexander's Garden. That relief force was commanded by Colin Campbell, the Baron Clyde. The defending force was initially commanded by Henry Lawrence, who died at this battle defending the namesake city's Residency. For 10 points, name this six-month siege that took place during the Sepoy Mutiny. ANSWER: Siege(s) of Lucknow [accept synonyms of "Siege," e.g. "Storming" or "Battle"]

Slaughton Lynd declined to participate in this event because he expected that its participants would favor one side. People who participated in this event included Stokely Carmichael, Peter Weiss, and A. J. Ayer. The eleven official (*) conclusions resulting from this event were all unanimous votes, except for the answer to the question of whether the Japanese government was guilty of complicity. Successors to this event investigated issues like human rights in psychiatry and Palestine, but this event itself was convened to investigate the American intervention in Vietnam. For 10 points, name this war crimes tribunal hosted by Jean-Paul Sartre and organized by the philosopher who co-wrote *Principia Mathematica*.

ANSWER: Russell Tribunal [accept International War Crimes Tribunal]

A blue one of these objects can barely be seen at George's wake in the episode "Good Grief" and originally appeared in the pilot, where it can be seen behind five members of the Bluths posing for a photo. One of them was made for Buster in the episode "Â; Amigos!" and was (*) doctored in two later episodes, "Hand to God" and "Forget-Me-Now." Another of them is hastily made for Michael after the

accidental drugging of Rita in "Forget-Me-Now," and Gob ungrammatically tells Michael to look at it. These objects are frequently knocked down by the stair car, and they display phrases like "Mission Accomplished" and "You're killing me, Buster." For 10 points, name these objects which the Bluths like to hang up to celebrate special occasions on *Arrested Development*.

ANSWER: **banner**s [prompt on things like **sign**s]

This woman is the subject of Moise Kisling's painting *Nu assis*, and Kisling also depicted her in a red jumper and blue scarf. She's not Greta Garbo, but a bronze sculpture of this woman's head by Pablo (*) Gargallo can be found in the Louvre. She starred in the short films *The Sea Star* and *Emak Bakia*, as well as Fernand Léger's experimental film *Ballet mÃ*©canique. She posed with an African mask next to her face in *Noire et Blanche*, and she is shown with the F-holes of a violin on her back in *Le violon d'Ingres*. Those works are two of the many depictions of this woman by Man Ray. For 10 points, name this woman whose birth name was Alice Prin, a French artist's model known as the "Queen of Montparnasse."

ANSWER: Kiki de Montparnasse [accept Alice Prin early]

The first Google Scholar result for the phrase "varying difficulty" is a textbook on this branch of mathematics by Bondy and Murty. Theorems in this field include the BEST theorem and Frucht's theorem. One unsolved problem in this field is the (*) ErdÅ's-Faber-LovÃ;sz conjecture. A major figure in this field, Pal TurÃ;n, gives his name to objects which do not contain any (r+1) cliques. Kuratowski's theorem characterizes the conditions under which planarity holds for the objects studied in this field. This field is said to have been inaugurated by Leonhard Euler's paper on the Seven Bridges of Königsberg. For 10 points, name this branch of mathematics which studies structures made up of nodes and edges.

ANSWER: graph theory

A modified version of Psalm 23 appears on one track off this album that says that "With bright knives he releaseth my soul," while another track opens with an acoustic guitar and droning Farfisa Organ playing chord tones. A talk box is used to mimic the sound of the title (*) creatures on the guitar solo of another track on this album that also contains a clear reference to Mary Whitehouse with the line "house proud town mouse." Yet another song off this album says that "It's too late to lose the weight you used to need to throw around," before concluding with "Who was found dead on the phone/ Who was dragged down by the stone." The "In the Flesh Tour"

supported this album, whose cover art shows the Battersea Power Station, and it was released two years before *The Wall*. For 10 points, identify this album by Pink Floyd that contains tracks like "Pigs on the Wing," "Sheep," and "Dogs."

ANSWER: Animals

Historians writing during the time of this emperor's successor include George of Pisidia and Theophylact Simocatta, who were both hostile to him. He restored Smaragdus to the position of Exarch of Ravenna. This emperor's son-in-law (*) Priscus, a leader of the Excubitores, joined a revolt against him led by the Exarch of Africa. He was the first emperor other than Julian the Apostate to wear a beard since Constantine I. A column dedicated to this emperor was the last monument built in the Roman Forum. Khosrau II declared war against him in 402, inaugurating the final Byzantine-Sassanid War. For 10 points, name this Byzantine emperor who overthrew Maurice and was himself overthrown by Heraclius.

ANSWER: Phocas

A computer in this film asks one character "Who said, 'Logic is the cement of our civilization with which we ascend from chaos using reason as our guide?" and later that character refers to Jacqueline Susann and Harold Robbins as "The Giants" after earlier questioning the use of "colorful (*) metaphors." The song "I Hate You" is played on a boombox by a punk whose incapacitation garners applause on a bus, and several characters in this movie talk to Dr. Nichols about "transparent aluminum." At the beginning of this film, a cigar-shaped probe disrupts Earth's atmosphere and oceans, which prompts the protagonists to travel back in time in a captured Klingon Bird-of-Prey. For 10 points, identify this movie in which Captain Kirk must rescue some Humpback Whales, the fourth *Star Trek* film.

ANSWER: <u>Star Trek IV</u>: <u>The Voyage Home</u> [accept either before mention of "fourth"]

This man said of the Emancipation Proclamation, "We show our sympathy with slavery by emancipating slaves where we cannot reach them and holding them in bondage where we can set them free." In one speech, given while he was a lawyer in Auburn, New York, (*) he dismissed "[t]he color of the prisoner's skin" and urged, "Hold him...to be a man." That was part of his Argument in Defense of William Freeman. He was probably the most famous friend of Thurlow Weed, who was probably unhappy when this then-senator gave a speech claiming "there is a higher law than the Constitution." He was stabbed multiple times in the face and neck during an attempt on his life by Lewis Powell, a collaborator with John Wilkes Booth. For 10

points, name this Secretary of State to Abraham Lincoln and Andrew Johnson whose namesake "folly" was buying Alaska.

ANSWER: William Henry Seward

This novel opens on Valentine's Day, 1989, with the main female character awaking from a dream in which she is about to become the victim of an Aztec sacrifice. The protagonist of this novel loses vision in his left eye in a car accident, but it allows him to see into an alternate universe. The protagonist of this novel is a (*) musician who channels his stillborn twin brother to write songs, and is in love with a woman who gets swallowed whole by an earthquake. It takes place in a world where JFK survives the assassination attempt in Dallas and "Bridge Over Troubled Water" was sung by Carly Simon and Guinevere Garfunkel. This novel is narrated by Rai Merchant, who competes for the love of Vina Apsara with Ormus Cama. For 10 points, name this modern version of the Orpheus and Eurydice story written by Salman Rushdie.

ANSWER: The Ground Beneath Her Feet

A building of this type in Prague consists of three pillars connected by nine approximately cube-shaped pods, and is covered with creepy sculptures of crawling babies by David Černý. A spherical section of a building of this type in Berlin reflects sunlight in a (*) cross-shaped pattern, a phenomenon known as the Pope's Revenge. A building used for this purpose typically alternates between blue and purple illumination, which represent the *iki* and *miyabi* aesthetics, respectively. That building, the second-tallest structure in the world, is the Tokyo Skytree. Another building used for this purpose was the world's tallest free-standing structure until it was surpassed by the Burj Khalifa, and yet another was built for the 1889 World's Fair. For 10 points, name these tall buildings which, like the CN Tower and the Eiffel Tower, have antennas for transmitting media.

ANSWER: tele**communication** towers [or **broadcast** towers; accept **TV** towers or **radio** towers; accept **observation** towers before "antennas" because most of them are also used as observation towers]

An August 2012 Sports Illustrated article discussed this player's friendship with Louie Zamperini, the author of Unbroken. He won the starting job as a true freshman, causing Aaron Corp to transfer to Richmond. That freshman season ended with a victory over Boston College in the Emerald Bowl. (*) At a press conference, he announced that he would return for his senior season by saying that his team "had some unfinished business," referring to a two-year bowl ban, and that he intended to "play a part in it." That senior season was ended with a shoulder separation in a game against UCLA, after which he was replaced by Max Wittek for the regular season finale against Notre Dame and the Sun Bowl against Georgia Tech. For 10

points--name this former USC quarterback, the successor to Mark Sanchez, who was selected in the 2013 NFL Draft by the Philadelphia Eagles.

ANSWER: Matthew "Matt" Barkley

Homer describes this man as "small of stature," but far better with a spear than "the whole host of Hellenes and Achaeans." Aeneas killed this man's half-brother Medon of Phylace. This man appears on the coins of the (*) Opuntians, who worshipped him. At Patroclus's funeral games, he defeated Antilochus in a footrace, but he lost to Odysseus because he tripped and fell. He was nearly killed by a storm that wrecked his ship, but he clung onto a rock until Poseidon split the rock with his trident, drowning him. Athena disliked him because he dragged the supplicant Cassandra from her temple. He was the son of Oileus, king of Locris. For 10 points, name this hero from the *Iliad* who shares his name with the son of Telamon.

ANSWER: Ajax the Lesser [accept Locrian Ajax before "Locris"]

In the Book of Exodus, the namesake sea of these people is mentioned as one of the borders of the Israelites' realm. In the Book of Judges, Shamgar son of Anath uses an oxgoad to kill 600 of these people. In another story, these people make an offering to God that includes five gold (*) mice. One king of these people, Achish, gave the city of Ziklag as a gift to his warlord, the future King David. An earlier king of these people was Abraham's buddy Abimelech. A cart pulled by two milk cows brought the Ark of the Covenant back from the land of these people, who had captured it and placed it in the temple of Dagon. Samson's main gig was fighting and killing these people, except for his wife Delilah. Another one of these people was slain by David, who used a sling and stone. For 10 points, name these people whose warriors included Goliath.

ANSWER: **Philistine**s [or **Pelisht**im]

The only one of these works by this man in Britain stands next to the Manchester Lowry Hotel and consists primarily of a 41 meter rotund white pylon. Another one of these structures by this man is named after a sundial and is located in Redding, California, while a different one appears prominently in (*) Run, Lola Run. Besides the Oberbaumbr \tilde{A} ½cke, one of these structures in Petah Tikvah, Israel is named for the man who designed it, while another was built to withstand Calgary's one-in-100 year flood cycle. Besides that one named "Peace," several of these structures by this man are being built to span the Trinity River in Dallas, while a famous one in Jerusalem is named "Chords." For 10 points, identify these usually cantilever spar cable-stayed structures created by the Valencian architect of the Turning Torso building.

ANSWER: bridges by Santiago Calatrava Valls [prompt on "bridges"]

This organization's current executive vice president is David Boaz. A dispute about the ownership of shares of this organization resulted from the 2011 death of William A. Niskanen. A senior fellow of this organization, Walter (*) Olson, runs the tort reform blog Overlawyered. Its other senior fellows include Vaclav Klaus and Johan Norberg, the author of *In Defense of Global Capitalism*. It awards the Milton Friedman Prize for Advancing Liberty every two years. In 1977, it launched the publication of *Inquiry Magazine*. Originally named the Charles Koch Foundation, it was co-founded in 1974 by Ed Crane and Murray Rothbard. For 10 points, name this libertarian think tank indirectly named after a Roman statesman.

ANSWER: Cato Institute [accept Charles Koch Foundation before mentioned]

One film movement from this country is typified by the 1981 film *Diva* and the 1991 film *The Lovers on the Bridge*, the latter of which was directed by the same man who turned Melville's *Pierre*, or the Ambiguities into a film co-starring Yekaterina Golubeva. That film, Leos (*) Carax's *Pola X*, is often classified as part of a movement from this country whose name was coined by James Quandt. Other films associated with that movement from this country include *Intimacy*, *Enter the Void*, and a controversial movie in which Monica Bellucci's character is brutally raped, *Irreversible*. That movement is this country's "new extremity." In a film from this country noted for its innovative use of jump cuts, Patricia turns Michel in to the police. For 10 points, name this country whose "New Wave" produced directors like Jean-Luc Godard.

ANSWER: France

The "Red Phone Plan" was created as a safeguard against this character, and one component of this character likes to state things like "At some point in their lives, 1 in 6 children will be abducted by the dutch" and "According to most advanced algorithms, the world's best name is Craig." This character serves as the dealer in Telltale Games's (*) Poker Night 2, and this character's voice actor voiced Gipsy Danger AI in Pacific Rim. In one appearance, this character notes that humans "frown on weight variances," and in that game a different character that was "designed to be a moron" transfers this character's consciousness into a potato. In the first game in which she appears, this character attempts to flood the Enrichment Center with neurotoxin and tells Chell that "You will be baked, and then there will be cake." For 10 points, identify this malevolent artificial intelligence, the antagonist of Portal.

ANSWER: GLaDOS