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 3 Jonathan Tong Xu, Eric Xu, and Haohang Xu. Edited by Andrew Hart.

1. This god, who was depicted on coins called asses, raped the nymph Carna and commemorated the event by giving her a white hawthorn branch and the ability to control hinges. This god's wife Juturna and his son Fontus are both associated with wells and springs. Temples dedicated to this god kept their doors always closed during peacetime and always open during wartime. For 10 points, name the Roman god of choices and beginnings who has two faces and is the namesake of the first month of the calendar.

## ANSWER: Janus [or Ianus]

2. This military leader's early career was spent fighting imperialists in the War of the Farrapos, or Tatters. This man, who retired to his semi-private island of Caprera, told Abraham Lincoln he would join the Union side of the Civil War if the war shifted focus to abolishing slavery. This crusader for Uruguayan independence led the "Expedition of the Thousand" and had an uneasy relationship with the Piedmont-Sardinian Prime Minister, Count Cavour. For 10 points, name this Italian military leader of the Risorgimento known for his colorful "Redshirts."
ANSWER: Giuseppe Garibaldi
3. Philip Glass was inspired by these pieces to compose his second violin concerto. The second movement of one of these works uses a two-note viola motif to represent a dog's bark. Eleven bars of pizzicato depict rain in the last of these works. The first of these compositions begins with trills in the solo violin to imitate birdcalls. These pieces were published with eight similar pieces as The Contest Between Harmony and Invention. For 10 points, name this set of violin concertos composed by Antonio Vivaldi, which includes "Spring" and "Summer."
ANSWER: The Four Seasons [or Le Quattro Stagioni; accept The Contest Between Harmony and Invention or Il cimento dell'armonia e dell'inventione before read]
4. This artist painted a scene from Tacitus in which a one-eyed, bearded man in a cloth crown beckons to several others around a table to cross swords with him. One of his paintings includes a well-lit girl in a gold dress holding a dead chicken. This artist of The Conspiracy of Claudius Civilis painted Aris Kindt's tendon being prodded by the title doctor in The Anatomy Lesson of Dr. Nicolaes Tulp. In another painting, he showed a drummer amidst the riflebearing shooting company of Franz Banning Cocq. For 10 points, name this Dutch painter of The Night Watch.
ANSWER: Rembrandt van Rijn [accept either underlined part]
5. One novel by an author with this surname centers around the hedonistic lifestyle of a commercial director named John Self. That author with this surname also wrote the novel London Fields. Another author with this surname wrote about a medieval history professor who gives a lecture on "Merrie England," has romantic entanglements with Christine and Margaret, and is eventually fired from his job. The author of Money possesses this surname, shared with his father, the author of Lucky Jim. For 10 points, give this shared surname of the writers Martin and Kingsley. ANSWER: Amis [Kingsley or Martin]
6. Casualties of this incident include Samuel Maverick and Patrick Carr. Private Hugh White was on guard during the beginning of this event, which ended when Thomas Hutchinson cleared the crowd. This incident was known to one side as the "Incident on King Street." John Adams defended the soldiers involved in this incident, a snowball fight gone awry that claimed the life of a runaway slave named Crispus Atticus. For 10 points, name this incident where British Redcoats shot at colonists in a Massachusetts city in 1770.
ANSWER: Boston Massacre [accept Incident on King Street before read]
7. This power limits a state's ability to enact certain discriminatory legislation unless the state is a market participant in its "dormant" form. The aggregation theory of this power was enumerated in Wickard v. Filburn. The Gun-Free School Zones Act did not fall under this power in United States v. Lopez. John Marshall struck down the state of New York's claim on a steamboat monopoly using this Article I, Section 8 enumerated power in Gibbons v. Ogden. For 10 points, name this clause that allows the federal government to regulate interstate economic transactions. ANSWER: commerce clause [or commerce power; accept dormant commerce clause]
8. A thick transparent membrane that surrounds one of these cells, called the zona pellucida, is surrounded by the cells of the corona radiata. These cells are excreted along with torn patches of cumulus tissue by the rupturing of the outer wall of a structure named for Graaf. Each one of these cells is formed along with three polar bodies. When these cells are discarded, a corpus albicans forms from a corpus luteum and one of these cells is expelled through the vagina via menstruation. For 10 points, name these female haploid gametes that are fertilized by sperm. ANSWER: egg cells [or eggs; or ova; or ovum; or oocyte; or ovocyte; prompt on gamete or gametophyte or ovarian follicle]
9. Poems in this form are followed by commentary in an anthology called The Seashell Game. This poetic form's basic principles were embraced by Imagists such as Ezra Pound, whose "In a Station of the Metro" drew heavily from this poetic form. A poem in this form describes "the sound of water" made by a frog jumping. This poetic form, which typically contains a "cutting word," arose as the opening of a longer poetic form called the renga. For 10 points, Issa and Basho were masters of what 17-syllable poetic form developed in Japan?
ANSWER: haiku [accept hokku]
10. This character is called a weird guy when he is asked "you got any of that gum?" and he responds "that's none of your damn business." In one film, this character solves the murder of Roger Podacter. At the start of another film, he exclaims "it was right there!" when a slinky stops on the second-to-last step of a giant temple. This character discovers that Lois Einhorn is actually Ray Finkel, an NFL kicker who kidnapped Snowflake to settle a longstanding grudge against Dan Marino. For 10 points, name this "pet detective" played by Jim Carrey.
ANSWER: Ace Ventura [accept either]
11. This performer was the inspiration for La Voz del Cuerpo, written by the foremost teacher of her methods, Christine Dakin. This dancer choreographed her own title role in the Norman Dello Joio opera The Triumph of St. Joan. This woman, who premiered the Seraphic Dialogue as a dancer, often collaborated with the set designer Isamu Noguchi. She commissioned a work depicting a pioneer celebration that features the Shaker tune "Simple Gifts." For 10 points, name this American choreographer who commissioned Aaron Copland's Appalachian Spring.
ANSWER: Martha Graham
12. This author created a character who rails against "capitalist svine" and constantly claims that the "days grow hot, O Babylon!" He wrote a trilogy of plays centering on the murder of Ezra Mannon and another play that climaxes when Theodore Hickman arrives in Harry Hope's saloon. Another play by this author centers on the struggles of various members of the Tyrone family. For 10 points, name this American playwright of Mourning Becomes Electra, The Iceman Cometh, and Long Day's Journey into Night.
ANSWER: Eugene [Gladstone] O’Neill
13. A standoff over the Scarborough Shoal in this body of water has been ongoing since 2012. The Macclesfield Bank is administered under the Sansha prefecture in this body of water, which bounds the island of Palawan along with the Sulu Sea. Brunei and Malaysia both have territorial claims in the Spratly Islands in this sea. For 10 points, name this marginal sea of the Pacific Ocean that is bounded by Vietnam to the west, the Philippines to the east, Indonesia to the south, and a namesake People’s Republic to the north.
ANSWER: South China Sea
14. After this battle, the losing side's commander's circlet was brought to the top of Crown Hill. The victorious side's army was under the command of the Earl of Oxford, who received significant reinforcement from the Lords Stanley during this battle. The death of the losing commander at this battle led to the House of York's fall from power in England. In a Shakespeare play, the loser of this battle cries "my kingdom for a horse." For 10 points, name this battle, a victory for Henry VII over Richard III that was the last major battle of the War of the Roses. ANSWER: Battle of Bosworth Field
15. In an electrochemical cell, the natural $\log$ of K is equal to this quantity over negative RT. At standard temperature and pressure, this quantity divided by surface area is equal to surface tension. A reaction is endergonic if it has a positive value for this quantity, which tends towards zero as a reaction reaches equilibrium and is classically defined as the enthalpy plus the product of temperature and entropy. For 10 points, an American chemist names what quantity that, when negative, indicates a reaction is spontaneous?
ANSWER: Gibbs free energy [or Gibbs energy; or Gibbs function; or free enthalpy; prompt on Gibbs or free energy]
16. One novel by this author contains a parable titled "Before the Law." This author, whose works were spared from the fireplace by his friend Max Brod, wrote a novel in which a land surveyor attempts to gain access to the official Klamm. This author also wrote about Josef K., who is killed "like a dog" after being arrested for an unspecified crime that he did not commit. This author of The Castle and The Trial wrote a story in which Gregor Samsa transforms from a human being into an insect. For 10 points, name this author of "The Metamorphosis."

## ANSWER: Franz Kafka

17. This effect provides the cooling limit for low-density gases, such as rubidium-85, cooled with lasers in a technique named for it. A result of this effect is diminished by two lasers with the same frequency used to induce stimulated emission, a technique known as saturated absorption spectroscopy. An astronomer can calculate the radial velocity of stars by measuring how this effect blue-shifts or red-shifts their spectra. For 10 points, name this effect in which the apparent frequency of waves is affected by the relative motion of the source and the observer.
ANSWER: Doppler effect [or Doppler shift; prompt on redshift or blueshift before read]
18. One member of this school discredited tenacity, authority, and a priori truth in favor of science and defined three stages of apprehension in his works "The Fixation of Belief" and "How to Make Our Ideas Clear." This school of thought greatly influenced the writer of Philosophy and the Mirror of Nature, Richard Rorty. This school, which was described as "a new name for some old ways of thinking," was advocated by John Dewey and C. S. Peirce. For 10 points, name this school of philosophy popularized by William James, which emphasized practical reasoning.
ANSWER: pragmatism [accept word forms]
19. Events protesting this policy led to the Saint James Church Massacre and the Shell House Massacre. The Immorality Act was used to uphold this policy, which resulted in the death of a man described in the film Cry Freedom. Ten members of a group opposing this policy were sentenced in the Rivonia Trial. An opponent of this policy was jailed on Robben Island until 1989 and later elected president following the term of F.W. de Klerk. For 10 points, name this system of state-sponsored racism in South Africa, opposed by the ANC and Nelson Mandela. ANSWER: apartheid
20. The discharge from a prehistoric one of these structures near Missoula, Montana is responsible for the creation of the Channeled Scablands of Washington. When these bodies are closed or terminal, they are termed endorheic, and when their layers don't interact, they are meromictic. These structures can undergo deadly "overturns" in which carbon dioxide erupts from them. One of these structures was the starting point of a body named for G.K. Warren and is named for Louis Agassiz. For 10 points, name these bodies of water, exemplified by Victoria and Superior. ANSWER: lakes [accept glacial lakes; prompt on reservoirs]

TB1. Many homes in this country contain an altar that houses an ihai to commemorate deceased family members. "God-shelves" are found in this country, where the Tendai sect of Buddhism is practiced. Shingon, meaning "true word," is a branch of Vajrayana Buddhism in this country. Nichiren is the namesake of a religious sect in this country and believed he was a bodhisattva. Another sect popular in this country seeks satori and contemplates riddles known as koans. For 10 points, name this country where Zen Buddhism is popular.
ANSWER: Japan [or Nippon-koku; or Nihon-koku]

TB2. In 2003, this man named "beautiful secretaries" as a reason to invest in his country. This man was prosecuted in the "Rubygate" scandal, which involved Karima El-Mahroug, the supposed relative of Hosni Mubarak. He founded the Forza Italia and Il Popolo della Libertà political parties and in his highest elected position he was replaced by Lamberto Dini, Romano Prodi, and Mario Monti in subsequent terms. This owner of Mediaset television network and AC Milan was found guilty of tax fraud in October 2012. For 10 points, name this three-time Prime Minister of Italy.
ANSWER: Silvio Berlusconi

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 3 Jonathan Tong Xu, Eric Xu, and Haohang Xu. Edited by Andrew Hart.

1. The travelling salesman problem asks for the Hamiltonian cycle with least weight for this object. For 10 points each:
[10] Name this mathematical object that is composed of vertices and edges. A tree is a connected one with no cycles. ANSWER: graph
[10] This operation, which may be "depth-first" or "breadth-first," forms the basis of graph-traversing algorithms. Algorithms that do this operation on the internet are called "engines."
ANSWER: search [accept search engines]
[10] If all edges of a connected and undirected graph have different weights, then the graph has a unique one of these trees, which connect all vertices and must contain all minimum-cost edges.
ANSWER: minimum spanning trees [prompt on spanning tree]
2. The Tower Commission was created to investigate this controversy. For 10 points each:
[10] Name this political controversy involving the funding of a group opposing the Sandinistas using funds by selling weapons to another country.
ANSWER: Iran-Contra affair [or Irangate; or Contragate; prompt on partial answer]
[10] This man, who created the Tower Commission, was president at the time of the Iran-Contra affair.
ANSWER: Ronald [Wilson] Reagan
[10] This man, Reagan's Secretary of Defense before Iran-Contra, resigned before his trial and was pardoned by George H.W. Bush before he could be tried for his role in the scandal.
ANSWER: Caspar [Willard] Weinberger [or Cap Weinberger]
3. This book begins with a decree that all male Jewish babies be killed. For 10 points each:
[10] Name this second book of the Torah, which features the Ten Plagues and the parting of the Red Sea.
ANSWER: Book of Exodus [or Sh'mot]
[10] This brother of Miriam parts the Red Sea and receives the Ten Commandments in the Book of Exodus.
ANSWER: Moses [or Mosheh]
[10] This object owned by Moses's brother turns into a serpent when cast to the ground.
ANSWER: Aaron's rod [accept equivalents like Aaron's staff; prompt on Staff of Moses]
4. This construct for water is unique because one line is negatively sloping due to hydrogen bonding. For 10 points each:
[10] Name this construct that shows the state of matter for a compound at a particular temperature and pressure.
ANSWER: phase diagram [must be exact]
[10] This point on a phase diagram is the temperature and pressure at which the three phases of matter for a particular substance exist in equilibrium.
ANSWER: triple point
[10] This theorem states that two liquids that have identical reduced pressure, temperature, and volume will have the same compressibility factor, or will deviate from ideal behavior equally.
ANSWER: theorem/principle of corresponding states
5. This novel begins with the explosion of a hijacked plane over the English Channel. For 10 points each:
[10] Name this novel, which follows Gibreel Farishta and Saladin Chamcha and earned a fatwa for its author from Ayatollah Khomeini.

## ANSWER: The Satanic Verses

[10] The Satanic Verses was written by this British-Indian author of Midnight's Children.
ANSWER: [Sir Ahmed] Salman Rushdie
[10] This event is simultaneous with the birth of the protagonist of Midnight's Children, Saleem Sinai. All children born in the hour following this event are blessed with special powers.
ANSWER: Partition of India and Pakistan [accept any answers that mention India and Pakistan splitting up; accept Independence of India from Britain]
6. Answer some questions about various popes, for 10 points each.
[10] This pope resigned in 2013, becoming the first pope since 1294 to do so.
ANSWER: Pope Benedict XVI [prompt on Benedict; or Joseph Aloisius Ratzinger]
[10] This pope, the longest serving in the office, convened the First Vatican Council to establish the dogma of papal infallibility and defined the Immaculate Conception of the Virgin Mary in 1854.
ANSWER: Pope Pius IX [prompt on Pius]
[10] This pope, the last Italian to hold the office, died shortly after obtaining the papacy and was followed by a man who took the same papal name.
ANSWER: Pope John Paul I [prompt on John Paul; do not accept "John Paul II"]
7. This artist's extensive studying under Thomas Hart Benton was not overly evident in his later works. For 10 points each:
[10] Name this artist of Full Fathom-Five and Lavender Mist known as "the dripper."
ANSWER: [Paul] Jackson Pollock
[10] Jackson Pollock was a prominent figure in an art movement named for this type of expressionism.
ANSWER: abstract expressionism
[10] Pollock's work heavily inspired this Color Field artist whose paintings adorn a nondenominational chapel in Houston.
ANSWER: Mark Rothko [or Marcus Yakovlevich Rothkowitz]
8. This man's rise to power began when his brother face-planted while missing a small stair after a 2008 speech. For 10 points each:
[10] Name this man who currently serves as the leader of an embargoed Caribbean country.
ANSWER: Raúl [Modesto] Castro [Ruz]
[10] Raúl Castro and his brother Fidel served as president of this country with its capital at Havana.
ANSWER: [Republic of/Republica de] Cuba
[10] This Cuban-American, a U.S. Senator from Florida, gave the Republican response to Barack Obama’s 2013 State of the Union Address.
ANSWER: Marco [Antonio] Rubio
9. This social scientist wrote a 1919 essay discussing E.T.A. Hoffman called "The Uncanny." For 10 points each: [10] Name this Austrian father of psychoanalysis who developed a theory of the "death drive" in his Beyond the Pleasure Principle.
ANSWER: Sigmund Freud [or Sigismund Schlomo Freud]
[10] Freud wrote a book about the "interpretation" of these phenomena, which he defined as a "royal road to the unconscious."
ANSWER: dreams [or träume; accept The Interpretation of Dreams or Traumdeutung]
[10] Freud's Totem and Taboo contains an essay on the "horror" of this behavior, which is the logical end of the Oedipus complex.
ANSWER: incest [accept equivalents like sex with one's father/parent]
10. When this figure refused to sleep with the queen of Tiryns, she accused him of attempted rape. For 10 points each:
[10] Name this hero from Greek myth who received a golden bridle from Athena after sleeping in her temple on advice from the seer Polyeidus.
ANSWER: Bellerophon [or Bellerophontes]
[10] Bellerophon slew this fire-breathing monster with the head of a lion, the body of a goat, and the tail of a snake by flying at it on Pegasus and ramming a lead block down its throat.

## ANSWER: Chimera

[10] Bellerophon got cocky about having slain the Chimera and tried to fly to this mountain home of the Greek gods, but Zeus sent a gadfly to sting Pegasus, which caused him to fall.
ANSWER: Mount Olympus
11. This play takes place in a Second Empire-style room. For 10 points each:
[10] Name this play, which describes the torments of Inez, Estelle, and Garcin, who exclaims, "Hell is other people!" ANSWER: No Exit [or Huis Clos; accept In Camera; No Way Out; Vicious Circle; Behind Closed Doors; or Dead End]
[10] No Exit was written by this French playwright and existentialist philosopher.
ANSWER: Jean Paul Sartre
[10] In the title story of this Sartre collection, which includes "Erostratus" and "Intimacy," Pablo Ibbieta divulges the hiding place of Ramon Gris while facing execution near the title structure.
ANSWER: The Wall [or Le Mur]
12. For 10 points each, name the following about ecology.
[10] This quantity is defined as the number of individuals of a species living in a restricted area, or the combined weight of members of a plant species present in a given area.
ANSWER: population
[10] This quantity is the maximum population that can survive in a given environment for an indefinite amount of time, subject to limiting factors such as food, water, and space.
ANSWER: carrying capacity [or K]
[10] This function, with a sigmoid or "s-shaped" form, is commonly used to model population growth.
ANSWER: logistic function [or logistic curve; accept logistics function or Verhulst equation]
13. This man conducted an impromptu debate with President Nixon in 1959 in an American model kitchen. For 10 points each:
[10] Name this Soviet premier, who denounced Stalin's cult of personality in the "Secret Speech."
ANSWER: Nikita [Sergeyevich] Khrushchev
[10] This man, the successor of Khrushchev, disagreed with Khrushchev's theory of détente and ordered the invasion of Afghanistan.
ANSWER: Leonid [Ilyich] Brezhnev
[10] This short-tenured premier served as head of the KGB before taking the premiership and was succeeded by the almost equally short-lived Constantin Chernenko.
ANSWER: Yuri [Vladimirovich] Andropov
14. This man's only known work consists of six books of poetry addressed to Memmius. For 10 points each:
[10] Name this Roman thinker of the first century BCE who argued that matter cannot be created spontaneously or destroyed completely in De Rerum Natura or On the Nature of Things.
ANSWER: Titus Lucretius Carus
[10] Lucretius belonged to this school of philosophy, whose founder advocated seeking ataraxia through living a pleasurable life.
ANSWER: Epicureanism
[10] One of the teachings of Epicureanism was that all matter consists of these indivisible units previously theorized by Democritus.

## ANSWER: atoms

15. Name these artistic movements, for 10 points each.
[10] Etienne-Maurice Falconet was a sculptor from this movement that emphasized ornateness, which also included the painters Francois Boucher and Jean-Honore Fragonard.

## ANSWER: Rococo

[10] Umberto Boccioni’s Unique Forms of Continuity in Space was part of this Italian movement whose Manifesto was written by Filippo Marinetti.
ANSWER: futurism [accept word forms; or futurism]
[10] This art movement born out of Russian Futurism is exemplified by Vladimir Tatlin’s design for the Monument to the Third International.
ANSWER: constructivism [accept word forms]
16. The slave Jim accompanies this character on his journey, where he gets involved in feuds involving the Grangerfords and the Shepherdsons. For 10 points each:
[10] Name this character whose "Adventures" title a 19th-century American novel.
ANSWER: Huckleberry Finn [accept either underlined part; do not accept "Tom Sawyer"]
[10] The Adventures of Huckleberry Finn was written by this American author of Tom Sawyer.
ANSWER: Mark Twain [or Samuel Langhorne Clemens]
[10] In this Mark Twain short story, gambler Jim Smiley trains the title amphibian, named Dan'l Webster, to make money off of its hopping abilities.
ANSWER: "The Celebrated Jumping frog of Calaveras County" [accept "Jim Smiley and His Jumping Frog" or "The Notorious Jumping frog of Calaveras County"]
17. The first two of these statements were published in 1609 after analysis of Tycho Brahe's results. For 10 points each:
[10] Name this set of laws named for a German astronomer, which describe planetary motion.
ANSWER: Kepler's [three] laws [of planetary motion]
[10] Kepler’s first law states that planets move around the sun in orbits of this shape, with the sun at one of the two foci.
ANSWER: ellipses [do not accept "ellipsoid"]
[10] Kepler’s second law states that over a uniform time interval, a radius vector joining any planet to the sun sweeps out sectors with this property.
ANSWER: equal area [accept any equivalent, such as "having the same area"]
18. One of this composer's ballets features the "Ritual Fire Dance." For 10 points each:
[10] Name this composer of El Amor Brujo, who included the movements "Danza lejana" and "En el Generalife" in a suite titled Nights in the Gardens of his home country.
ANSWER: Manuel de Falla [y Matheu]
[10] Manuel de Falla was a composer from this country, also the homeland of Pablo de Sarasate and the composer of Iberia, Isaac Albeniz.
ANSWER: [Kingdom of] Spain [or Reino de España]
[10] This composer, who depicted Spain with repeated "Alborado" movements in his Capriccio Espagnol, included the "Dance of the Tumblers" in his opera The Snow Maiden.
ANSWER: Nikolai [Andreyevich] Rimsky-Korsakov
19. This ruler built a massive palace in Timbuktu and the Djinguereber Mosque. For 10 points each:
[10] Name this ruler, whose gave out so much gold on his hajj to Mecca that it deflated the value for decades.
ANSWER: Mansa Musa [or Musa I]
[10] Mansa Musa was the ruler of this Western African empire, which lends its name to a modern-day country with capital Bamako.
ANSWER: Mali Empire [or Nyeni; or Niani]
[10] This founder of the Mali Empire is the namesake of an oral epic describing his victory against the Sosso people. ANSWER: Sundiata Keita [or Mari Djata I; or Songolon Djata; prompt on Keita]
20. This poem begins "five years have past! five summers." For 10 points each:
[10] Name this poem, addressed to its author's sister, describing the River Wye on July 13th, 1798.
ANSWER: "Lines Composed a few miles above Tintern Abbey" [prompt on Lines]
[10] This English Romantic poet of the "Lucy" poems and "Daffodils" wrote "Tintern Abbey."
ANSWER: William Wordsworth
[10] With Coleridge, Wordsworth co-wrote this collection that contains "We Are Seven" and "Tintern Abbey." ANSWER: Lyrical Ballads
21. For a main group element, this type of electron must be in the outermost shell. For 10 points each,
[10] Name this type of electron that is involved in chemical bonding.
ANSWER: valence electron
[10] This rule states that atoms tend to form bonds such that a certain number of valence electrons end up in the outer shells.
ANSWER: octet rule
[10] The octet rule can be visualized using the dot structures named for this American chemist.
ANSWER: Gilbert [Newton] Lewis

