Collegiate Written by Ewan MacAulay, Grant Boggess, Austin Brownlow, Michael Chuber, Alex Dzurick, Joey Novice 4 Goldman, Nicholas Karas, Melanie Keating, Paul Kelson, Benjamin Johnson, Grace Liu, Brian Fall 2013 Mongilio, Itamar Naveh-Benjamin, Robert Pond, Victor Prieto, Jacob Reed, Graham Reid, Jihye Shin, Packet 2 Jonathan Tong Xu, Eric Xu, and Haohang Xu. Edited by Andrew Hart.

1. Early in this man's career, he founded the political journal Cité Libre. Lubor Zink added the suffix "mania" to this man's name to reflect his popularity. When asked how far he would go to stop terrorism, this man responded, "Just watch me." The kidnapping of James Cross and Pierre Laporte prompted this politician to invoke the War Measures Act in order to apprehend members of the FLQ while he was in office during the 1970 October Crisis. For 10 points, name this Liberal French-Canadian Prime Minister of Canada.
ANSWER: [Joseph Philippe] Pierre [Yves Elliott] Trudeau
2. A song named for this concept on Inna's first album claims that this concept "is a mystery, distance is killing me." Ellie Goulding sings "When everything’s wrong, you make it right" in a song whose title states that she needs this concept. Jordin Sparks asks why this concept "always feels like a battlefield?" This is the second word in the title of a song whose Mary Lambert-sung hook states "she keeps me warm." For 10 points, name this word that precedes "Game" in a Lady Gaga song and follows "Same" in a Macklemore and Ryan Lewis song.
ANSWER: love [accept longer answers mentioned in the tossup like "Same Love"]
3. This man's namesake book of the Bible contains the parable of the weeds. The relics of this man, whose feast day is September 21, are housed at the Salerno Cathedral. This saint hosted a meal that many sinners attended, which Jesus defended by arguing that "I came not to call the righteous, but sinners." He was originally called Levi before being given a name meaning "gift of Yahweh" when he quit working for Herod Antipas to be an apostle. For 10 points, what onetime tax collector is the namesake of the first Gospel?
ANSWER: Saint Matthew [or Matthew the Apostle; prompt on Levi before mentioned]
4. The outermost "marginal zone" of this organ contains the reelin-producing Cajal-Retzius cells. The central sulcus in this organ is known as the fissure of Rolando. This organ is surrounded by the pia mater, a delicate membrane that is the innermost of the three meninges that surround it. Areas named for Wernicke and Broca are found in this organ, which also contains an almond-shaped area that is involved in fear conditioning. For 10 points, the corpus callosum connects the two halves of what organ that contains the amygdala, cerebrum, and cerebellum?
ANSWER: brain [prompt on cerebral cortex]
5. One work of this type discusses using "finality of form" to determine an object's beauty. Another work of this type separates principles into maxims and universal moral laws. A "table of categories" and a "table of judgment" are found in a third work of this type that distinguishes between phenomenon and noumenon and declares " 7 plus 5 equals 12 " to be a synthetic a priori truth. The third work of this type is "of Judgment." For 10 points, name this type of work, including those "of Practical Reason" and "of Pure Reason," written by Immanuel Kant.
ANSWER: critiques [by Immanuel Kant] [accept more specific answers such as Critique of Pure Reason; accept kritiken; prompt on works of Kant or equivalents]
6. In one poem, this author described the title entity as being the "season of mists and mellow fruitfulness." In another poem, he confessed "much have I travell'd in the realms of gold," and admires how, "with eagle eyes," "stout Cortez stared at the Pacific." This author of "To Autumn" and "On First Looking into Chapman’s Homer" declared "O Attic shape! Fair attitude!" in a poem that addresses the title object as a "foster-child of Silence and slow Time." For 10 points, name this English poet who wrote, "Beauty is truth, truth beauty" in his "Ode on a Grecian Urn."
ANSWER: John Keats
7. One leader of this town wrote a letter that became known as his "Rude Answer," leading to the sending and eventual wreck of the Sea Venture. A violent protest against Governor William Berkeley caused this town to be burned to the ground during Bacon’s Rebellion. While it was directed by George Percy, many inhabitants of this town died during its "Starving Time," due to their dependence upon trade with the Powhatan. For 10 points, John Rolfe and John Smith led what Virginia town, the first permanent English settlement in the United States?

## ANSWER: Jamestown

8. This functional group reacts with a peroxyacid to form an epoxide in the Prilazhaev reaction. One way to form this functional group is by reacting an alkyne with a quinolone-poisoned palladium catalyst named for Lindlar. Another way to synthesize this functional group is to react an alkyl halide with a base in a bimolecular elimination mechanism. The simplest straight-chain versions of these hydrocarbons contain $n$ carbons and 2 n hydrogens. For 10 points, name this functional group, exemplified by ethylene, that contains a carbon-carbon double bond. ANSWER: alkene [or olefin; accept either E alkene or $\mathbf{Z}$ alkene; prompt on carbon-carbon double-bond; do not accept "alkane" or "alkyne"]
9. This artist painted ships and men in the foreground as an enormous volcano erupts in the background in his Eruption of Vesuvius. This artist, whose painting of a Steam-Boat off a Harbour's Mouth supposedly resulted from when he lashed himself to a ship's mast, painted shackles floating in the water in a work depicting a "Typhoon coming on." In another work, this artist of The Slave Ship painted a rabbit running across a track of "The Great Western Railway." For 10 points, name this British painter of misty canvases like Rain, Steam, and Speed. ANSWER: [Joseph Mallord William] J.M.W. Turner
10. This man's son bribed the charioteer Myrtilus into helping him court King Oenomaus's daughter Hippodamia. Pandareus stole a golden dog created by Hephaestus and gave it to this man, who later claimed to have never seen it when Pandereus asked him to return it. This patriarch of the House of Atreus invited the gods to a feast where he cooked and served his son as the main course. For 10 points, name this father of Pelops, a mythological man who spends eternity with food and water just beyond his grasp.

## ANSWER: Tantalus

11. This composer, like Luigi Boccherini, replaced the second viola in with a second cello in his String Quintet in C major. This composer also took an overture from his opera Alfonso and Estrella to compose incidental music for Helmina von Chezy's play Rosamunde. Rapid triplets played on the piano are meant to mimic hoof beats in a work this man based on Goethe's poem Der Erlkonig. This composer wrote Death and the Maiden and over 600 pieces of lieder. For 10 points, name this Austrian composer of the Unfinished Symphony and the Trout Quintet.
ANSWER: Franz [Peter] Schubert
12. In one work, this author defined the state as the successful claimant of a monopoly on the legitimate use of violence. Verstehen is a term that describes the perspective of this man, who quoted Benjamin Franklin as saying "time is money" in a book discussing a secular "calling." This man, who wrote works describing the religions of India and China, wrote Politics as a Vocation and studied modern bureaucracy. For 10 points, name this German sociologist who argued that Protestantism spurred the rise of the market economy in The Protestant Ethic. ANSWER: [Maximilian Karl Emil] Max Weber
13. In relativistic quantum mechanics, the additional contribution to this quantity of spin is given by the PauliLubanski pseudovector. "Coupling" eigenstates for this quantity in total from separate eigenstates requires use of the Clebsch-Gordan coefficients. This quantity's conservation gives rise to Kepler's third law of planetary motion. For a rotating body, this quantity is equal to the product of angular velocity and moment of inertia. For 10 points, name this quantity, symbolized L, the rotational analogue of linear momentum.
ANSWER: angular momentum [accept moment of momentum or rotational momentum; prompt on $\underline{\mathbf{L}}$ before mention; do not accept or prompt on "linear momentum"]
14. This author wrote a novel about the psoriasis-stricken Peter and his depressed father George Caldwell, the latter a representation of the title mythical being. In another novel, this author created the seductive devil Darryl Van Horne, and the title women, Alexandra Spofford, Jane Smart, and Sukie Rougemont, who acquire magical powers. He wrote of a recurring character who peddles Magi-Peelers and was a former high school basketball star. For 10 points, name this author of The Centaur and The Witches of Eastwick who wrote about Harry Angstrom in his Rabbit novels. ANSWER: John [Hoyer] Updike
15. In one opera by this composer, the title character sings the aria "Pari siamo!" to describe how his own stabbing words are like the sword used by the assassin Sparafucile. In another opera by this man, the Chorus of the Hebrew Slaves sings "Va, pensiero." This man wrote an opera in which "O, patria mia" is sung by a princess who dies when she is buried alive with her lover, Radames. The Duke of Mantua sings "La donna e mobile" in this man’s opera about a hunchbacked court jester. For 10 points, name this Italian composer of Nabucco, Rigoletto, and Aida. ANSWER: Giuseppe [Fortunino Francesco] Verdi
16. An explorer from this country succeeded after making several attempts to sail around Cape Bojador. One explorer from this country became the first to round the Cape of Storms, which was later renamed the Cape of Good Hope by the king of this country. Another explorer from this country became the first to sail directly from Europe to India. The explorer Gil Eanes was funded by Prince Henry the Navigator of this country. For 10 points, name this country, which financed the explorers Bartolomeu Dias and Vasco da Gama.
ANSWER: [Kingdom of] Portugal
17. One character in this novel retrieves a cross of cypress and a cross of copper from a drawer. This novel includes a policeman who drinks champagne in the Crystal Palace named Zametov. This novel's epilogue takes place in a prison hospital, where the protagonist ponders the suicide of Svidrigailov. Porfiry Petrovich investigates this novel's protagonist, who is loved by the prostitute Sonia Marmeladov and murders the pawnbroker Alyona Ivanovna. For 10 points, name this novel centering on the murderous Raskolnikov, written by Fyodor Dostoyevsky.
ANSWER: Crime and Punishment [or Prestupleniye i nakazaniye]
18. In this culture, land was owned by a group of families known as the calpulli. Much of the history of this this civilization is collected in the Florentine Codex. One ruler of this empire targeted its neighbor during the Flower Wars. The Templo Mayor was at the center of this civilization's capital, where a group of soldiers escaped during La Noche Triste following the death of its ruler, Moctezuma II. For 10 points, Hernan Cortes conquered what empire that governed from its capital of Tenochtitlan?

## ANSWER: Aztec Empire [or Aztecs; or Aztec Triple Alliance]

19. This term and "logarithmic" form a portmanteau that describes the time complexity of the Quicksort algorithm. The time for finding an item in an unsorted list grows as this type of function of the number of items in the list, giving its time complexity this property. Functions of this type, which have no derivatives above order one and constant first derivative, can be expressed in the point-slope and slope-intercept forms. For 10 points, name this type of mathematical function with constant slope.
ANSWER: linear [accept words forms like linearity or line; prompt on $\underline{\mathbf{n}}$ ]
20. The speaker of one of this author's poems receives the title objects, which were "knitted with threads of twilight and goatskin," from Mari Mori. This author included that "Ode to My Socks" with odes to clam chowder and tuna in his Elemental Odes. In a poetry collection translated by W. S. Merwin, this author wrote "tonight I can write the saddest lines." This poet wrote "arise to birth with me, my brother," in a Canto from his "The Heights of Macchu Picchu." For 10 points, name this Chilean poet who penned Twenty Love Poems and a Song of Despair.
ANSWER: Pablo Neruda [or Neftali Ricardo Reyes Basoalto]
TB1. Joseph Warren was killed in this battle, which is memorialized in a painting by John Trumbull. This battle resulted when Thomas Gage attempted to occupy Dorchester Heights, causing the colonists built a redoubt nearby. During this battle, either Israel Putnam or William Prescott supposedly told their soldiers not to fire until they could see the whites of their enemy's eyes. For 10 points, name this first major battle of the Revolutionary War, a pyrrhic victory for the British that was actually fought on Breed's Hill.
ANSWER: Battle of Bunker Hill [accept Battle of Breed's Hill before read]
TB2. In Kjeldahl's method, the back variety of this method is used to determine the ammonia content. Argentometry uses this process to calculate the chloride ion concentration present in a sample with silver (I) ions. The Gran method can be used to calculate the acid dissociation constant based on this technique. The namesake curve of this technique can be used to determine the equivalence point. For 10 points, name this type of volumetric analysis in chemistry that uses a burette and indicators to find the amount of an unknown substance.

## ANSWER: titration

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1. For 10 points each, name these basic laws of chemistry relating to solutions.
[10] This law, which contains a term K sub H that is its English namesake's constant, explains decompression sickness in divers.
ANSWER: Henry's law
[10] This law, named for a Frenchman, calculates the partial pressure of a component of a mixed solution by multiplying the pure vapor pressure of that component times its mole fraction.
ANSWER: Raoult's law
[10] This basic law of photochemistry determines how much light is absorbed when passing through a particular solution based on its molar absorptivity, concentration, and distance.
ANSWER: Beer-Lambert-Bouguer law [or Lambert-Beer law]
2. In this story, a man's eye is compared to that of a vulture. For 10 points each:
[10] Name this short story, whose narrator confesses that he has hidden the title object underneath his floorboards.
ANSWER: "The Tell-Tale Heart"
[10] "The Tell-Tale Heart" is by Baltimore native who wrote "The Raven."
ANSWER: Edgar Allan Poe
[10] Poe adopted his poem "The Haunted Palace" into a song sung by this character, who prematurely buries his sister Madeline.
ANSWER: Roderick Usher [accept either; accept "The Fall of the House of Usher"]
3. This group assassinated members of the Cairo Gang during Bloody Sunday. For 10 points each:
[10] Name this revolutionary organization led by Eamon de Valera during a War of Independence against the United Kingdom.
ANSWER: Irish Republican Army [or IRA; do not accept "Provisional IRA"]
[10] The treaty following the Anglo-Irish War allowed for this state with capital Belfast to remain a part of the United Kingdom.
ANSWER: Northern Ireland [or Norlin Airlann; do not accept or prompt on "Ireland"]
[10] After the 1918 election, members of this political party created the Irish Parliament that supported the IRA. This still-existing political party has a name meaning "we ourselves."
ANSWER: Sinn Fein
4. Franz Boas created the first graduate program of this social science at Columbia. For 10 points each:
[10] Name this broad social scientific discipline whose early practitioners also included Bronislaw Malinowski.
ANSWER: anthropology [accept word forms]
[10] This English anthropologist was inspired by Charles Lyell to write his Primitive Culture, in which he states that "the science of culture is essentially a reformer's science."
ANSWER: Sir Edward Burnett Tylor
[10] This French structural anthropologist argued that both savage and civilized minds had the same structure in The Savage Mind and Tristes Tropiques.
ANSWER: Claude Levi-Strauss [prompt on partial answer]
5. When this quantity is constant for an object, the equation describing the position of that object will have a quadratic as its highest-order term. For 10 points each:
[10] Name this quantity, the time derivative of velocity.
ANSWER: acceleration [prompt on a]
[10] This law states that the force on an object is equal to the product of the object's mass and acceleration, or F equals $m$ a.
ANSWER: Newton's second law of motion [prompt on partial answer]
[10] This quantity, symbolized J , is the change in momentum over a period of time, and can also be understood as the integral of force with respect to time.

## ANSWER: impulse

6. This man wrote a treatise on geometry as part of a work on "seeking truth in the sciences." For 10 points each: [10] Name this philosopher who wrote Discourse on Method.

## ANSWER: René Descartes

[10] Descartes wrote this work in which he begins by eliminating everything that could possibly be a deception and arrives at the statement "I think, therefore I am."
ANSWER: Meditations on First Philosophy [or Meditations Metaphysiques; or Meditationes de prima
philosophia; prompt on Meditations]
[10] In his Meditations, Descartes showed that one recognizes objects through judgment and not perception alone by heating a piece of this substance.
ANSWER: wax
7. In one story, this animal attempted to stay up all night so he could choose his own name. For 10 points each: [10] Name this canine animal from Native American folklore whose stories are sometimes attributed to Raven, and who created man by rolling a ball of mud.
ANSWER: coyote
[10] Coyote often fills this role also performed by Anansi in African myth and Loki in Norse myth.
ANSWER: trickster god
[10] This Native American trickster is a god of fertility with a detachable phallus who is usually depicted as a hunchbacked flute player.
ANSWER: Kokopelli
8. Arturo Toscanini premiered this piece with the New York Philharmonic. For 10 points each:
[10] Name this repetitive one-movement orchestral piece based around a snare drum ostinato.
ANSWER: Bolero
[10] This French composer of Gaspard de la Nuit and Rapsodie Espagnole composed Bolero.
ANSWER: [Joseph] Maurice Ravel
[10] Ravel wrote a work in this genre of courtly Spanish dance dedicated to "a Dead Princess." Ravel's teacher, Gabriel Faure, wrote one of these dances as his Opus 50.
ANSWER: pavane [accept Pavane for a Dead Princess or Pavane pour une infante défunte]
9. Bokanovsky's Process is featured in this novel. For 10 points each:
[10] Name this dystopian novel, set 631 years after the Model T's initial production began, in which John the Savage hangs himself after a failed revolt.
ANSWER: Brave New World
[10] Brave New World was written by this author, who wrote about a dinner party hosted by Henry Wimbush in Crome Yellow.
ANSWER: Aldous [Leonard] Huxley
[10] This oft-consumed drug in Brave New World is endorsed by the government. Lenina Crowne consumes it to repress her emotions.
ANSWER: soma
10. The lava that typically forms this rock yields obsidian when it cools slowly. For 10 points each:
[10] Name this igneous volcanic rock, the extrusive equivalent of a rock that makes up the continental crust.
ANSWER: rhyolite
[10] Rhyolite is the extrusive equivalent of this intrusive rock that makes up the earth's crust along with basalt. ANSWER: granite
[10] Aluminosilicates of potassium, sodium, or calcium comprise this class of minerals that, along with quartzes and micas, are a primary component of granite and rhyolite.

## ANSWER: feldspars

11. One general at this battle sent a false report that he was at Aleppo. For 10 points each:
[10] Name this massive chariot battle fought at a city on the Orontes River.
ANSWER: Battle of Kadesh
[10] The leader of the Egyptian forces at Kadesh was this "great" pharaoh who built the temples of Abu Simbel to honor himself and his wife Nefertari.
ANSWER: Ramses the Great [or Ramses II; or Ramesses II/the Great]
[10] The Battle of Kadesh was fought between Egypt and this Anatolian civilization, whose army was led by their king Muwatalli II.

## ANSWER: Hittites

12. According to The Double Helix, this man walked into the Eagle Pub in Cambridge and announced that he and James Watson had "discovered the secret of life." For 10 points each:
[10] Name this man who received a Nobel with Watson and Maurice Wilkins for discovering DNA.
ANSWER: Francis [Harry Compton] Crick
[10] Crick was the first to state this explanation of the flow of genetic information within a biological system, which essentially states that "DNA makes RNA makes protein."
ANSWER: central dogma of molecular biology
[10] Information is passed from mRNA into protein by this process, in which a ribosome facilitates polypeptide synthesis by inducing the binding of tRNAs.

## ANSWER: translation

13. The largest island in this chain is Spitsbergen. For 10 points each:
[10] Name this archipelago in the Arctic Ocean, whose largest city is Longyearbyen, the world's most northernmost town.
ANSWER: Svalbard
[10] Svalbard is the northernmost possession of this country, whose other territories consist of Bouvet Island, Jan Mayen, and many fjords on the western shore of the Scandinavian Peninsula.
ANSWER: Norway
[10] This city, the capital of Norway, was called Kristiania prior to 1925.
ANSWER: Oslo
14. British forces lost over 58,000 soldiers on the first day of this battle. For 10 points each:
[10] Name this battle during which tanks were first used in combat. It resulted in a stalemate, as Germany withdrew to the Hindenburg Line.
ANSWER: Battle of the Somme
[10] The Battle of the Somme occurred during this war that began after the assassination of the Archduke Franz Ferdinand.
ANSWER: World War I [or First World War; or the Great War; or WWI; prompt on partial answer]
[10] The Russian Army was nearly completely obliterated in this 1914 World War I battle fought near the site of the 1410 Battle of Grunwald.
ANSWER: Battle of Tannenberg
15. This poet was inspired by the death of his daughter's friend to write his Sonnets to Orpheus. For 10 points each: [10] Name this poet, who questioned "who, if I cried out, would hear me among the Angelic Orders?" in the first of his ten Duino Elegies.
ANSWER: Rainer Maria Rilke [or René Karl Wilhelm Johann Josef Maria Rilke]
[10] Rilke wrote his poems in this language, also used by Schiller to pen "Ode to Joy."
ANSWER: German [or Deutsch]
[10] This German poet wrote about a siren in the Rhine in his poem "Die Lorelei."
ANSWER: [Christian Joseph] Heinrich Heine [or Harry Heine]
16. Pope Leo $X$ excommunicated this man after he refused to back down at the Diet of Worms. For 10 points each:
[10] Name the German monk whose criticism of Catholic doctrine and practices sparked the Protestant Reformation. ANSWER: Martin Luther
[10] Martin Luther's hatred of indulgences led him to nail this 1517 set of enumerated complaints to the Wittenberg church door.
ANSWER: The Ninety-Five Theses on the Power and Efficacy of Indulgences
[10] Luther broke with Catholicism in arguing that this concept alone, and nothing to do with good works, is the reason that God justifies sinners.
ANSWER: $\underline{\text { faith }}$ alone [or sola fide; do not accept "grace alone" or "sola gratia"]
17. This author's Voss is a novel about the title German explorer. For 10 points each:
[10] Name this author whose other novels include The Vivisector and Riders in the Chariot.

## ANSWER: Patrick [Victor Martindale] White

[10] White is an author from this country, also the homeland of Peter Carey, who detailed the life of one of its notorious Outback outlaws in his True History of the Kelly Gang.
ANSWER: [Commonwealth of] Australia
[10] Australian author Thomas Keneally wrote about a novel titled for this German industrialist's "Ark," which was made into a film about his "List."
ANSWER: Oskar Schindler [accept either; accept $\underline{\text { Schindler's Ark or Schindler's List] }}$
18. This structure is part of the Jefferson National Expansion Memorial. For 10 points each:
[10] Name this monument that sits on the west bank of the Mississippi River in St. Louis.
ANSWER: Gateway Arch
[10] The Gateway Arch was designed by this Finnish-American architect whose other projects included the Kresge Auditorium at MIT.
ANSWER: Eero Saarinen
[10] Early in his career, Saarinen worked with his father Eliel to design the General Motors technical center in Warren in this state.
ANSWER: Michigan
19. This man's cabinet included Secretary of State Charles Evans Hughes and Secretary of Commerce Herbert Hoover. For 10 points each:
[10] Name this president who called for a "return to normalcy" during the 1920 election.
ANSWER: William Gamaliel Harding
[10] Much of Harding's cabinet was made up of his friends from his days in state politics, who were dubbed the "gang" of this home state of Harding.

## ANSWER: Ohio Gang

[10] The Harding administration was rocked by this scandal in which Secretary of the Interior Albert Fall tried to lease petroleum reserves from the namesake oil field.
ANSWER: Teapot Dome Scandal [prompt on partial answer]
20. This artist's painting The Sea was heavily influenced by Georges Braque. For 10 points each:
[10] Name this early-20th-century Dutch painter, whose Compositions feature black intersecting lines demarcating rectangles of white, red, blue, and yellow.
ANSWER: [Pieter Cornelius] Piet Mondrian
[10] Mondrian contributed to this art movement whose Dutch name was coined by Theo van Doesburg.
ANSWER: De Stijl [accept neoplasticism or word forms thereof]
[10] Mondrian painted a "boogie woogie" named for this street in Manhattan, where Mondrian was inspired by the shows and dances he saw.
ANSWER: Broadway [accept Broadway Boogie Woogie]
21. Part II of this work was completed in 1831. For 10 points each:
[10] Name this play in which a poodle transforms into a demon, and the title character promises that the demon can kill him the second he experiences a moment in which he wants to live forever.

## ANSWER: Faust

[10] This German author of The Sorrows of Young Werther wrote the two-part Faust.
ANSWER: Johann Wolfgang von Goethe
[10] Goethe wrote a novel about this character's "apprenticeship," in which he chases the nut-brown girl, and a sequel about this character's "journeyman years."
ANSWER: Wilhelm Meister [accept either]

